

ensto today

STAKEHOLDER MAGAZINE
1/2016



Ensto Lights **Sweden**

Our special Sweden issue

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Cover: Stockholm's Solna Centrum
metro station with *Ensto Tinos* in
the background.

Photo by *Jonas Borg*



From the Editor

Moving at the **Speed of Light**

The lighting business is changing so fast that we
can't accurately predict where it's going.

In this business speed is everything, and the
worst thing a business can do is stand still. It's
sometimes enough to know we're moving in the the right
direction. The only thing we can be certain of is continuous
disruption.

In this issue of *Ensto Today* we pay a visit to Ensto clients
to see how they are using modern Ensto LEDs. But even as
you read this text, changes are occurring in lighting techno-
logy: soon the Internet of Things will make lighting smarter,
we'll see organic OLEDs take root, and one day lighting may
be sold not as a product, but as a service. And Ensto will
lead that change.

We are also proud to present you Ensto's new CEO, as
well as the insightful thoughts of our former Chairman of
the Board.

In this issue we also celebrate Sweden. Sweden is leading
the world by proving that it is possible to uncouple green-
house gases and economic growth, and the Swedes' ability
to gain consensus has led to a business climate envied by
many in the region and the world.

Sweden has been a key market for Ensto from our very
beginning, and today it is a 25 million euro business with
nearly 40 people employed.

Lys upp mörkret med belysningslösningar från Ensto!

Pia Hänninen

Director

Brand and Communications



Come on baby, light my fire!

 Kaupo Kikkas

Very often artists are able to predict new trends years before they even exist. The Doors did this in the sixties, and the title of their song is still valid. Come on baby, light my diodes!

When I joined Ensto, one of my objectives was to introduce LEDs and help Ensto become a leading supplier of LED luminaires and solutions before my retirement. Now, in the cruise ship market, in Finland, and to a great extent in Sweden, this has become a reality. My successor, Ari Virtanen, who will take over as CEO beginning in early April, will now lead the Ensto team to even wider and more significant coverage of new markets.

The speed of technical evolution has during these years been that of a revolution, and looking at Organic LEDs one can be sure that there's a lot happening all the time. At first, light emitting diodes were expensive, and as a technology, forecast to be used only in specific cases. The colour of LEDs was difficult to master, so they were not very appealing for residential use. Lower efficiency combined with high cost made many think that alternative technologies, multi metal light sources, for example, were unbeatable for energy efficiency.

When the cost of LEDs was reduced and performance enhanced, production volumes picked up, first moderately and then massively. This explosion gave birth to many new players in the lighting industry, and these new entrants did not play by the rules of the traditional market. Of course it also meant a wider choice, and with limited industrial experience of some producers, a high number of products of inferior quality entered the market. Quality that left something to be desired did hurt the reputation of the LEDs and slowed down the pace of change.

Industry players who were technology freaks, in a positive way, managed to create new products which made use of the unique properties of LEDs, like directional light, and hence true LED luminaires came about. These luminaires have proper drivers and cooling, no reflectors, and hence are designed to exploit fully these new opportunities which are not available if you just replace a conventional light bulb by an LED light source. The true LED luminaires are unbeatable in their energy efficiency, their ability to bring out true colours, and their longevity.

We can say that had the technological development of LEDs been linear, technology pessimists could have been right. However with an exponential development curve, in several aspects, LEDs have disrupted the market. Old systems have a bright future behind them. "Fiat lux" is today "Fiat LED"!

Timo Luukkainen
CEO and President, Ensto Group

Ensto Lights **Sweden** *- below ground, too!*

Ensto in **the Metro**

Ensto's Tino G2 LED is an energy-efficient, low-maintenance, industrial LED High Bay and all-around luminaire. A wide selection of optics and power options makes it ideal for everything from supermarkets and parking garages to logistic centers and even the Stockholm metro.

Featured on the cover of this magazine is Stockholm's Solna Centrum metro station with Ensto Tinos in the background. Shown in this photograph is **Anders Mälström**, Ensto's Sales Director for Lighting Solutions in Scandinavia.

The Stockholm metro has purchased 800 Tino fixtures from Ensto in both standard and specially-ordered lengths. "It's a very price competitive fixture and great for large volume orders like this," says Mälström. ■

Ensto in Sweden

Our second home market

For Finnish companies, Sweden has always been the most natural export market. As many will know, Finland was part of Sweden for nearly 700 years until the early 19th century, Swedish is still spoken in southern Finland, and the two nations are perennial hockey rivals. (Finland recently proved superior in hockey, I feel compelled to note.)

For Ensto, Sweden has been one of our most important home markets for over 40 years. In 1974, Ensto Elektriska AB was founded in Stockholm to sell accessories for overhead lines, panel boards, and switchgear accessories. The 1980s and '90s saw dozens of acquisitions of Swedish companies. By 1994, Ensto Sweden was 245 employees strong. In 2001, we reorganized our business to concentrate on our core fields and maintain sales and marketing. Today, Ensto's entire product line is marketed in Sweden, with a heavy emphasis on lighting products.

In lighting, Sweden was very early on an incredibly progressive LED market, which developed much faster than other countries. Sweden continues to be a leader in Europe in lighting solutions.

Since Sweden has traditionally been Ensto's first or second biggest market, I am pleased that *Ensto Today* has taken this opportunity to bring readers stories from that market.

Good reading,



Timo Luukkainen
CEO, Ensto Group

Some highlights of our history

1974

Ensto Elektriska AB founded in Stockholm. Ensto's first foreign subsidiary starts selling accessories for OHL lines, panel boards and switchgear accessories



1980

Luminaires are introduced to product assortment



1985

New office and warehouse of 1,500m² built



1986

Wiring accessories added to product mix

1990

Lighting manufacturer Ensto Hövik AB is acquired, and SA Elprodukter AB brings terminals and connectors to the product portfolio



1991

Lighting business is further strengthened by the acquisitions of Ifö Electric AB and Belysnings AB El-Be. Fuses, ceramic lamps and outdoor luminaires are added to the product range

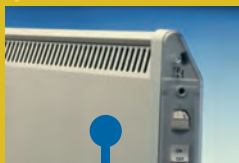


1987-94 Rapid expansion and acquisitions



1993

Ensto acquires Idealplast AB, a manufacturer of installation- and plastic products, expanding Ensto's plastic product offering



1995

ISO 9001 quality certification



*40 years
in Sweden*



1994

Distribution boards and panel heaters to the assortment. OPA Svenska AB is acquired



1997

New office in Stockholm

2000s

All Ensto product lines are now sold in Sweden. Ensto divests from all manufacturing in Sweden, concentrating on sales and marketing

2014

Ensto celebrates 40 years in Sweden

*Ensto in
Sweden*





“Regulations should not hinder R&D by making it too expensive.”

MATS HOLME

The Benefits **of Consensus**

What the world can learn from Sweden.

 Scott Diel  Jonas Borg

Sweden has performed a remarkable feat: the uncoupling of green house gas emissions from economic growth. According to the American magazine, *The New Yorker*, over the past 25 years Sweden has reduced its carbon emissions by about 23 percent, yet at the same time grown its economy more than 55 percent.

“We’ve had an interest in environmental questions for many years,” says **Mats Holme**, CEO of Belysningsbranschen, Sweden’s Lighting Association. Holme, in typical Swedish fashion, is quite modest about the success of his nation. Despite how Vikings are portrayed in the movies, it’s very difficult to get one to beat his chest and talk about victories.

Consensus works

But one thing Holme doesn’t hesitate to showcase is Sweden’s ability to get things done in the lighting industry.

“What’s special in Sweden is that competitors in the marketplace are good at cooperating. We compete in one area, yet we work together in another. There is no conflict when we come together on a question for the trade association. There is a real respect for competitors here.”

Making sure consensus management works is the role of Holme’s trade association. “It’s important I know the laws about competition so that I can propose the questions our organization will work on.”

And consensus only works when there is trust. If association members trust that Holme is acting in their best interests as a whole, then cooperation follows.

Striking the balance

One important case has been the creation of standards for how to communicate environmental information about products.

“Many Swedish customers, such as lighting consultants and large property owners, want detailed information, far more information than is provided in other countries,” says Holme.

It’s of course critical that customers know about potentially hazardous elements of a product, but disclosure can get out of hand. “Sometimes they may demand information

that manufacturers may not even know, like the mixture of the aluminum in a product,” says Holme.

So Holme’s association helps create standard ways to inform and present information, finding a balance where manufacturers may profitably produce yet buyers are also satisfied. “In other markets this would have been impossible.”

Smart, efficient, safe

Another showcase accomplishment of the association has been its ELRÄTT initiative, designed to help electricians sell solutions instead of just offering products.

“ELRÄTT is 4,500 companies strong, teaching 20,000 electricians to be smart, efficient, and safe,” says Holme. “It’s an organization committed to increasing the knowledge of electricians so that they sell good solutions to the end user.”

It also helps to increase trade association membership. If a manufacturer wants to be part of ELRÄTT, he is obligated to join the trade association.

ELRÄTT is innovative in that it can help sell manufacturers’ products while at the same time creating a better experience for consumers. It’s a testimonial to the Swedes’ ability to build consensus. “There should be interest for this in other markets,” says Holme.

R&D’s defender

In addition to all the above, the lighting association is on the front lines in defending its members interests when it comes to legislation and regulation. “We try to make changes in regulations as smooth as possible for members, since these changes are usually expensive,” notes Holme.

The organization is active in lobbying for R&D-friendly regulations. “You need rules which will allow industry to develop new energy-saving technologies,” says Holme. “But regulations should not hinder R&D by making it too expensive.” ■

“If the space is too dark people will not use it and not take care of it.”

DANIEL EKSTRÖM, SALLÉN PROJECT LEADER



Sallén Elektriska Project Leader Daniel Ekström and Ensto Area Sales Manager Fredrik Larsson in front of the community center's outdoor climbing wall.

Safer Means Savings

Sallén Elektriska needed a creative approach to light community building at Gottsunda Centrum. Working with Ensto they found a solution.

✍️ Scott Diel 📷 Jonas Borg

On the backside of Uppsala's Gottsunda Centrum shopping center is a community sports center with an exterior climbing wall. While in the daytime it's a teenager's dream, at night the area was dark and residents tended to avoid it.

Sallén Elektriska AB, one of Sweden's largest lighting and installation companies with 225 installers and nearly 50 million euros in turnover, was hired to deliver a solution.

Sallén Project Leader **Daniel Ekström** inspected the site. Original designs had never considered lighting for the back of Gottsunda Centrum building, only a parking lot light. Ekström would have to be creative. He called in Ensto Area Sales Manager **Fredrik Larsson** for an opinion.

What the customer wanted

"Fredrik and I spent a few hours at the facility just looking it over," says Ekström. "We talked a lot about what the customer wanted."

What the customer wanted was usable space, so the two focused on that. "If the space is too dark people will not use it and not take care of it," Ekström says. "There's a retirement home nearby, and those people need to feel safe after dark."

Ekström and Larsson noticed a ten-centimeter recess in the side of the building, a place fixtures could be installed if they could find the right ones. Larsson suggested an Ensto LED called Jono. It was a tight space, but he thought it would fit.

"We had to use sky lifts to get up there, but Jono fit as if it were made for the space," says Ekström.

A three-part solution

To light the space, Ekström and Larsson settled on a three-part solution: 75 Jono LED fixtures, six Opera pole-mounted LEDs, and three AVR8 facade LEDs, all installed by one electrician and his assistant.

The three-part solution brought a three-part result: The area feels safe, it's aesthetically pleasing, and savings are enjoyed from the LED technology.

Ekström and Larsson have worked together for eight years. "Trust is built over time," says Ekström, "and it facilitates finding the right solutions for clients."

"It's what we do everyday," adds Larsson. 🟩



The community center near Uppsala's Gottsunda Centrum shopping center now enjoys a well lit, safer exterior.



For VätterHem
LED = ROI!

A major apartment owner in Sweden has set out to save energy – and it’s doing so very methodically.

Scott Diel Tomas Jansohn

We will cut our consumption of resources by 20 percent by the year 2016,” declared the CEO of the municipal company VätterHem at a 2007 meeting in Malmö.

The job of figuring out how to save that 20 percent would fall to Afrim Alijevski. An electrician by training, Alijevski, is part of a five-person task force committed to saving energy for VätterHem. He has a budget for doing so, and he is held accountable for results.

