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Dear Reader,

Welcome to the first issue of 2013. We wish you all the very best of luck and much success for your business in the coming year!

About one year ago we started the TexData magazine with an extensive report on sustainability and this year the first issue is also dedicated to the same topic. The crucial point is not a hint of nostalgia but the fact that sustainability continues to be the topic concerning the international textile industry as the most global sector of all. There are no longer any conferences or trade fairs in our industry that do not dedicate a lot of space to sustainability - and rightly so.

We reflect on what companies and organisations initiated in 2012 in order to improve the sustainability of textile production and we also report on where the hitches are and even situations where the direction is completely wrong. We would like to venture a forecast for the current year in this regard.

Furthermore we would like to present the Higg Index of Sustainable Apparel Coalition in a clearer light. How does this tool operate and how do I apply a tool that should enable products to be designed and produced in a more sustainable manner?

We hope that we were able to provide you and your business again with a lot of interesting information in these and other topics and look forward to receiving your valued opinion in the future at redaktion@texdata.com.

Best regards
Oliver Schmidt

Top story

Sustainability – review 2012 and outlook

by Oliver Schmidt

Last year we started our TexData magazine with a big report on sustainability, and we would like to once again provide you with an update in the first issue of this year as to what has changed in the area of sustainability in 2012. How far have we been able to meet Kofi Anan's request last year in respect of the textile industry changing the world as the most global industry?

First of all we would like to remind you again how we understand sustainability or sustainable development in the sense of the definition of the Brundtland Commission of the United Nations stated on March 20, 1987: "sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

Hence 'sustainability' is an approach to balance ecological, economic and social interests across the entire value chain under consideration of all aspects of farming, processing and packaging.

Efforts have been made along the entire textile value chain in order to improve sustainability: In the area of cotton, the manufacture of man-made fibres, mechanical engineering industry, national and international organisations, the chemical industry, textile associations and textile companies and last but not least at the large brands and retailers of the garment industry.

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Progress is being made and even if the individual steps might appear small it should be considered when making a judgement that most people overestimate what is achievable in one year and underestimate what they can change in 10 years.
In our last report on sustainability we approached the topic in chronological order. This time we structure the report along the textile value chain to make it easier to react to the different developments of the individual clusters. We start therefore with the fibres and do so with cotton, as it is so important for the entire sustainability process.

Globally there are 250 million people involved in the production of cotton according to the annual report of the Cotton Exchange in Bremen and produce nearly 27 million tons of raw cotton in an area of 36 million hectare. While the figures themselves are large, the picture changes with the percentage of cotton in the global fibre consumption which reduced from over 50% in 1975 to about 34% in 2010. In principle cotton is the more sustainable fibre compared to chemical fibres as it regrows, however especially cotton is repeatedly criticised in connection with sustainability as there is a very high consumption of pesticides for protection and as fertiliser and high water consumption are attributed to cotton. Eco or organic cotton, where farming does not make use of chemicals, has a percentage of only ca. 0.7-1% in the global market. A complete conversion to organic cotton would also be complete utopia in theory, as the area required for farming is not available or large parts of food-farming areas would be eliminated, which nobody who values sustainability would seriously take into consideration.

The consumption of fibre required in the future will increase as well, as for a start the global population in general is growing and on the other hand emerging national economies are going to consume more garments and textiles according to current prognoses.

This is a brief outline of the problem with cotton and a solution sounds like squaring the circle. The topic of sustainability has been a concern for the cotton industry for several years now. Allen A. Terhaar, Senior Advisor com Cotton Council International writes in this respect: ‘Sustainability is an important target for the entire industry’ and ‘Preserving our world should be a worthwhile objective for us all’. He does not however offer specific solutions. Instead he refers to the Life Cycle Analyses commissioned by CCI for cotton fibres and tissues from the planting process to disposal or recycling of the garment. In respect of CO2 emissions he refers to the fact that the largest quantity of greenhouse gases is emitted in the finishing process of textiles and also household linen. That might probably be correct, sounds however very much like shifting the problem. Terhaar relies above all on technological progress.

Producers [...] should not only stick to one method, but continually research and check which production methods help best to achieve the target of more sustainability.

Allen A. Terhaar, Senior Advisor com Cotton Council International

He says: 'Producers [...] should not only stick to one method, but continually research and check which production methods help best to achieve the target of more sustainability [...]. [...] The USA and a number of other countries apply sustainable methods in cotton production, optimal processes most modern technology. This means that today far less land, water and energy are consumed, there is a lot less soil erosion and pesticides are used less per output quantity compared to the values of 25 years ago or even 5 years.