Garages

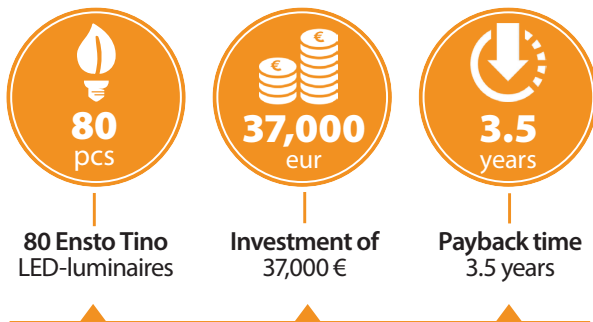
Alijevski’s team is responsible for VätterHem’s 8,500 apartments in four areas of Sweden’s Jönköping municipality. Almost 17,000 residents depend on four electricians to make

sure lights light when a switch is thrown – and to ensure energy is not used irresponsibly.

A natural first step to reduce energy use was replacing a 10-year-old lighting system in one of VätterHem’s parking garages: 2x28W fluorescent luminaires burned 24 hours a day, seven days a week. They cast a yellow glow that did not even reach the parked cars.

Alijevski replaced seven floors of lights with 80 Ensto Tino 42W LED fixtures. A total investment of slightly over 37,000 euros covered the fixtures, cables, motion sensors, and installation. He estimates a payback time of 3.5 years, about half of the maximum allowed for such a project.

While LEDs with motion sensors will eventually consume 70 percent less energy than the old system, there is instant



2015, 80 LED fixtures were installed in the production area with an investment of 37,000 euros.

gratification, too: the first month's electricity bill for the garage dropped 30 percent, even with motion sensors that are not yet fine-tuned. When that happens, 80 percent savings are predicted.

Stairwells

Alijevski also turned his attention to stairwells, where old fixtures used three luminaires containing fluorescent lamps 1x18W and, including ballast, the total power was 93W. He replaced those with two LED light luminaries 1x14W with a total power of 28W, only a third of the energy and also with better light value. He then gained another 30 percent savings due to built-in motion detectors.

"With the built-in motion sensors you have the option of the lights shutting off after one minute without movement, or dimming to 10 percent power for security reasons."

The LED lamps have a 70,000-hour life, and in stairwells where a lamp burns approximately three hours per day, the system could last 45 to 50 years. Payback periods depend on usage and switches, but Alijevski has predicted five to six years to recoup his investment.

Commons

Another possibility for savings was park lighting, the 125W Mercury lamps that illuminated the apartment block commons.

"Mercury is good for about two to three years, about 5,000-10,000 hours, and then it doesn't supply enough light for its purpose," says Alijevski. Since April 2015, Mercury lamps have been forbidden in the EU, there was no reason to consider anything but LED.

Alijevski installed Ensto Opera pole fixtures in both 42W and 20W variations to see how residents reacted. "People in the test area said the 20W was just fine, so we went with those." Eventually, he installed 100 Opera fixtures that burn 12 hours per day, about 4,000 hours per year.

Since the lifespan of an LED is 50,000 hours, it will be 13 years before lighting intensity will fall off, and then only a 30 percent deterioration. It's a clear victory over Mercury.

Alijevski's Opera LEDs required an approximate 27,000-euro investment, with energy savings predicted to surpass 8,000 euros per year. A three-year payback period has been estimated, and a 32 percent drop in energy consumption has been recorded already in the first three months. Even more savings are expected later.

The next 20 percent

With the first 20 percent savings in energy consumption achieved, Alijevski is facing a new challenge: VätterHem's CEO has called for an additional 20 percent reduction by 2023.

"The first 20 percent was a major challenge," says Alijevski. "You install LED lights in the public areas, put water meters in apartments so people are aware of their individual consumption. But the next 20 percent will be tougher. It will require a more significant investment."

But Alijevski is up to the challenge. "We will examine the whole," he says. "We'll look at more lighting, ventilation, insulation, and windows."

And Ensto will be there to assist. Carl Leitner, Ensto's Area Sales Manager, says VätterHem and Alijevski are the types who take action and get things done: "They never wait until the last minute to make changes." ■

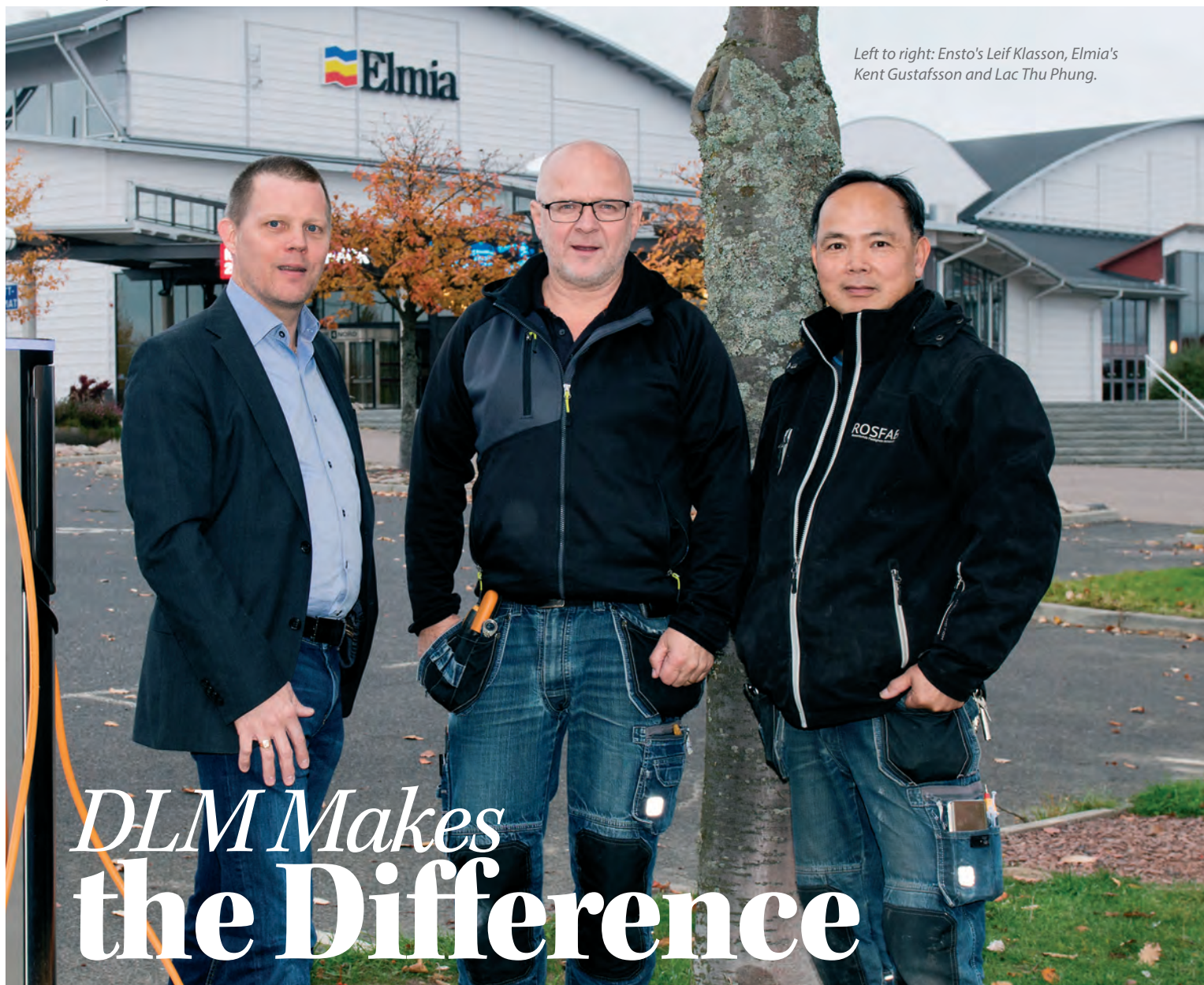


Ensto's Carl Leitner and VätterHem's Afrim Alijevski visit one of VätterHem's properties.

Product testing

Product testing in VätterHem's properties is something Afrim Alijevski does often. He installs products side by side and consults residents about what works best for them.

"Saving money is nice, but praise from residents is essential," says Alijevski. "We've tried many types of light – much cheaper ones than Ensto's – but we think good products are worth it because they last."



Left to right: Ensto's Leif Klasson, Elmia's Kent Gustafsson and Lac Thu Phung.

DLM Makes the Difference

Ensto Chago with Dynamic Load Management takes the parking stage at Jönköping's legendary exhibition space.

✍️ Scott Diel 📷 Tomas Jansohn

DreamHack is the world's largest digital festival and LAN party, featuring concerts, digital art, and e-sports. Each fall, more than 20,000 geeks descend on the Elmia Exhibition and Convention Center in Jönköping, Sweden, to compete for DreamHack's prize purse of over 200,000 euros.

"They sit at their computers 24 hours straight, drinking Red Bull and Coke," says **Leif Klasson**, Ensto Area Sales Manager. "The electricity, internet, absolutely everything has to work perfectly."

Working flawlessly

Kent Gustafsson and **Lac Thu Phung** are the two key people charged with keeping the DreamHack party going, as well as dozens of other events at the Elmia Center that also demand a flawless experience.

Gustafsson, Thu, plus two additional electricians, are responsible for heat, air, electricity, and light for Elmia's 77,000 square meters of indoor exhibition space, outdoor

exhibition space, plus 4,000 parking spaces that serve it all.

Increasingly, exhibition goers are arriving in electric automobiles. "Four electricians don't have the time to be hauling out cables every time someone wants to charge his car," says Ensto's Klasson. So Elmia selected Ensto to supply them with four Chago dual charging units to handle eight cars. They also specified Chago's dynamic load management system, or DLM.

DLM and Chago

"DLM was the reason we chose Ensto," says Lac Thu Phung, Elmia's unofficial computer genius. Thu not only chose the Ensto system, but he installed it himself.

The DLM allows for the management of five to 20 cars, makes sure fuses don't blow, and that cars get the proper amount of amps they need. When a car is full, the DLM automatically disconnects it and reroutes energy to another car.

Thu says he met a few challenges installing connecting the DLM to the system and getting the software running.



Ensto specialists connected directly to Thu's system in real time, everyone looked at the same screen, and together they got the system up and running. It's been smooth sailing since.

"If you google 'laddstolpe,' Swedish for 'charging post,' an Ensto charger is what comes up first."

LEIF KLASSON, SALES MANAGER, ENSTO

Another feature of the DLM that attracted Thu was the ability to monitor and control the system remotely, whether from his desktop, a tablet, or even smartphone. "I can check power consumption from anywhere. I can release a stuck hatch if a parker's RFID card gets demagnetized."

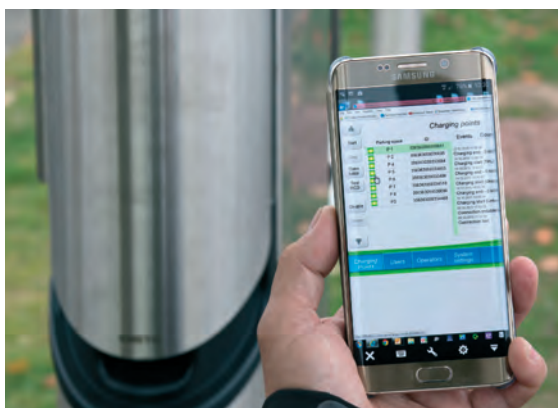
A growing market

Sweden is not yet a market where electric vehicles are commonplace. Its neighbor, Norway, famous for having 50,000 EVs on the road, uses government-provided incentives to boost EV popularity. In Sweden there are few benefits given to EV drivers, and only 13,000 EVs in use.

But the market is growing and Ensto has sold several hundred Chago units throughout Sweden, including a unit to every Toyota dealer, and a charging pole for many McDonald's restaurants, as well.

"This has been the most interesting year so far for EVs and Ensto in Sweden," says Ensto's Klasson. "The majority of customers are actually finding me."

"If you google 'laddstolpe,' Swedish for 'charging post,'" adds Klasson, "an Ensto charger is what comes up first." Being the very definition of charging post in the Swedish language puts Ensto in an enviable position. Thanks to the work of Klasson, and success stories like Elmia, it may be able to stay there a while. ■



Lac Thu Phung demonstrates his ability to monitor and control the DLM system from his smartphone.



An electrician's biggest nightmare?

"There was a **Magnus Uggla** concert at Elmia some years ago, and after five seconds of music everything went black," recalls **Kent Gustafsson**, who's in charge of making sure systems never fail at Elmia.

Gustafsson rushed backstage to see what the problem was, but after a few seconds the concert resumed. "It turned out the cut to black was part of the show," says Gustafsson, "but my heart stopped for a moment."

‘Profitable growth is the name of the game’

Former Ensto Group Chairman of the Board, Risto Anttonen, reflects on the past two years as Chairman.