Mark A. Messura, senior vice president, Global Supply Chain Marketing, Cotton Incorporated, USA, also considers sustainability as a problem for the entire supply chain and counts on research and development for more sustainability. He said on the
ITMF Annual Conference 2012 in Hanoi, Vietnam in November 2012: „People often ask: How can we strive to plant more cotton when the world needs more food? Well, in the future, the world is going to need more of a lot of things! That's why cotton has - and will continue to - improve its production practices. The industry will innovate and find ways for cotton to require less land, less water, less energy, and fewer chemicals to generate even more fiber".

Environmental organisations view this topic completely differently. Hence Greenpeace writes in an article: Workers on the cotton plantations pay for this low price with a 77 hour-week, a miserable health care and enormous exposure to pesticides that are applied in large quantities to the delicate cotton plants. Enormous water requirements are a further problem: Production of one kilogram of spinnable fibre requires 25.000 liters of water! That means that in countries like China, India, the USA and Uzbekistan, that are already very dry farming areas, the soil becomes salty and the ground water level sinks.

And the Umweltinstitut München (environmental institute in Munich): 'Farming cotton for a single T-shirt devours up to 2000 liter - 10 bath tubs full. 60 percent of the cotton farming area is irrigated artificially. That is about half of the irrigated areas worldwide. Cotton production is therefore responsible for about six percent of global freshwater consumption.'

Terhaar names the perception of cotton consuming extremely much water as a widespread delusion. He says: 'The global water consumption of cotton constitutes about 2.6% of the total amount of water used for farming.'

„The industry will innovate and find ways for cotton to require less land, less water, less energy, and fewer chemicals to generate even more fiber."

Mark A. Messura, senior vice president, Global Supply Chain Marketing, Cotton Incorporated, USA

e-save

comprehensive efficiency

Oerlikon Textile started to establish e-save – a green label, originally created to brand components and machinery with a significantly reduced energy consumption – successfully back in 2004. In the last few years e-save has become a hallmark for comprehensive efficiency. It underlines Oerlikon Textile's technological excellence for economic welfare as well as for a sustainable management of limited resources. Oerlikon Textile innovations are developed with the following four e-save aspects in mind:

To learn more about highly efficient textile machinery visit www.e-save.oerlikontextile.com

innovation has a name

oerlikon

Apart from these areas of friction between industry and environmental organisations there are endeavours and attempts that lead to the hope that the cotton industry may find ways to clearly improve their part in the sustainability of textile products.

Two of these initiatives are ‚Cotton made in Africa' and ‚Better Cotton'.

The 'Better Cotton Initiative' (bci) defines its ongoing mission as follows: "bci exists to make global cotton production better for the people who produce it, better for the environment it grows in and better for the sector's future. bci works with a diverse range of stakeholders to promote measurable and continuing improvements for the environment, farming communities and the economies of cotton-producing areas. bci aims to transform cotton production worldwide by developing better cotton as a sustainable mainstream commodity."

„bci exists to make global cotton production better for the people who produce it."

„Better Cotton Initiative" (bci)

„The Cotton made in Africa Initiative follows the principles of ‚social business'."

„Cotton made in Africa"

‚Cotton made in Africa' describes itself as follows: „The Aid by Trade Foundation follows an innovative approach in development cooperation. Rather than sending money to Africa, the Cotton made in Africa Initiative follows the principles of "social business" – as the name of the Foundation says, this is aid by trade, helping people to help themselves by means of commercial activities. The African smallholder farmers who have joined this initiative are partners on an equal footing."

It is the target of ‚Cotton made in Africa' to be able to deliver sustainable cotton, however not organic cotton. Their reasons are as follows: "There are other initiatives that focus on the cultivation and sale of organic cotton. But as it is still quite expensive to grow this cotton, in many cases it is not yet able to meet the requirements of the mass market, and remains a niche product for the time being. Big retail companies want to buy the cotton raw material at the lowest possible price, because consumers are normally not willing to pay more for it. Cotton made in Africa wants to sell as much African cotton as possible in the market, to improve the conditions of life of as many smallholder farmers as possible. So CmiA cotton has to hold its own in the mass market. Cotton made in Africa is not organic cotton.