✍️ Scott Diel 📷 Kaupo Kikkas

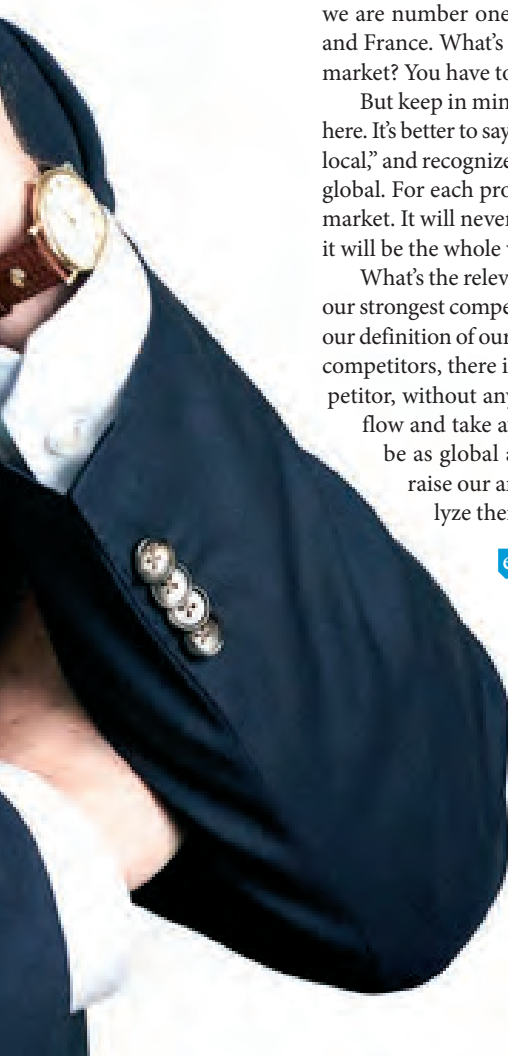
Anttonen has served as CEO of both Ahlstrom and Norpe, two Finnish corporations he helped transition from local to global. *Ensto Today* asked Anttonen about the process of widening Ensto’s relevant market, making the company “less local,” yet maintaining its competitive advantage of being locally present.

et As Chairman, you led the work of the board to set the corporate strategy – determining which businesses Ensto should be in. Given that role, what’s your vision for Ensto?

The main objective is to find the right growth strategy. Ensto has a rich portfolio of different technologies and we have a good knowledge base. We can still learn how to become better in designing our growth strategy and executing it. While the board defines the businesses we’re in, the Strategic Business Units themselves must create their own sustainable competitive advantages.

Ensto’s greatest potential growth will come from Ensto Utility Network products and lighting. But in Ensto Electrification business units there are also opportunities, each having product lines with real growth potential.





When it comes to execution we should look at our structure, overheads, and capacity utilization. I recently visited our units in France and found opportunities to better act as one unified company.

et Does growth for Ensto mean tough choices about the product portfolio?

You should never divide your products between category A and category B. Be proud of every product because they all have a role to play. Just because a product does not have potential for global leadership does not mean that it lacks value. Products may generate valuable cash flow, or they may be part of a farm of potential future successes.

I don't believe there is such a thing as "profitable shrinking." Profitable growth is the name of the business. Do not misunderstand: I am not saying that we should accept underperforming products – that is a separate issue.

You've remarked before that Ensto products should be number one or two in their respective categories.

Products need to be positioned, and this means two things. First, that you are hopefully a "leading product." Second, it means that you are in the largest market. It doesn't help if we are number one in Finland but number 11 in Germany and France. What's your position when you first define your market? You have to be as global as your main competition.

But keep in mind that "global" may not be the right word here. It's better to say that business is constantly becoming "less local," and recognize that there are places in between local and global. For each product we have to understand the relevant market. It will never be only domestic, but that doesn't mean it will be the whole world, either.

What's the relevant market for our products? Look where our strongest competitors are operating. That is our market. If our definition of our playground is not as wide as the strongest competitors, there is always the risk that a more global competitor, without any pain at all, can use his cumulative cash flow and take away our market. Our product lines must be as global as their strongest competitors. We must raise our ambition for these products; we must analyze their competitive advantages and positions.

et What are Ensto's competitive advantages at the group level?

If you visit South Korea you'll find that companies there have the goal to be number one in the world. In the US, if your company reaches 10 million in sales, you don't sell it if you see it could make 100 million after five years. Finnish companies generally lack this ambition and remain very small.

In this sense, Ensto is not a typical Finnish company. In business-to-business worldwide there are 3,000

Changes in the Board

Changes in Ensto's Board of Directors have recently been announced. Current Chairman **Risto Anttonen** will step down in February, remaining as a Board Member and assuming the role of Deputy Chairman. **Marjo Miettinen** will take the role of Chairman. Current Board Members **Esa Saarinen** and **Martti Mäntylä** (both academics) will also step aside.

Ensto wishes to thank these gentlemen, especially Esa Saarinen for his over 25 years of service to the board and his invaluable contributions to the development of Ensto. The cooperation with both former board members will continue at practical levels outside the board.

Replacing Professors Saarinen and Mäntylä will be two men with strong business and management backgrounds; **Kari Kasanen**, a management consultant and former owner of Talent Vectia and a partner of Boardman (the leading network developing active ownership and board work competences in Finland) and **Jukka Ruusunen**, CEO of Fingrid, the electricity transmission company.

leading companies, and half of these are German. They are often middle-sized companies, leaders in small niches, which have been family-owned for generations. Ensto is similar to these in the respect that it is a family-owned company with the critical mass to become a global or regional leader. But also we do not have the resources to be leaders in too many businesses.

This strength of Ensto means continuity, which is extremely important for product development. How can you develop something really new if you stay as CEO only three years and maximize profit every quarter like is common in listed companies? In a family company you can stay and fight for something that brings results after five or fifteen years.

et Buying companies is the fast track to growth, but you have cautioned against too much acquisition.

Ensto's growth should be, roughly speaking, half organic and half acquisitions.

Offhand I cannot assign numbers, but my sense is that Ensto has been growing more by acquisitions in recent years. We've had Enervent and Alppilux in Finland. We've grown in France by acquisition. It is easy for me to name these transactions, but it's more difficult for me to name how we've grown organically through product development. So organic growth is an area for focus.

continued ▶

‘Profitable growth is the name of the game’

So where are our best possibilities for true global growth? In this analysis we must include questions about our resources and knowledge. Organic growth is safer growth, but, in a way, more demanding.

Whatever you do you need people to do it. You need a resource pool, a “bench” as the Americans call it – “How deep is your bench?” We must be less dependent on resources in Finland and have capable people in all markets where we are present.

et You once made the remark that in the previous century the leaders of companies were inventors, and you named Enso Miettinen as a good example. You noted that today’s business leaders often are financial people: “balance sheet acrobats” was your term. But there are some inventors, some software engineers running major companies these days, aren’t there?

I meant that remark to be critical of Finland. What we’re lacking in Finland – and in Europe – is innovation. The fastest

growing companies are software companies and they are all American. There is no software giant in Europe.

Finnish companies are production- and technology focused. We are strong in demanding, difficult, B2B knowledge-based goods where production is the critical factor. But our weakness is in marketing. Downturns impact investment goods more than they affect those who make consumer goods.

It’s what brought Nokia down in the end: they could not understand consumer needs. They were the world’s best logistic machine, and they had the lowest unit cost per produced mobile phone. But they produced the wrong product.

But Ensto is on the right track toward change. During the little more than 10 years I’ve been on the Board we have become less and less dependent on Finland and the Nordic countries. Yet the positions of our product lines are too local. We will continue to search to find that sweet spot between local and global. ■



Sonera and Ensto Chago cooperation creates new communication channel and IoT platform

Ensto Chago and Sonera, a provider of secure networks and communication and digitalization services, are introducing digital channels of communication to the charging network for electric vehicles. New EV charging stations are able to show digital content, such as announcements and targeted commercials, easily and cost-efficiently.

This way public charging stations will offer new sources of income for both private and public service providers. “The new versatile charging stations enable and accelerate the implementation of new Smart City services, such as e-services for mobile devices and applications for improved security”, says **Juha Kähäri** from Sonera.

“We are now combining important and relevant things: digital displays as a channel of communication and charging stations for electric vehicles as an IoT platform. This enables a front-loaded building of the charging network and advances the spread of electric traffic”, says **Juha Stenberg**, CEO of Ensto Chago. ■



It's Payback Time

LEDs are a no-brainer for factories and warehouses. So why are they so rare in production environments?

✍ Scott Diel 📷 Ensto

When Ensto acquired Alpillux in April 2014, Tallinn Plant Director **Peeter Mõrd** examined their products. “I’d already put LEDs in my home, and so I wondered why not the Ensto plant, too?” So he visited Alpillux’s homepage, consulted their team, and together they made some calculations.

In November 2014, Tallinn became the first warehouse in Ensto to switch to LED lighting. One

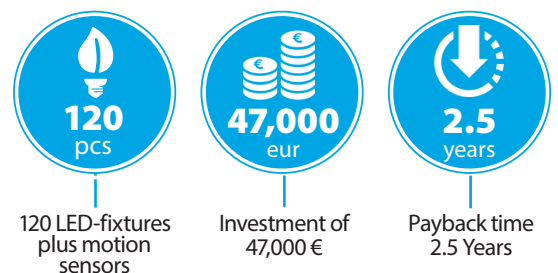
“Lighting calculations are simple. We know how many hours we operate, so as long as we’re present in the building, we’re going to pay back the investment.”

PEETER MÕRD

hundred and thirty LED fixtures, plus motion sensors, were installed with an investment of 68,000 euros. The payback period: 4.3 years. In August 2015, 120 LED fixtures were installed in the production area with an investment of 47,000 euros. Payback: 2.5 years. The grand total investment of 115,000 euros resulted in an average payback of 3.5 years.

Mõrd says that investment in machinery for factories generally requires a payback period of five years or less, and payback is never guaranteed due to potential shifts in the market. “But lighting calculations are simple,” he says. “We know how many hours we operate, so as long as we’re present in the building, we’re going to pay back the investment.”

If it’s so obvious, then why don’t all factories have LEDs? “Production people tend to focus on production issues,” speculates Mõrd, “and we tend not to replace things that already work.” But with the Tallinn plant leading the way, this is one good idea that might just be contagious. ■



In 2015, 120 LED fixtures were installed in the production area with an investment of 47,000 euros.

Fight against **BREAST CANCER** *and beauty standards*

Monokini 2.0 is an art project that re-examines popular culture's narrow view of a woman's ideal appearance. It strives to expand what is accepted and considered beautiful by designing a swimwear collection for women who have gone through breast cancer.

The project culminated in October 2015 in a charity fashion show created completely with the help of volunteers and sponsors. The 90-year-old Yrjönkatu swimming hall in downtown Helsinki provided a beautiful backdrop for the show.

Contribution, support and positive energy

Ensto's Marketing Communications Manager **Kaisa Kaikkonen** was one of the brave models on the catwalk. "I was so happy to be able to do something so unique, and for a good cause," says

Kaikkonen. "The response of the audience when walking down the catwalk, all the emotion and support and positive energy, it's something I'll never forget."

Contributions made during the show were donated to the Finnish Cancer Foundation for breast cancer research.

Ensto was one of the companies sponsoring the event. Also, one of the driving forces of the event was Ensto's third generation owner **Anna Miettinen** who was the event's producer.

One, two or none – you are beautiful no matter what

Swimwear is conventionally designed for women who haven't had a mastectomy. The fact is that many women who have had one breast removed due to breast cancer do not opt for breast reconstruction operation; they wish to continue their lives with one or no breasts at all.

Shops have clothes and swimwear only

for women with two breasts. Women with breast cancer tell it's very difficult to find clothes that fit them well and look good on them.

The creative leaders and creators of Monokini 2.0 **Katriina Haikala** and **Vilma Metteri** asked a group of Finnish fashion designers to design a swimwear collection. As a result the Monokini 2.0 project has 10 haute couture bathing suits, 10 beautiful photographs and 10 empowered women and a world-touring photography exhibition.

"With this project we want to say that any woman, with one or two breasts, can feel complete, lovely and beautiful," says Metteri, "...no matter how much pressure our environment and culture place on us," adds Haikala.

Let's fight breast cancer!

According to the World Cancer Research Fund, breast cancer is the most common cancer in women worldwide, and second most common cancer overall, with nearly 1.7 million new cases diagnosed annually (latest research result being from 2012). This represents about 12% of all new cancer cases and 25% of all cancers in women. One woman in eight suffers from it at some point of their life. About 40% of Finnish breast cancer survivors decide to continue their life with one or no breasts after their mastectomy.

There are multiple ways of raising awareness and fighting back. Besides donating to breast cancer research, you can start by joining the Monokini movement.

www.monokini2.com
www.facebook.com/Monokini2



Monokini 2.0 leaders and the hosts of the show, Vilma Metteri (far left) and Katriina Haikala (second from right) on the catwalk with the models. Ensto's Kaisa Kaikkonen on the far right.