„This broad set of abilities makes FLO-CERT your perfect partner in developing truly sustainable supply chains based on shared values." FLO-CERT

But sustainable growing of the raw material is ensured – together with its partners, the initiative gives the farmers training in modern, efficient growing methods, with awareness of pesticide use, i.e. use of the minimum amount of pesticides. Rain fed cultivation and crop rotation is used. But the initiative works in close cooperation with the organic cotton organisations, for joint work to increase the sales of sustainably grown cotton."

'Green activists' however also see some danger in these initiatives. Lars Wittenbrink, who did his Master thesis on „Nachhaltigkeitspotentiale der Outdoorbranche" (Sustainability in the Outdoor industry), in his blog „Grüne Mode" (green fashion): „[...]Is organic cotton nearly facing a strengthened breakthrough into the mass market after significant reductions in production quantity in the past? Rather not, unfortunately, as the textile giants primarily are not thinking of organic cotton when talking about 'sustainable cotton', but cotton from the contractual production systems Cotton made in Africa (CmiA) and Better Cotton Initiative (BCI). Their standards however are far from ecological agriculture and the social standards are restricted to a great extent on the prohibition of child labour and forced labour. CmiA explicitly rejects purchase prices for cotton above global market level (such as the Fair Trade concept)."

„The textile giants primarily are not thinking of organic cotton when talking about 'sustainable cotton'."

Lars Wittenbrink, „Grüne Mode"

A list of certified organic cotton suppliers are to be found via Fairtrade in the directory of 'FLO-CERT', the certifier for Fair Trade. ‚FLO-CERT' stands for ‚Realizing the Value in Sustainability' and describes itself as follows: „Our skill set spans the sustainability spectrum - from providing assurance about compliance with social and economic standards (such as Fairtrade Certification), to measuring the Product Carbon Footprint of products sold to consumers. This broad set of abilities makes FLO-CERT your perfect partner in developing truly sustainable supply chains based on shared values."

The directory lists around 300 producers and merchants. One of the companies listed in the directory is the German yarn supplier BIMECO. The company writes on its website: „BIMECO is continuously developing its cooperation with suppliers using certified organic cotton and paying attention to fair working conditions. For this reason we can supply our customers with yarns in accordance with the Öko-Tex® Standard 100 and the Global Organic Textile Standard (GOTS), as well as arrange Fair Trade certified yarn for them." Bimeco is only an example of a growing niche that has set up a complete value chain for organic cotton right through to the consumer.

„Cotton is the most sustainable and, therefore most desired fibre.“

The initiative for sustainable cotton (isc)

The initiative for sustainable cotton (isc) provides a remarkably interesting approach. It developed a futuristic scenario for the year 2025 in a forum ‘The Future Of Cotton’. The report Cotton Futures uses four scenarios created for Fashion Futures as the basis to explore the future of the cotton industry. The complete report that was developed with the cooperation of numerous persons from organisations in the textile industry and retailers (i.a. Fairtrade Deutschland, Bremen Cotton Exchange, Better Cotton Initiative, Textile Exchange, Otto, Tchibo), is available on the website and has led to the following vision: „Cotton is the most sustainable and, therefore most desired fibre. Collective actions of stakeholders in the cotton industry ensure the fibre makes a positive impact on people and the environment along the value chain.”

There can hardly be a better conclusion to the efforts on sustainability and so we turn to man-made fibres. Is it at all justified that fibres based on fossil oil can claim to be sustainable? Well, at least one vision could be created in the form of complete recycling leading to a situation where less and less or no ‘fresh fossil oil’ needs to be injected into the production process. This however is probably to remain a remote vision.

Filament production experts concerned themselves with the much more up to date topic of sustainability in November 2012 at the conference at Università Carlo Cattaneo – LIUC in Castellanza, Varese, Italy, during the conference ‘The man-made fibres industry between globalization and sustainability’.

“Today sustainability has entered the domain of sales and competitiveness,” stated Maurizio Radici, vice president and COO of RadiciGroup and president of Assofibre Cirfs Italia at the conference. “The main focus of our group’s efforts is making sustainability a total systemic approach to the management of our businesses, at all stages in our production chain, from chemicals to plastics and synthetic fibres. Concrete action is needed, starting from the smallest responsible steps that each individual can take in his or her daily routine.

„The main focus of our group’s efforts is making sustainability a total systemic approach to the management of our businesses.“

Maurizio Radici, vice president and COO of RadiciGroup and president of Assofibre Cirfs Italia

Sustainability is an overall vision of corporate management and, for this reason, we need to be committed not only on the environmental front but also on economic, human, production-commercial and social levels."