Badges of Honor awarded to Timo Luukkainen in Finland and France

Timo Luukkainen, CEO of Ensto Group, has been awarded First Class Knight of the White Rose of Finland by the President of Finland **Sauli Niinistö**. The badge of honor is granted to distinguished citizens in recognition of significant civilian and military merit.

Earlier this year Timo received the title "Officer of the National Order of Merit" (*Officier de l'Ordre national du Mérite*) by decree of the President of the French Republic.

The President of the French Republic is the Grand Master of the Order and appoints all other members of the Order, by convention, on the advice of the Government. The order recognizes distinguished merits acquired in public office, civil or military, or in private business for services, merits and devotion rendered to the French Nation. **Our warmest congratulations to Timo!**



Welcome Noram to the Ensto Family!

Ensto Enervent Oy has acquired the entire share capital of the Norwegian company Noram Produkter AS, a distributor of ventilation products. The acquisition is perfectly in line with Ensto Enervent's growth strategy of focusing on fresh air, energy efficiency, health and comfort.



Noram Produkter AS has been a long-term partner and the sole Norwegian distributor for Enervent's products sold under the brand name Exvent.

Both companies see opportunities in deeper co-operation. "Norway is a positively developing market where quality and energy efficiency are highly appreciated by customers. This acquisition gives an excellent foothold for us to expand our already growing business in Norway. I am also confident that the increased focus and direct access to the manufacturer's R&D and marketing planning will support Noram," says **Jukka Riekkinen**, Managing Director of Ensto Enervent Oy.



Spotlight:
ARI VIRTANEN

Ari Virtanen is Ensto's new CEO beginning April 4, 2016. Ensto Today sat down to interview him about his past and his plans for the future.

 Pia Hänninen  Kone

“For me, Ensto is a great combination of solid existing businesses and future potential.”

ARI VIRTANEN

et Tell us something about yourself and your family.

I am married with two children. My wife is a lawyer and works in the public sector. Our son studies finance and doesn't live at home anymore. His sister is doing her first year of upper secondary school. The fifth member of our family is a West Highland White Terrier with an ego much greater than his body.

et Where did you study?

I earned my Master's degree from Tampere University of Technology with dual degrees in industrial economics and computer science. Since then I've participated numerous leadership trainings and other events at INSEAD and IMD, for example. I still have postgraduate student status with some courses completed and papers written. The dissertation? Maybe at some point, but now the focus is completely on Ensto.

et How would you describe yourself as a person? As a boss? As a colleague? As a friend?

I like to think that the person is always the same, but in different roles different characteristics are emphasized. The same fundamentals are always there. For example, ethical behavior, respect for individuals, and high integrity must never be compromised. In the leadership role I feel it is important to define a clear direction and help the team to achieve its goals. Colleagues are there to provide and receive support, often outside their own areas of responsibility. In fact, in many organizations the level of collegial collaboration is far too low. The words I associate with friendship are presence, trust, and loyalty.

et Walk us through your career so far.

I did my Master's thesis at Nokia Cellular Systems. The topic was “Charging in GSM networks,” defining the logic of how mobile switching centers collect call-based data and make it possible for the operator to bill its subscribers. So whenever you receive your phone bill, I am partly to blame, because the software I wrote is the great-grandfather of those currently used.

Eight years later I was responsible for the business unit, and three years after that heading the technology office of Nokia Networks based in Silicon Valley.

After returning to Finland I moved to the mobile phone side and established the Linux SW platform called Maemo (later Meego). We built four generations of Internet Tablets, but unfortunately Linux never became Nokia's mainstream. During those years Nokia's business grew rapidly and the success was almost overwhelming. However, when I now look back those times, the strongest memory is not about business. It is about people and how fun it was to work with them. That feeling is something I clearly remember and want to repeat.

At Elektrobit I was responsible for the wireless business. That half of the company is now called Bittium. Moving from telecommunications to the R&D service business gave me a totally new perspective in many ways. Suddenly there were

other companies than Nokia in Finland with real people working for them. No matter how much I appreciate my Nokia years, I think I really needed that change. It was also rewarding to be part of a competent team, which created great products like the world's first smartphone with a satellite connection.

Kone had well-established “vertical” businesses for elevators, escalators, and doors. My role was to build a “horizontal” solutions business to create the best possible people flow experience. If you google “People Flow Intelligence” you'll get a good understanding how a traditional industrial company is renewing itself, boosted by digitalization. For me, Kone was both an introduction to a new industry and a great company to work for. At the moment I am doing the final handovers and feel comfortable about moving on.

I have always been lucky to work for great companies and now I feel privileged to join Ensto.

et What are the most important lessons you've learned about success in your previous jobs?

There is an old saying that the only place where success comes before work is the dictionary. It is not possible to guarantee success in any business, but when the whole organization works together towards clear and shared goals, the likelihood of success can be significantly increased. Once targets are reached they must be quickly celebrated but then considered to be history. Unfortunately, success is not a stable state of affairs, but it must be earned again and again with small actions every single day.

These days, when most companies possess good skills, competences, and processes, companies with true passion will win. The right attitude is irreplaceable, especially during tough times.

And finally, success is never individual. It is always winning together.

et What is your management philosophy?

I don't think this classifies as a philosophy, but I always try to clarify the business framework, including external trends, competitors, customers, and other stakeholders. Then – by reflecting ourselves against this framework – clear business goals can be defined and shared. Once the whole organization understands the direction in a similar manner, everything else becomes easier, because everyone is pulling in the right direction.

The other key thing is to find the right people for the right positions, and give them both responsibility and freedom to execute. I won't monitor every single action, but will be there if needed. My principle is always to hire people who are more competent in their tasks than I am. ■

The full interview is available online at enstotoday.com

Sustainable Postcard:
Zambia

Earth House creates simple, affordable structures – around which an entire economy can be built.

📷 Scott Diel 📷 Fotolia, Patrik Raski





Sustainable Postcard:

Zambia



Earth House CEO Sami Juola standing in front of a prototype of an Earth House family home in Zambia.

"Building should be simple, fast, and should not require special skills, at least on a small scale," argues **Sami Juola**, CEO of Earth House.

Earth House offers sustainable homes that can be built in 14 days by fewer than 25 people without the footprint left by traditional construction techniques.

Juola points out the irony: his family pedigree is in steel and concrete. His father and Earth House partner, architect Tuomo Juola, designed Finland's first all-steel office building.

Noble Origins

It was his father's idea to create the Earth House. "Our first idea was to serve areas of catastrophe by creating a replacement for tents," says Juola, who notes that the tent is still the most widely used solution for catastrophe areas.

"In refugee camps the average time for people to live in tent is more than three years. There should at least be a transitional shelter, something other than just a tent." An Earth House structure's first stage can be finished in 24 hours and serve as the skeleton for a tent. It then maybe be added to as required, until it's a complete home.

But the catastrophe-relief idea was not an immediate success. The buyers for the emergency and catastrophe business are few, and often governments or NGOs who are quite conservative. "Even though we're on the UN vendor list, doesn't mean we can do business with the UN," says Juola. "It's a long road."

Plan B

The long road took a detour – to Zambia.

Earth House has created a scalable home, a 75-square-meter turnkey solution with the price of approximately 35,000 euros. At this price, the home offers clean water, sanitation, hygiene, and limited energy supply. The home is built with modular steel frames, inlaid adobe brick insulation, and plastered with clay both inside and out. Local labor and materials are used when available. The finished price is 20 to 30 percent cheaper than a traditional structure, including a 10 to 15 percent profit margin for Juola's company.

These numbers require volume, however, and 100 structures are needed – basically a village. When you need to sell a whole village, where do you turn? It turns out, to a mining company.

Sustainable mining?

To begin to reach the needed scale requires contracts with approximately 15 to 30 families. "We make a deal with the families, and mining companies guarantee the loans," says Juola.

Mining companies like Canada's Barrick Gold Corporation need housing for junior staff in Zambia's copper belt. Barrick's safety standards rival that of anywhere in the west, says Juola, and its in their interest to support a sustainable local economy.

Barrick, however, is able to buy only three percent of what it needs from Zambia. The country lacks a supply chain and distribution channels.

“Building should be simple, fast, and should not require special skills, at least on a small scale.”

SAMI JUOLA, CEO OF EARTH HOUSE

“The community around the mine has everything,” says Juola, “but it’s being sold in five kilo quantities by families.” These are amounts too small for the mining company to deal with. “So we created the mechanism to enable collection from many families: centralized storage.”

Agri-storage

The Earth House agri-storage facility, constructed using the same technique and technology as its homes, can store the production of 200 families. At these larger quantities, Barrick will guarantee they’ll buy a family’s production. “It’s a win-win case for all involved,” says Juola. “The mining company gets a better product at lower price in a sustainable way. The local residents get a foundation for livelihood.”

From one agri-storage unit comes a positive spiral of benefits. “Families then have income which can be used to build a proper bored well. Children stay in school, because then they don’t have to carry water all day.”

Juola says this aspect was not understood in the beginning. “It’s an example of living and learning. We were there to sell houses, but the women told us that they needed livelihoods. They could buy homes only if they first had an economic basis for doing so.”

Green house, green partners

Earth House currently guarantees 80 percent of labor and materials sourced locally. “For the other 20 percent we want to be as sustainable as possible,” says Juola, and so he has chosen to source from Finland’s greenest companies, and those who share his values of social responsibility.

Ensto has supplied connectors, luminaires, and distribution boards for Earth House. And while its products are green, they also just make sense: “EnstoNet is a click-in solution which does not require specialists to install. We can’t go wrong with it.”

Juola’s vision is for Earth House suppliers to see merit in investing in developing markets and local production. “A local solution with Ensto standards. That’s our long-term goal.”

From family to family

Earth House is now beginning to see some success on the long road to developing countries. A few prototype homes have been constructed, thanks to a deal made in December 2013.

A family is constructing an organic farm education center in Northeastern Zambia, and an additional 12 buildings are slated for construction using Earth House technology. And so it’s perhaps only fitting that Earth House is also a family company with what might be considered a family approach toward business.

“Our design is open source,” Juola says. “We don’t patent anything. Even though we come from as far away as Finland, we believe building a strong brand and choosing the right partners will protect us.” ■



Earth House's electrical installer Timo Kettunen building a grain storage unit commissioned by Irish Aid in Zambia's North Territory, north of Luwingu. "This unit was the first in which we used Ensto's electricity. Ensto's solution streamlined the installation, and sped it up by at least three days in difficult circumstances - not to mention the quality!"



Ensto Vulcano
**Functions
Under Fire**

Set it on fire. It still works fine.

✍ Scott Diel 📷 Ensto



“We wanted a product for the extreme environment of fire safety. Ensto is the only Nordic manufacturer to offer one.”

RIITTA SEECK

In case of fire in a public space, the first priority is evacuation to safety. Patients are removed from hospitals, passengers escorted from airports, or industrial plants cleared of workers.

Ensto Vulcano, one of the industry's most durable junction boxes for fire resistant circuits, buys time for rescue workers to perform this important evacuation work. Ensto Vulcano can provide up to 90 precious life-saving minutes, keeping electricity flowing, safety lighting systems operational, and water pressure systems intact.

Leveraging years of Ensto experience with enclosures for hazardous environments, Ensto Vulcano junction boxes give designers new flexibility and options in making sure their buildings comply with directives and standards and are as safe as they can possibly be.

Still working above 1,000 degrees

Ensto Vulcano is designed to be used in cable systems with system circuit integrity. “We wanted a product for the extreme environment of fire safety,” says Riitta Seeck, Ensto Product Manager. “And Ensto is the only Nordic manufacturer to offer one.”

Ensto Vulcano's ceramic terminals are so durable they could be used again after a thousand-degree fire bath. When the temperature reaches 1,000 degrees Celsius, plastic enclosures have melted away, but Ensto's special copper alloy terminals inside ceramic housings retain their shape and continue to function.



Ensto Product Manager Riitta Seeck prepares Ensto Vulcano for its trial by fire.

The product meets the German standard DIN 4102-12 and keeps electricity flowing for periods up to 90 minutes in order to keep, for example, safety lighting systems and water pressure systems intact.

Even faster installation

Vulcano breaks new ground in installation, as well. “Typically,” says Seeck, “this type of product comes like a Lego toy, loose parts stuffed in a plastic bag. Ensto Vulcano terminals come already mounted in their enclosures, the only separate parts being screw anchors.”

Tapping terminals are another advantage in installation. One incoming conductor space has three outgoing spaces. “This eliminates the need to put many conductors under one screw,” explains Seeck.

Because life matters

Roman myth instructs that Vulcan, god of fire, made a helmet for Pluto, a trident for Neptune, and the armor of Achilles and Aeneas. It's said he taught men the malleability and polishing of metals. And he would surely be pleased that Ensto has produced a legendarily durable fire protection junction box worthy of the Vulcan name.

Because life matters Ensto Vulcano will find a home wherever people gather and equipment with function maintenance is critical. ■

Read more at enstovulcano.com



Leading in Lighting

Meet Jukka Tiitu, the Ensto Lighting business unit's new President

✍️ Scott Diel 📷 Kaupo Kikkas

The formation of the Ensto Lighting business unit is a clear signal of the importance of the lighting business for Ensto. Another signal is the hiring of **Jukka Tiitu** to lead the organization.

A veteran of Nokia, Hewlett-Packard, and Tech Data, Tiitu has an IT and mobile industry background. He has also spent a good portion of his career working with wholesale distributors, a business model which is critical to success in the lighting business.

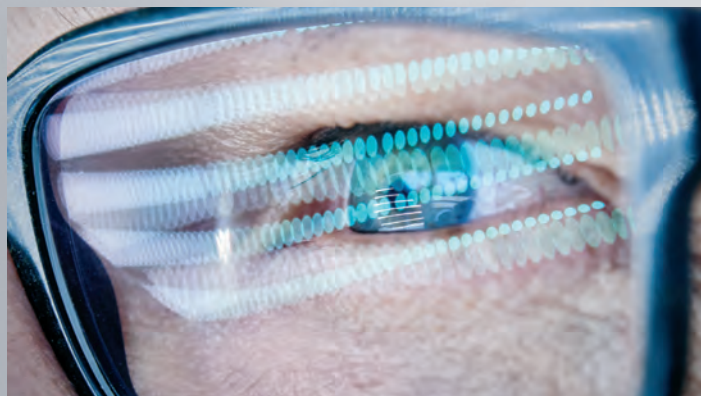
Tiitu sees three clear advantages for Ensto Lighting. "First we have true professionals on our team who have specialized in lighting. Second, our portfolio is strong and it matches customer needs. Finally, Ensto's competitive edge has been top class availability and delivery accuracy. Our production side is extremely flexible and we excel in delivery accuracy and at fast customization."

There are many opportunities in the market at the moment, says Tiitu. "LED is still driving the growth, our

excellent products are gaining more and more ground, we are strong in lighting big ships, and we have a very strong portfolio and project execution skills. The big opportunity is how to use existing Ensto networks to open up or accelerate other European mar-

light but not the fixtures."

Tiitu says the business changes so fast that the only thing we can be certain of is continued disruption. "But," he adds, "Ensto Lighting is structured to embrace change so that both Ensto and its customers will profit." ■



kets where Ensto is present. We've been strong especially in Finland and Sweden, but we have huge growth potential in other countries."

What's the future of lighting? "The Internet of Things and intelligent lighting will play a key role in product development," says Tiitu. "There is also lighting as a service, where you buy

"Ensto Lighting is structured to embrace change so that both Ensto and its customers will profit."

JUKKA TIITU



Fluorescent to LEDs in record time

In a nocturnal installation all the pieces had to fit together.

✍️ Kari Heikkilä 📷 Jori Gustaffson



K-Citymarket Sello

- Replacement of T5 fluorescent luminaires to Tino G2 LEDs
- More high quality light controlled by needs
- Clear improvement of comfort and energy efficiency

Finland's second largest shopping center Sello is located in Espoo, just outside of Helsinki. One of its two hypermarkets, K-citymarket, has always impressed its customers with its size and product assortment. However, this was not enough for the owner who decided to carry out an extensive remodeling and restructuring of the store. At the last minute he decided to include in the project the exchange of all general lighting, and that's when Ensto's new LED solution had a chance to show its benefits.

Brightly exceeded expectations

Last summer Ensto Lighting's Project Sales Manager **Aki Saine** called his long-standing customer, Kesko Food's Building Technology Manager **Jari Suuronen**, into Ensto's factory showroom. The reason was an updated version of the Tino G2 LED luminaire with an improved luminous efficacy of up to 40 percent.

This leap exceeded the bar and an LED luminaire became for the first time a realistic alternative to fluorescent lamps also in locations where large volumes of T5 luminaires are replaced with new ones.

The renewed product found its first proof by fire in K-citymarket Sello, where electrical installations were already at full speed. Delivery schedule was not the only challenge. The locations of most luminaires had to be changed, the current EnstoNet installation system had to be kept in place, and DALI control system had to be combined with the entire general lighting.

Ready, plug, go

Ensto quickly began with planning and preparations and in just over a week after the first presentation the customer was able to assess the luminaires in model installation on site.

"We had a good starting point as the Tino G2 LED luminaire is designed to accommodate the needs of different locations. The only customization was done to the mounting mechanism, where steplessly adjustable brackets were added to the lighting unit ends. This enabled them to reach the existing suspension structures and they could be positioned freely," Saine says.

The requirement for rapid installation suited Ensto in other ways as well. The location was already equipped with an EnstoNet installation system, exactly for this purpose. It was fitted with a group of wiring harnesses and splitters required for the DALI control system, and the luminaires were equipped with corresponding plug-in couplers.

The decision about lighting replacement was made in the advent of summer holidays, and the luminaire production was reorganized urgently to meet the demands of the order. Saine cleared with the renovation site all the necessary details such as rail spacing, line lengths and connector types.

Fully assembled luminaires were delivered to the site in the agreed installments over a period of two weeks. The luminaires had been packaged and labeled in such a way that installation - conducted mostly at night time - would be as smooth as possible. The luminaire replacement project was facilitated by Ensto's experience as a supplier of logistically and schedule-wise demanding projects.

"During the last fifteen years we have renewed a large amount of lighting in our shops together with Ensto," Jari Suuronen says. "Here, too, their strengths have proven to be a good understanding of our needs and the dimensions of the project, as well as the quality of their products. I am very satisfied with the level of LED know-how and the flexibility they have demonstrated in this exceptional project."

A thousand lux or just the right amount of light?

As we enter the shopping center, lighting certainly is the first thing we notice about the K-citymarket's new look. The sensation of bright daylight makes the space appealing. As we stroll through the various departments we find many renewed details creating a more attractive space and a better purchase experience.

The light is directed more to the shop corridors as the suspension is switched from uniform tile-pattern to directional lighting rows following the corridors. At the same time energy is saved as the upper surfaces of the shelves are no longer illuminated at full capacity.

Suuronen notes that a typical store has traditional fluorescent lighting without a control system. It produces a steady state of 800 or 1,000 lux, resulting in unnecessary, if not harmfully excessive, illumination. These systems cannot meet today's energy efficiency requirements.

In this store the level of light intensity can be adjusted by department. Lighting attractively brings fruits and wellness products, while in the cold and frozen food department the cabinets' own lighting plays a more significant role.

During cleaning and shelving, the lighting level is lowered to one-third, and at night, the lighting is switched to minimum or turned off entirely. Without programmed control this would require completely separate lighting solutions.

"I am pleased that we found this LED



Jari Suuronen (on the left) has followed the LED evolution closely, but only now found a general lighting solution suitable for the large spaces in hypermarkets. Ensto's aki Saine was happy to provide it to him.

luminaire: its high luminous efficacy and gross energy efficiency were positive surprises. With this upgrade we were, in conjunction with other modifications, able to secure an impressive and long-term lighting solution for this central metropolitan commercial hub. ■



A Company of Stars

Boris Groysberg is a Harvard Business School professor, author, and management consultant known for putting numbers on things formerly considered soft, like culture and management performance. Ensto Today spoke with Professor Groysberg at an Ensto management seminar in May 2015.

✍️ Scott Diel 📷 Ensto



et The case studies you shared with Ensto, General Electric and Google, placed a heavy emphasis on speed in every aspect of business. Laws and culture differ around the world, and change can't always be made as fast in one place as another. Would you comment on that aspect of change?

First, keep in mind those cases were selected because GE and Google were in particular situations and focused on general managers. But regardless of regional differences, best practices still apply.

There's no argument that if you look at speed of change, it's dramatically different now than 10 or 20 years ago. We're in a global economy now. If in a global economy there are companies in one region moving at a different speed than others, then it creates a comparative advantage for one.

Labor laws and legal issues we have to keep in mind, of course. It might be easier in the US to manage out underperformance. You have to manage performance, which means rewarding the best people. No longer do companies have the luxury on the balance sheet to carry underperformers for decades. I think there are still companies where people put in different efforts but get the same reward. But this is changing in the global economy.

et In your book, *Chasing Stars: The Myth of Talent and the Portability of Performance*, you write about "workers who are increasingly far more committed to an occupation than to an employer." But in the Nordic cultures, it seems employees already matter more – employers and employees value each other more, there is more of a team culture. If this is, in fact, true of Nordic companies, is it an advantage in the global marketplace?

Individual performance is an outcome of many different cultures. Our research suggests that the more of a "we" culture you have, the less portable you are, because you depend on other people. The issue of whether talent is portable and whether you can hire from outside and expect them to exhibit high performance is a big question mark.

If what you say is true [that Nordic companies are by reasons of culture more team oriented] then this trend of Finnish companies hiring more from outside becomes a problematic solution. We should spend more time developing people from inside companies. If you believe in unique cultures (and, by the way, I think Ensto has a unique culture) then developing from within becomes a lot more important. People hired from outside in unique cultures might experience organ rejection. I think there is no substitute for developing the best and brightest, whether speaking about this company or overall.

et You discuss two approaches: Nature and Nurture. Nature means hiring in volume so stars will rise, and hiring stars away from other firms. Nurture means constant training, mentoring, fostering loyalty, a long-term perspective. Is the Nurture approach particularly

difficult for public companies that must deliver results each quarter? Do family firms like Ensto have an advantage here?

First, it's important to note that Nature matters. People have to have a positive IQ and without that nurturing does not help.

But when we talk about stars it should be pointed out that there are quite a lot of people with talent who are

"We should spend more time developing people from inside companies."

BORIS GROYSBERG,
HARVARD BUSINESS SCHOOL
PROFESSOR

able to accomplish nothing. Maybe they wasted their talent, or an organization did not leverage their talent. The bottom line from our research is that stardom is a partnership between you and your employer. The employee has to bring some ambition and the table, but it's a partnership to a team-oriented "we" who works for a team-oriented company, that produces a better outcome than if you're an "I" working for a "we." The proper match is a multiplier of talent. It's possible that you can be working for a company that has a negative impact on your performance.

Is it easier to focus on nurturing and developing in companies that have a long-term orientation? I think the answer is yes. Are there fewer companies with long-term orientations that are publicly traded? The answer is also yes. It's actually really hard nowadays with investors that focus short term.

Look at how institutional investors turn over their portfolios versus 20 or 30 years ago. Look at investor activism, at hedge funds. It's really hard for a company to have a long-term perspective. And development strategy is about long-term yield.

With many of our businesses it's an apprenticeship model. You work with a person and observe what he or she does. There is no book on how to become a great salesman, for example. It's an apprenticeship model, and this takes time. Formal training is a small part of overall development. On-the-job and mentoring are the two biggest pieces. In a partnership or privately owned company it's easier to say, "We are building performance over the next decade, not over the next quarter."

Speaking of team-oriented cultures, in *Chasing Stars* you quote someone with Goldman Sachs who talks about "pronoun education," noting that first-person singular is only used to describe a mistake, not an accomplishment. Accomplishments are expressed as "we." That's encouraging, yet at the same time you noted there are many companies with the opposite culture.

My research was mostly conducted when Goldman Sachs was a partnership. It went public in 1999, and it's a different company today. To clarify: I think we need to

continued ▶

A Company of Stars

look at “we” versus “I” cultures by industry. Is Goldman Sachs a “we” in investment banking? Yes. Is it a “we” versus all other companies? Probably not. You’ve got to look at the peer set. But, to be honest, many companies are “I” cultures.

There is a cross industry trend to build stronger company cultures, and you see more companies moving to becoming “we” – as opposed to just an assembly of free agents. I think if you become global you have to be more consistent. There is pressure to share best practices, to seamlessly execute across time zones and regions, which is easier to do in a “we” culture. “We” cultures have lower turnover, higher customer retention rates. There are many benefits.

But there are negative attributes, as well. “We” cultures sometimes behave like clubs and a dynamic industry can kill them. I think there are probably more benefits to a “we” culture than there are negatives, and this is what CEOs are seeing. A number of companies are now saying that their business units do not own talent, that the top 50 or 100 people are corporate assets and we invest in them as such – because if a business unit can own them they won’t share them with anyone else.

Changing a culture isn’t easy and it’s a decade transformation. I always tell CEOs that if you want to change the culture, I assume you’ll be gone before you see it transformed. Someone else will finish your work.