A press release describes the assessment of the conference on sustainability of the European fibre manufacturers: : „European fibre manufacturers are demonstrating a tangible commitment to sustainability. Evidence of this is the rising number and quality of man-made fibres produced with recycled materials, the greater use of renewable source energy, the growing use of biopolymers, the reduced amount and greater recycling of production rejects and the fact that non-recyclable waste from man-made fibre textiles can be efficiently incinerated to generate energy. What is more, compared to Asian production, the production of man-made fibres in Europe is less energy intensive, because of more innovative and efficient plants, as well as energy sources that produce fewer emissions."

So let's leave the raw materials and fibres and go one step further along the textile value chain and turn our attention to the production process of textiles.

Here the large potentials in the field of energy-intensive yarn production are the spinning process and the finishing process of the dye works and textile finishing.

The pioneer for improved sustainability in spinning is the market leader Oerlikon, who has set the standards for many years now with their e-save strategy and extensive research to make their machines more and more energy efficient. Since energy is the largest cost factor in the spinning process, the target to pursue sustainability here leads also to competitive advantages when producing yarn. In the past years, Oerlikon has reduced the energy consumption of some newly developed machines drastically to 50%. On the trade fair India ITME in December, the company pointed out one special process in particular the masterbatch dyeing process with the Oerlikon Barmag 3DD mixer as part of their sustainability drive. It can alone save very much energy just with innovation.
Oerlikon comments: „A piece dyeing process requires around 30 times as much energy as masterbatch dyeing processes, while also emitting approximately 30 times the amount of CO2".

A further model company on the sustainability issue is the German company Groz-Beckert that already received the Korea-EU Award in the category „Green Pioneer" in November.
At Groz-Beckert, sustainability and energy efficiency are integral components of global strategy. The company provides its customers with intensive support in order to increase productivity and reduce energy and CO2 emissions. One highlight in this regard is the litespeed® needle for high-performance circular knitting machines. It enables energy savings of up to 20 percent - without the need for any additional investments or modifications. Replacement of the existing knitting machine needles with litespeed® needles is all that is required.

In Korea alone, seamless application of the litespeed® would result in a CO2 reduction of 10,500 t. This roughly corresponds to the annual emissions caused by around 9,000 average cars each traveling 10,000 km a year.

In the finishing process, we had already presented the energy efficient machines, such as for example tenter frames from the Germany companies Brückner and Monforts, as well as the more environmentally friendly dyeing machines of the Germany company Thies.

Clariant opend up a new level of performance to the outdoor gear and equipment markets with the launch of fluorine-free water repellent Arkophob® FFR and has been honored for its Advanced Denim technology by ICIS. (You can find out more about Clariant's sustainability strategy also in the –> interview with Emrah Esder). Huntsman Textile Effects and DuPont Alliance had launched the innovative product – OLEOPHOBOL® CP-U that delivers maximum performance with minimum environmental footprint for the automotive and upholstery segments. A collaboration between Proviron and Reverdia has resulted in the introduction of Provichem® 2511 Eco, a Di-Methyl-Succinate (DMS) that can be used as a solvent and a raw material for fine chemicals such as pigments and UV stabilizers.

„In ten years, the use of innovative machinery and plants will in fact allow these savings to be doubled."

VDMA

That innovations in finishing do not have to come from the chemical industry or machine manufacturers, is proven by the spinning works Schöller from Austria. Schoeller is the 2012 winner of the Vorarlberg Innovation Award for its"sustainable production". The spinning and dyeing company was distinguished for its novel chlorine-free EXP 3.0 wool finishing. This novel and also water-saving finish has been elaborated during several year's research by Schoeller in cooperation with the University of Innsbruck (Austria).

The Germany association VDMA focuses mainly on innovation and information with its Blue Competence Initiative. On the initiative webpage we learn: „Compared with the level of consumption in 2000, the products manufactured by the mechanical engineering industry today are already allowing energy savings to be achieved which are equivalent to the electricity demand of all 48 million households in Germany, Austria and Switzerland! In ten years, the use of innovative machinery and plants will in fact allow these savings to be doubled." Using best practice models, the VDMA informed comprehensively at the ITMA ASIA, how sustainability can be achieved by investing in innovation and how such models can also make economic sense due to their higher energy efficiency.