Even though people realize high-values, high-performance, strong cultures are important, it’s harder to do in publicly-traded company cultures, because the tenure of the CEO is so limited. The CEOs won’t be there to see it if they don’t perform at the same time they’re building the culture.

That’s why I think partnerships and privately owned companies might potentially have a stronger effect in some industries, because they can take a long-term view, not only in developing the people but developing the cultures.

et You’ve written that “a company that offers its valued employees a convincing counterargument to the prevailing superficial and formulaic thinking about portability stands to gain a great deal.” Are there some great examples of this we can learn from? A company that has communicated its values well?

It could be any other value – it doesn’t have to be the “we” culture. You have to offer the value and then to communicate it. The Employee Value Proposition, also called internal marketing, was popular a couple of decades ago, but over time these resources have gone into customer value propositions.

We spend a great deal of time communicating our values to our customers. I think we don’t do as good of a job of actually communicating our values to our employees. When CEOs of companies complain that they’re actually managing free agents or butterflies – people who jump from one company to another – I always ask CEOs if the best people who work for them actually know how much value they create.

Because it’s not enough to create value. You have to communicate it, as well. Goldman Sachs, Google, GE, McKinsey all do it. My employer, Harvard Business School, does it well.

The more successful you are the more likely it is that you believe you control your own destiny. So just as we communicate value to customers, I think the next trend is to communicate your value to your employees and your best and brightest or they’ll go somewhere else. Don’t assume they get it, because most of them will not. ■



Skills vs. **Values**

Ensto Today spoke with Katrin Joala, Ensto's HCM Director, about Ensto's philosophy in hiring and developing a corporate culture.

✍ Scott Diel 📷 Kaupo Kikkas



Skills vs. Values

When we hire and develop our people, we are influencing and creating a culture,” says **Katrin Joala**, Ensto’s HCM Director. Choosing the right people, and pairing them with the right job, enriches an overall organization.

Since people are the carriers of a culture, Joala says hiring for values is important. “When hiring for starting positions, there is a wider choice of personnel, and emphasis can be placed on values, since skills can often be taught. But when hiring for a demanding position, it can be difficult to find both the right skills and values in the same person.”

Ensto Lead superior training program is one good example of a systemic approach to developing employees. “All our superiors have participated in it,” says Joala. She cautions, though, that too much emphasis should not be placed on theoretical training. “Learning by doing is critical. We try to provide our employees with the opportunity to try different things and learn things in different units.”

To cultivate and reward talent, Joala says Ensto always makes an effort to promote from within. “When our VP of Operations retired last spring, all vacant roles cascading from this were filled by promoting from within.”

“And when there is the possibility, we rotate our people, also internationally, in order to grow them. We do not send expats to check up on our daughter companies abroad, rather we do it to add value and grow the person.”

“When there is the possibility, we rotate our people, also internationally, in order to grow them.”

KATRIN JOALA



This philosophy has borne fruit in low employee turnover and long-term employee relationships. “We’ve celebrated 40-year, even 50-year work anniversaries,” says Joala. “We have examples where several generations of a family are all working here, not only the owners, but employees on the factory floor, as well.” She notes that this is also true of other countries where Ensto operates, not just Finland where the company is headquartered.

But to borrow a term from Boris Groysberg, does Ensto have stars? “Every company has superior performers, and we try to find development paths for them. But we would not label them stars,” Joala says that if an employee has the passion to develop him- or herself, then Ensto will support that. “But I believe development is the responsibility of the person, not the company. Our job is to offer the possibilities, but the desire and will must come from the person.”

As Ensto grows to become even more international, as it offers developmental opportunities across many geographic areas and cultures, will the company culture change, as well? “If you compare Ensto to bigger companies, our way of working is to keep bureaucracy to a minimum. When we acquire a company, we usually do not integrate them entirely,” says Joala.

“Being local and close to the customer is a strength and competitive advantage of Ensto. Therefore our corporate culture has to support local expertise and flexibility.” ■



Meet Ensto People:
Marwa Fouly

Riina Silvennoinen Ensto

et Tell us about yourself

Ciao, I'm Marwa but everyone calls me Maru. I'm an enthusiastic person with a good dose of madness, energy, ideas and a lot of imagination! I've been working for nine years at the finance department of Ensto in Italy. Last April I started as the Ensto Wellness Motivator because I want (and I do all my best) to promote healthy lifestyle.

et What do you do on your free time? I bet it's something exercise-related.

I have a normal life and I have a lot of hobbies but you bet right, most of my free time is invested in exercise. I've been doing sports since I was a toddler. I started with dance; modern dance, jazz, hip hop. Then I started swimming. After university I took up running. My first race was StraMilan, a 10 km race where my brother took me. At first I thought I would fail miserably because I hadn't practiced, but I finished it in 50 minutes! That's when I realized running is my thing.

I run almost every morning before going to work, for maximum one hour. Then during the weekend I go for a longer run. I also enjoy mountain running. (The views are fantastic!) In addition, I exercise quite much. Three to four days per week I go to gym for two hours to do abs, cross-fit, body pump, and so on. After five years I continue to be in love with antigravity yoga which I practice two hours every week.

et Do you plans for the near future?

Right now I'm challenging myself with marathons. I just ran my first full marathon in Florence, and the next one will be this year either in Tallinn or Helsinki.

et Do you have some good memories about running?

In the real all my races and trainings are a good memories but my first long distance race, Salomon City Trail, a 28 km race in Milan still the best memory I have. After that I felt "wow, I did it, I'm a winner." It was amazing.

In Italy, one can't race without belonging to a team, so I joined one and made new friends there – a lot of people of different ages and backgrounds. These runner-friends and traveling around the world make the best memories.

et Have you faced any challenges?

Sometimes during a long race I start thinking 'why on earth am I doing this?' But then the feeling on the finish line is unbeatable! And then you start planning your next race and forget about the hardships.

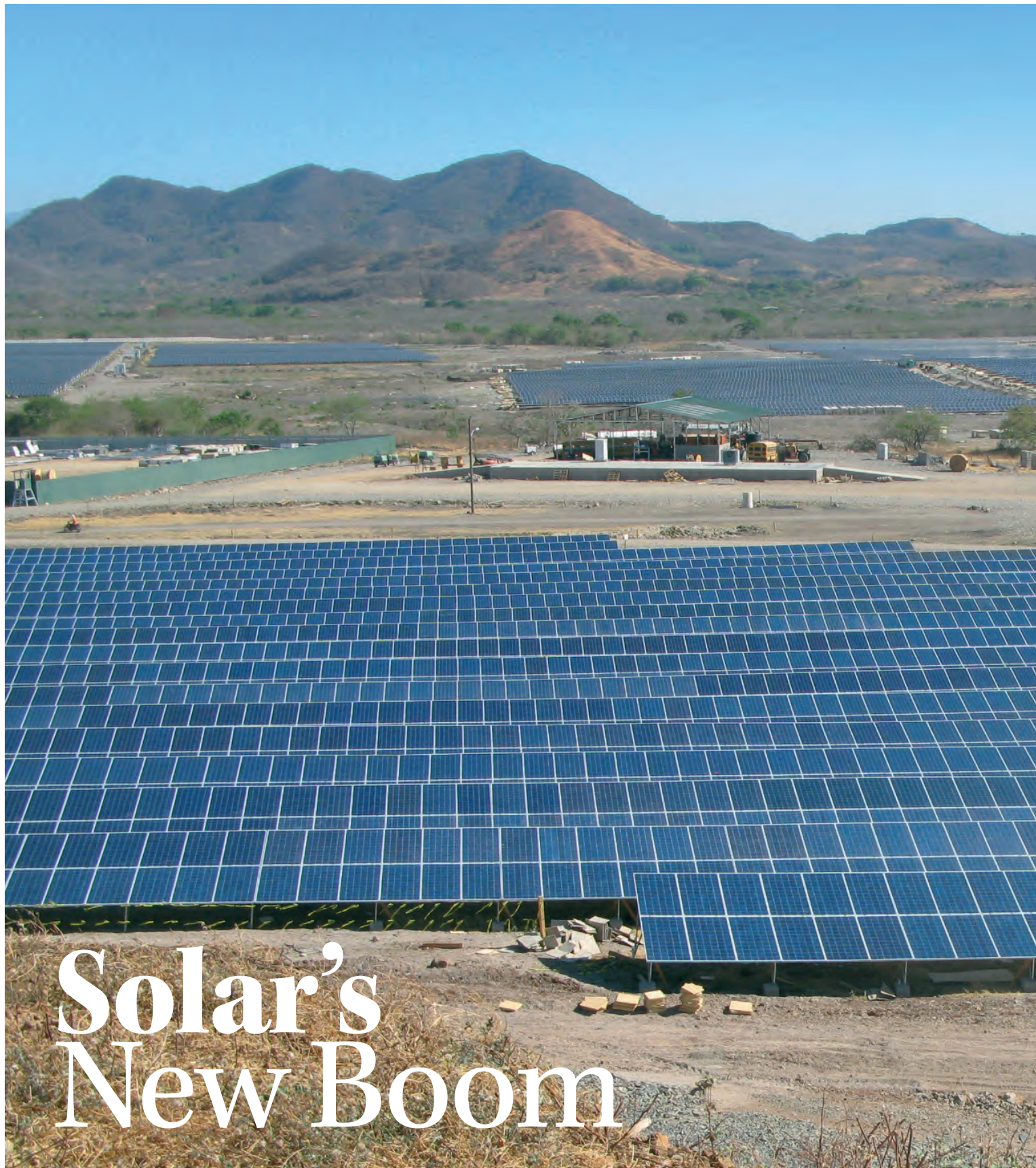
et And finally, Ensto's customer promise is "saves your energy." How do you save yours?

With healthy lifestyle. I try to convey what I believe in: a healthy individual is healthy in several dimensions - emotionally, physically, mentally and spiritually, and this is my mission in life and work. ■

Ensto Wellness Motivator is a position of trust appointed to one person at a time, for a period of one year. The task of the Wellness Motivator is to spread the word of the importance of functional exercising and through different campaigns motivate Ensto personnel to exercise.



@ensto_wellness



Solar's New Boom

The solar market has finally matured and stabilized. Ensto is staking out a solid position together with bigger international players like ABB.

 Scott Diel  FinnFund



"Before, the industry was all about survival," says Ensto Industrial Solutions President **Fernando Troliá Slamic** about the state of the solar business just five years ago. "It was a nascent industry concerned with technology and government regulations." But that's all history.

"Today," says Troliá Slamic, "the fundamental economics of the solar business is comparable to those of traditional power sources like gas and oil."

The solar boom

What Troliá Slamic terms "the new boom" is taking place in Latin America, Asia and the Middle East, with enormous potential for the United States, as well. "We see emerging markets doing in just three years what took about a decade to happen in Europe." And so in today's dynamic solar marketplace, the relevance of a company's business model, as well as its creativity, becomes the critical factor for success.

One of the companies successfully riding this megatrend is ABB, a Switzerland-based power and automation company with annual revenues of approximately 36 billion euros. And playing an important support role for ABB is Ensto.

Honduras' 609MW

Honduras, Latin America's second largest producer of solar electricity, approved 23 solar farms in 2014 for a total of 609 megawatts.

Key in this mix is a 146MW solar project near the city of Nacaome, the biggest solar project ever in Latin America, where ABB was awarded contract for electric balance of system for a 146 MWp project. According to Ensto Key Account Manager **Tomi Ojanen**, the Honduras farm's clean energy will return the investors' money in just four years.

Overall, Ensto has supplied ABB with 1,144 Cubo E-based solar string monitoring junction boxes for the Honduras project, and in 2015 is supplying more than 2,000 to another 20 projects in 10 countries, including the Philippines, Russia, Turkey, India, the UK, and Finland.

The string monitoring junction boxes, delivered by late December 2014, are a critical link in any solar installation, and incorporated over 100 different components manufactured or sourced, requiring adapted and dedicated manufacturing lines at Ensto factories working towards deadlines that demanded extreme flexibility and speed in engineering, sourcing, and manufacturing. The boxes are also nearly indestructible. "The boxes must endure UV radiation and be heavily corrosion-resistant," says Ojanen.

New ideas for a great partner

Troliá Slamic says ABB has been a great partner who is very open to new ideas and creative solutions. "Conventional industry wisdom is that solar array junction boxes must be metallic. But when you consider the extreme operating conditions, such as UV radiation, humidity, heat, and day-night temperature fluctuations, you find out that it doesn't have to be that way, and that other 'unusual' materials can achieve even better performance."

continued ▶



Ensto's high-spec plastics are half the weight of metal and extremely flexible for customization, which translates into lower costs of installation and maintenance, and thus higher flexibility and reliability for ABB and the operator of the solar plant. "We're now seeing about 30 to 40 percent of ABB's orders to Ensto specifying plastic," says Troia Slamic.

Most of all, Ensto's flexibility has served ABB well. "Ensto delivers configurations for plants between 40 and 200 MW, and those change from project to project," says Troia Slamic. "Every project is different."

The secret formula

What's Ensto's secret? "Our processes are tuned for this," says Ensto Project Manager **Kari Sorjonen**. "Once the design is finalized with our customer, we consume a very little amount of time via optimized processes for making the products."

Consultant **Asko Rasinkoski**, a Senior Technology Specialist at Soleras, says Ensto's strength is "taking the customer seriously" and producing a solution which he terms a "standard-custom project."

These projects have produced a fruitful relationship. "The contract is a good example of us trusting Ensto in their professionalism in providing high-quality enclosing solutions targeted at demanding environments," says Jyrki Leppänen, Director, Market management, Solar inverters at ABB. "Ensto is deeply familiar with the solar industry segment and is able to offer technical solutions meeting our needs."

Ensto is currently working with ABB in bidding on 50 other projects in the Far East, Middle East and Latin America, for solar plants of 15 to 200 MW of installed capacity.

And it's not just Ensto supporting ABB. Over the past decade, ABB has been a reliable supplier to Ensto, too, with critical components for the most demanding AC and DC applications.

Growing together

Ensto has over 40 years of experience in integration solutions at large scales. For the past decade, it has gained solar industry specific experience in Europe. Now that competence is being taken outside of Europe, together with key partners like ABB.

So far, Ensto's Mikkeli factory has been the primary manufacturer of the Ensto solar array junction boxes. However, enough growth is expected that Sorjonen says there is a parallel ramping up of capabilities Ensto's factory in Tallinn, as well.

With the market mature, government regulation now largely irrelevant, and the big players staking their positions, Ensto has carved out its key competence: the interconnection of the whole farm.

"The cost of one kilowatt hour ten years ago was four times what it is today," says Troia Slamic, "making today's cost of a kilowatt hour comparable to a gas plant. The world is now ready for a bright solar future." ■

Anatomy of a Solar Farm

1 Mw/1 ha

Photovoltaic power plants are called "farms" for very good reason: since each megawatt of output requires approximately one hectare of space they actually do sometimes compete with agriculture.

MWp

Solar plant capacity is expressed in MWp (megawatt peak) to reflect DC power output. The largest are currently around 600 MW, but up to one gigawatt stations are on the drawing board.

90 min solar radiation = all energy needs for 1 year

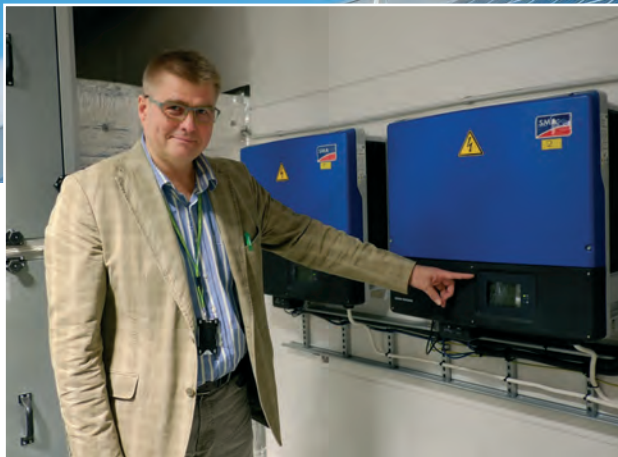
Fun solar fact to astound and amaze your friends with at parties: In 90 minutes there is enough solar radiation on earth to feed all energy needs of planet for one full year. ■



When Solar Is Strategic

While we're a long way from solar-powered factories, Ensto Tallinn shows how solar panels can make a contribution.

 Scott Diel  Ensto



Factory solar panels are a strategic investment, says Peeter Mõrd, pictured here inside the Tallinn plant.

“Several years ago ABB installed four times fewer panels in their Tallinn office with the sole goal of simply powering their office computers.”

PEETER MÕRD, PLANT DIRECTOR

Big picture awareness” is the primary reason Tallinn Plant Director **Peeter Mõrd** gives for installing 124 solar panels on the roof of Ensto’s Tallinn factory.

His second reason was practical: use solar energy to power two Nissan LEAFs which could shuttle employees 43 kilometers between Ensto’s factories in Tallinn and Keila. “The numbers worked out nicely,” says Mõrd, “since the Estonian government was subsidizing the first thousand electric vehicles on the roads.” But just as Ensto was installing its panels, the government pulled the subsidy.

So while Nissan LEAFs aren’t ferrying Ensto workers between the factories, the investment has become more strategic. A 43,000-euro investment purchased 124 panels that produce 27,000 kWh annually. “Factory production is energy intense enough that this covers only one percent of our total energy consumption,” says Mõrd. “But it will pay for itself in about ten years.”

“Since factory investments are generally expected to pay back in five years, solar is not an easy decision for finance people,” says Mõrd. “But **Timo [Luukkainen, Ensto CEO]** saw its merits and signed off on it immediately.”

Ensto isn’t alone in this type of strategic investment in solar. “Several years ago ABB installed four times fewer panels

in their Tallinn office with the sole goal of simply powering their office computers,” says Mõrd.

Mõrd also cites the RE100 global initiative to showcase influential companies committed to using 100 percent renewable power. Members include IKEA, H&M, Nike, Procter & Gamble, SAP, Starbucks, Unilever, Vaisala and Walmart.

“Why not have Ensto on that list?” asks Mõrd. “I think that’s a good challenge.”



124
pcs
124 Solar panels installed on Ensto Tallinn factory

43,000
eur
Total investments 43,000 €

10
years
Payback time 10 years

124 Solar panels were installed on Ensto Tallinn factory with an investment of 43,000 euros.

Own Tools, Own Rules

The Millennial generation will eventually occupy 75 percent of the workplace and control an awesome amount of capital. And they've got their own ideas about how things should be done.

✍️ Scott Diel 📷 Julia Weckman

Imagine an incredibly powerful generation who wants to improve the planet. Meet the Millennials: they're interested in far more than just a bottom line.

Brace for revolution

Born between 1980 and 2000, some estimates place Millennials as comprising 25 percent of the population and controlling as much as 21 percent of consumer discretionary income. While researchers rarely agree how many of them there are precisely, one thing is certain: Millennials will soon be running the world and in control of a great deal of capital.

Stephanie Keller-Bottom, Partner, Growth and Innovation Consulting, at InnoVacienc, the California-based strategic advisory group, says to brace for a revolution in how we look at trust and how we define economic health.

"This is a fully-digital tribe who will control 75 percent of the workplace, and they have a different view. Their focus will not simply be the accumulation of wealth. They embrace peer platforms and they're used to information that moves extremely fast."

This reasoning, in part, explains the Millennials' fascination with startups: the fast-moving culture plays to their strengths, even if they're not quite yet in control of the venture capital. Though the vast majority of startups will fail, Millennials know some will inevitably grow to become tomorrow's corporate behemoths.

New world, new rules

"[Millennials] have their own tools and their own rules..." **Donna Sabino**, Senior Vice President at Ipsos MediaCT, told Forbes.com. And these new rules include a new pattern of consumer behavior.

Research shows Millennials so embrace the idea of trust that they're open to purchasing goods and services from outside a company's area of proven expertise. In other words, they might be willing to buy financial services from Nike.

And, as is often pointed out, they are digital natives to whom social media is important for building that trust, whether with peers or with brands. Some estimates attribute them a full one trillion US dollars in direct buying power.

Beyond the balance sheet

But what makes Millennials interesting goes far beyond what can be counted on a balance sheet. They were raised in a world where global warming is largely accepted as fact. They're going to have to fix the planet, and they don't appear to shy away from the challenge.

At a breakout session in the 2015 Women in Tech conference in Helsinki, a group of Millennials was charged with articulating their vision of sustainability.

"Sustainable business is business as usual," imagined one Millennial. "There'll be no such thing as sustainability reports, because it's a concept we will take for granted."

"Companies will reflect the values of the people who work there," dreamt another.

But these Millennials were hardly naïve, and they recognized that individuals alone cannot always affect change. Hence they see government as the enabler, pushing industry in the right direction.

If Millennials have their way – and they likely will – we may someday enjoy a world with less of a quarterly focus. And all the choices will be sustainable. ■



Ensto Board member Marjo Miettinen addresses the Women in Tech conference.

Peer Pla

"Brace for a revolution in how we look at trust and how we define economic health."

STEPHANIE KELLER-BOTTOM



Why Embrace Startups

Anssi Vanjoki, Professor of Practice at Lappeenranta University of Technology, and former Nokia General Manager, says growth will come from small companies. "Millennials must create their new world. The 25 biggest companies in Finland will employ fewer people in future than they employee today."

Vanjoki encourages non-Millennials to focus on startups. "Help startups grow. Big corporations provided a good life after World War II, but they are moving their operations elsewhere. Small companies must not be just the talk, but the fact."



Installers find the certification very useful: it boosts their confidence and adds reliability to their work.



PKS Sähkösiirto's Jukka Leppänen, Ensto's Markku Rantio and Enerke's Janne Huotari think the certification standards are comprehensive.

Incentive for More Reliable Networks

Ensto grants three-year extensions on guarantees for underground cable joints and terminations when the installer is certified by Ensto.

 Riina Silvennoinen  Markus Sotikov



Formerly, medium voltage cables were installed only by specializing installers. Today, cabling is part of the expertise of all installers.

A remarkable share of the delivery breaks for an underground cable network is caused by installation faults of cables and cable accessories, says the Europacable Accessory Committee, a cooperative organization of cable manufacturers. The organization strives to find a solution for this increased problem via pan-European- and regional trainings, plus accreditations. “The number of installation errors has significantly increased in Central Europe,” says **Markku Wederhorn**, the President of Ensto Utility Networks and a member of Europacable. “This is probably because of the change of installer generations and thus the disappearance of existing know-how.”

The influences of installation faults in this field are well recognized in Finland, too. It's important for network companies to take care of their property and look for more accurate information on the prevalence of installation-based defects. No research-based material is publicly available, but some electricity companies in Finland have conducted their own studies, examining items that are in use now or that were disassembled during renovation projects. According to an

investigation by the Aalto University School of Electrical Engineering, up to 50 percent of installations showed deviations from installation instructions.

Certification project started in Finland

As a pioneer in the field, Ensto has offered installation trainings for a long time. A next logical step was to develop an installer certification system for underground cable products.

Markku Rantio, Sales Director, Ensto Utility Networks, is a member of the installer examination work group (subordinate to the Finnish National Board of Education), which creates examination questions and oversees the organization of installer examinations in Finland. “We thought that the same examination concept could be applied to the certification process. The same principle could be applied to installer training and certification could be obtained via a skills test, and this way we could ensure a high quality of work,” says Rantio.

Ensto introduced the certification concept at the Network 2015 Trade Fair for Electricity and Information Networks in January 2015. "It aroused lots of interest right away," says Rantio. "Encouraged by feedback, we began to pilot certifications with the Finnish electricity network contractor, Enerke." Enerke's goal in the pilot was for 80 to 90 percent of its installers, at minimum, to receive certification. So far, almost 40 installers have passed the certification. As a result, there is at least one certified installer in each of the operating areas and each of the 10 places of business of the network company.

Goal: improvement of reliability

The new Electricity Market Act, adopted in 2013, obligates network companies to significantly improve the reliability of electricity distribution by 2019. According to the new law, the longest permitted delivery break is six hours in densely populated areas and 36 hours in areas that are sparsely-populated. Many network companies have tackled this issue by increasing the volume of their underground cabling.

PKS Sähkösiirto Oy is a conventional overhead line network company with a share of low voltage cabling in the network of about 12 to 13 percent, and approximately 2 to 3 percent in the medium voltage network. "By 2028, we shall invest 400 million euros in improvements of the network and underground cabling," says **Jukka Leppänen**, Construction Manager responsible for building PKS Sähkösiirto's network. "When underground cabling becomes more common, the expertise of the installers and quality of the installations will be emphasized. This can only be maintained and controlled via regular trainings and certifications."

According to **Janne Huotari**, Enerke's CEO, it is clear that high-quality operations reduce the number of electricity distribution failures and decrease costs for the service company. The company tries to prevent harm caused by failures by operating as best it can – following the control model of the Energy Authority. Quality is a matter of cost. "If electricity cannot be distributed due to low-quality installation, it will increase costs for all parties involved," cautions Huotari.

Repairs under warranty are also expensive. A trained installer is able to guarantee to the employer that the work will be performed correctly the first time. The installer doesn't need to return to the work site, which prevents extra costs. Repairs under warranty also make a company's reputation worse in next to no time. Of course, a company image is impaired by any quality deviations and faults due to the installation errors. "In some cases it's easy to verify if the fault is due to installation or materials," says Huotari.

Added value to the product and service

Ensto grants an extended guarantee for its underground cable products when installed by a certified installer. This way, Ensto takes responsibility for possible mistakes made by the installer. The guarantee is extended from the normal two years to five years.

Huotari sums up: "The skills test confirms our installers' installation expertise related to the cable accessories, and in exchange Ensto can grant the extended guarantee for its products." For Enerke, certification is a large investment in man hours, but the company is happy to make this investment. "Employer well-being and training are important for us: our employees appreciate that the employer makes investments in their expertise, and the certification improves installers' professional self-esteem and confidence."

To Enerke quality is a clear differentiating factor. "Enerke wants to be an operator that emphasizes the importance of high quality and not just low price," says Huotari. "Our goal is to become the best service provider in Finland in terms of quality and price, and this kind of cooperation is the key to success." ■



Ensto's Product Manager Stefan Bärlund shows the candidates how the cold shrink is properly peeled.

A Longed-for Extension of Ensto Pro Training

Installer certification is an extension of traditional Ensto Pro trainings which Ensto continuously offers for its customers. Certification is a concepted skills test. "The installer receives feedback immediately. This way, mistakes can be corrected right away and it is easier to remember appropriate operating procedures later," says Markku Rantio.

Kimmo Jääskeläinen, one of Enerke's installers, took part in the Ensto Pro training on elastic joints and terminations in November 2014. "Thanks to the training, one gains an idea of the new products immediately when they are introduced to the market." Jääskeläinen says that certification is also useful: it adds reliability to one's work.

Jääskeläinen took part in the certification test together with another Enerke installer **Petri Auvinen** in June 2015. "The training helps us to make the cable terminations and joints and of course refreshing one's skills is always useful," Auvinen says. "I'm a little excited about passing the skills test, but it's good to have somebody making sure that the installation is performed correctly."

Both Jääskeläinen and Auvinen passed the skills test and are now certified cold shrink joint and termination installers.



Ensto Pro
TRAINING ACADEMY

A Smoke-free Ensto

A non-smoking company. And proud of it!

✍ Mari Häyry 📷 Kaupo Kikkas

A smoke-free workplace has been shown to promote workers' health, well-being and prosperity. Smoke-free work environments also protect non-smokers from passive smoking. Ensto supports its employees' being smoke-free and Ensto's offices in Finland have been non-smoking as of January 1, 2016.

"For us at Ensto, the well-being of employees is very much in focus, as quite often is the case in family businesses. It's very important to the owners," says **Susanna Simolin-Eriksson**, HCM Manager, who in her work concentrates on employee well-being.

"Well-being of employees means, among other things, good occupational health and investment in the development of health care services. Also, the fact that we can offer our employees the opportunity for good and healthy lunch options at the workplace plays an important role in personnel well-being. Likewise, the smoke-free working environment has significant importance. Actually, it is for us quite a matter of the heart," continues Simolin-Eriksson.

Taking care

Simolin-Eriksson's job description in Ensto's personnel department was redefined last spring. Since then she has focused on coordinating development projects that promote employee well-being and developing processes to support these initiatives.

Taking care is one of the main themes in Ensto's corporate responsibility work. The development of employee well-being and taking responsibility for it together with the employees is a key part of this work. Even if the employer is investing a lot in the development of personnel welfare and provides the framework, the ultimate responsibility belongs to employees. Taking care extends beyond Ensto's own staff to other Ensto stakeholders, but it was of course easiest to start with our own staff and premises.

"Taking care can be seen in many of our employee well-being development projects, but the non-smoking campaign has been one of the most important ones for our operations in Finland during recent years," Simolin-Eriksson concludes.

An important part of employee well-being

"For us at Ensto it is important to provide our employees with a healthy and safe working environment. We want to support our employees to cope with everyday life in good health while feeling well. By providing support for our employees to quit smoking, we believe we have contributed to the whole working community's health. It is good to remember that tobacco causes significant health risks to those non-smokers who are exposed to tobacco smoke, as well. Good, smoke-free indoor air plays an important role in a healthy working environment."

The decision to create a smoke-free working environment was made by the company's Management Group, though

originally, the idea of a non-smoking workplace came from many different sources.

Firstly, occupational health care representatives in an annual review introduced management to the additional costs incurred by smoking-induced health hazards. Secondly, the company owners highlighted the importance of investing in personnel welfare.

Management is responsible for enforcing the non-smoking policy – and it's taking this responsibility seriously. Many smokers might feel that non-smoking equals to restriction of freedom. However, non-smokers believe that eliminating tobacco breaks increases equality. It is therefore important that any potential problems are dealt with as openly and quickly as possible.

Ensto has supported its personnel who want to quit smoking since 2013. There was a campaign where support was offered both as therapy and as medical substitution treatments. "Both direct and indirect health impacts of tobacco are undeniable, and they are of great importance to public health. We have achieved our goal if even a few employees manage to quit smoking thanks to the support we provide," states Simolin-Eriksson. ■

What does a smoke-free workplace mean?

Smoking and the use of other tobacco products (electronic cigarettes, snus, and snuff, for example) on Ensto's premises in Finland is prohibited. This applies to both indoor and outdoor spaces.

Non-smoking applies to both Ensto people as well as to persons visiting Ensto - i.e. customers, partners and other visitors.

Taking care is one of the main themes in our corporate responsibility. We offer all our employees a high-quality occupational health, and together with our employees we take responsibility for their well-being. A smoke-free workplace is an important part of well-being at work.



“By providing support for our employees to quit smoking, we believe we have contributed to the whole working community’s health”

SUSANNA SIMOLIN-ERIKSSON



Fourth generation AC charging stations: **Chago Pro**

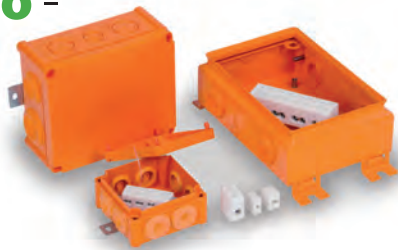
A timelessly stylish and modular solution for fast AC charging of electric vehicles. Chago Pro is the third generation of AC charging stations for public and semi-public locations, such as on-street installations, parking facilities, office buildings, fleet operators, shopping malls and hotels. Chago Pro is a solution for the charging of one (EVF100) or two (EVF200) electric vehicles. It is engineered especially for fast AC charging (Mode 3, 3x32A).

Benefits:

- **Modular structure:** Possibility to modify charging station based on needs (single/dual charging)
- **Models for ground and wall mounting**
- **Simple user interface**
- **Functional maintenance**
- **Esthetic and durable Scandinavian design**
- **Advanced communication options**



Ensto Vulcano - Fire protection junction boxes E30, E60, E90



The Ensto Vulcano high-quality fire protection junction boxes are designed to be used in cable systems with system circuit integrity. The fire protection product range comprises junction boxes made of plastic and metal especially manufactured for fire protection. We also produce our own high temperature-resistant ceramic terminals.

New Series of **screened separable connectors**



The new Ensto CON series screened separable connectors have a wide usage range and e.g. in connectors for 630 A, the range of 25 – 300 mm² can be covered with only three products, making the product selection easier and bringing savings in warehousing costs.

The familiar **Camillo** now comes in LED versions too



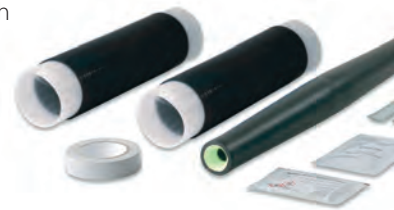
Ensto's Camillo LED is a well-known lamp for gardens and park areas, and now it is available in an energy-efficient LED version too. It has been designed for illuminating various types of spaces, such as squares, pedestrian streets, parks, open markets, parking areas, and playgrounds.

- **recommended installation height 3–5 m**
- **input power 35 W, luminous flux 3,060 lm**
- **colour temperature 4,000 K (Ra >70) and power factor 0.98**
- **service life of LED module 50,000 hours (L70), Ta = 25 °C**

New **Ensto CIL10x** series hybrid joints for medium voltage covered conductors

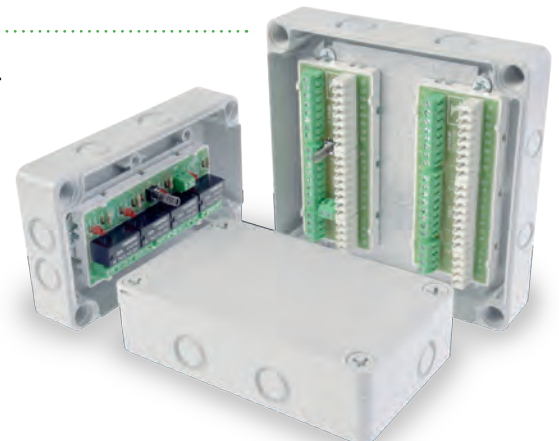
Lifting the hot work gear up with the installer has just become unnecessary - thanks to Ensto's all-new CIL10x series automatic wedge joints with cold shrink sealing tubes.

**www.ensto.com/
forgettheflame**



Ensto Connexio - Installation products for security, telecom and communication

Ensto presents a concept of complete connection boxes for security, telecom and communication. The product range includes connecting, branching, bus and relay boxes as well modules and wide range of accessories for many industrial sectors. Ensto Connexio is used for example in alarm systems, access control, video surveillance and control systems in public areas such as airports, railway stations, hospitals and commercial buildings.



More information about Ensto's products on **www.ensto.com**

BACK TO THE DISCO

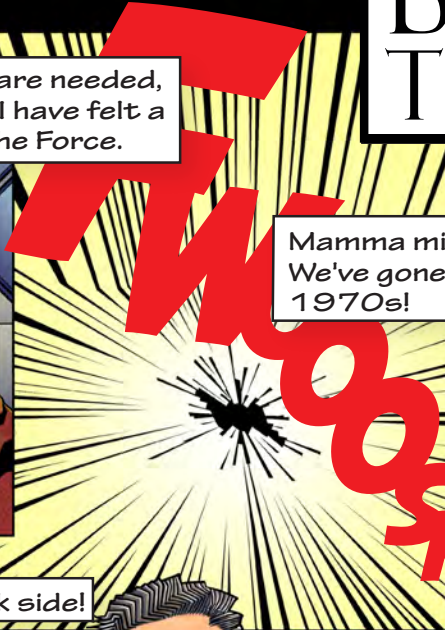
Recently, in a galaxy far, far away...

Where are we going, LEDi Master?

We go where we are needed, young Padawan. I have felt a disturbance in the Force.

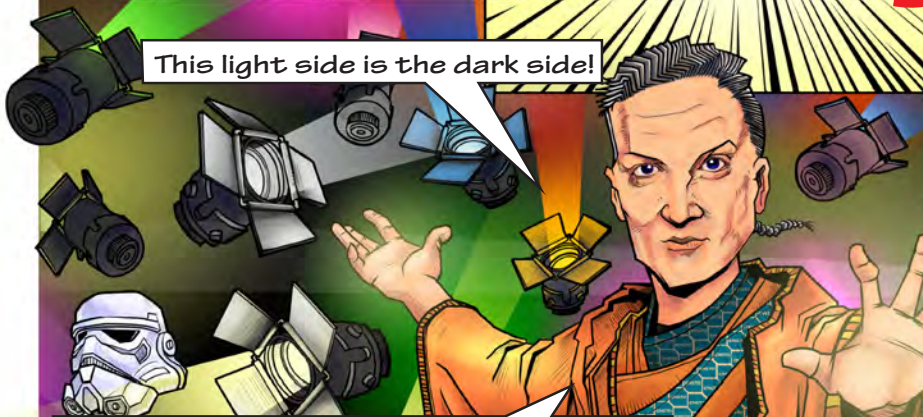


Mamma mia! Disco inferno! We've gone to Sweden in the 1970s!



I have a bad feeling about this.

This light side is the dark side!



But most of all, the energy they waste costs a lot of...

These bulbs are far from sustainable! Plus UV lights make your underwear glow.



...Money, money, money...



I see the Force is strong in you!

Now witness the power of a fully operational, highly sustainable, LED light show!



Super Trouper! My favorite song!

Is your lighting stuck in the '70s or '80s? Modern LED luminaires beam you straight to the future.

Renovate and save!

Ensto Lights Success

Modern workplace lighting must be cost-effective, energy-efficient, yet also inspire human beings to be at their most productive.

Ensto's array of professional lighting solutions can be found in showcase structures throughout Europe, helping companies and people to reach their potential.

Ensto Lighting. We light success.

www.ensto.com



Saves Your Energy