Also the Italian association ACIMIT is pushing its „green label“ forwards. The association' s “Sustainable Technologies” project took another important step forward in its development, obtaining a certificate of conformity for the ACIMIT green label. Subsequently, the Association chose RINA (www.rina.org), an international certification body, to define and validate the process for issuing the ACIMIT green label. Manufacturers participating in the “Sustainable Technologies” project are in fact obliged to adhere to implementation measures and operating instructions on the measurement of energy and environmental performances declared by the green label.

Critics of the „green label“, however, point out that the energy consumption and the sustainability of a machine depends on so many parameters, such as for example the material used and above all also the employed energy mix, that one label alone cannot make a statement about the sustainability of production. That is correct, but many manufacturers also point out the special energy efficiency of the machine often referring to the previous model.

In the end up, the associations‘ aim must be that Life Cycle Analyses performed by third parties do not operate with false assumptions, but rather that the associations develop and provide processes and tools to use the energy of defined production processes with defined material use. Taking the energy mix into consideration, the value of the carbon footprint must be ascertainable.

In the end, the aim must be, and that is where the developments are leading in the medium-term, to add up the values for CO2, energy consumption, water and chemicals used for each textile end product in every subprocess of production arriving at a total value.

In the garment production sector, there is a different aspect of sustainability that is becoming more and more important, since here the work is not primarily performed by machines, but by people. Only recently the dreadful catastrophe in Bangladesh demonstrated to us all how people are still being exploited and taken advantage of in the textile industry in some parts of the world, and how few make use of the work safety obligations, when they are strategically intended but not operatively put into practice. The failings were spotted by the safety inspection the case of the fire, but no consequent action was taken. An analysis by Wall Street magazines came up with the following result: „The inspectors that reviewed the Tazreen Fashions factory on behalf of a supplier of the US retail giant Wal-Mart Stores, had reported serious failings to the fire safety authorities. [...] Despite the warnings, the production lines of the factory were used to sew garments for Wal-Mart only weeks before the disaster.“

The reason that is nearly always given as to why a ‚code of conduct‘ for work standards and eligibility criteria of large retailers do not work, is basically the supply chain with its web of traders and middlemen as well as insufficient communication and flow of information in this network.

However, the consumers no longer accept these reasons and the damage to the image sticks with the large retailers and the brands that had their garments produced in such factories. And in times when the omni-availability of the Internet and of Cloud software provide every possibility to constantly control and manage the flow of goods and their scheduling, this reason is no longer really believable. Companies must also act, not just change their mind-set.

That is like asking, precisely in the area of work standards and the work conditions and wages involved, who will be first, and in the end it is a leap of faith that fair conditions also work in a market economy. Working conditions with 6 days 60 hour weeks and a state minimum wage that is not enough to feed a family or create some sort of ‚wealth' over a number of years, these models are being phased out. Of course, governments cannot adjust the minimum wages duly when they know that it will not take long before the production moves to another country. And so the companies cannot quote the state minimum wages because they are also well aware of this. Still, they do because they see themselves in competition with others that do not follow suit and demand fair conditions because they sell their goods over low prices.

H&M Sustainability Representative Helena Helmersson said on Germany television ARD, „I don't believe that we should control everything. The aim must be a very good cooperation with the suppliers". Furthermore, the problem could not be solved by one company on its own, but only if all companies joined in.

So it can only happen with a concerted effort. And finding common ground is in each individual case rather difficult to achieve. That is also what the German newspaper Frankfurter Rundschau reported on the topic work safety obligations of sub-contractors. „Up until now, only the US giant PVH (Tommy Hilfiger, Calvin Klein) and the Germany textile dealer deutsche Tchibo have agreed to support the convention. C&A, the Zara parent Inditex, H&M and others are reluctant sometimes referring to the investments made in other information campaigns. PVH will, however, only invest if at least three other international brand producers come aboard."

The questions that must be asked are: How large is the companies' image loss caused by such far-reaching, publicity of such reports? Isn't the purpose of the image gain through advertising contradicted by such reports?

„The aim must be a very good cooperation with the suppliers."

Helena Helmersson, H&M Sustainability Representative

Are not at least some of the millions invested in advertising squandered because of this, and would it not be wiser to invest them elsewhere, precisely in such projects? It is up to the companies themselves to answer these questions.

It must also be clearly stated that is doesn‘t make much sense or solve the issue, if the companies‘ will to improve sustainability is denied and they are criticised as being „green-washers“ because of individual incidents – no matter how tragic these may be.

And so we continue with retailers and brands, but turn our attention to the positive reports. A lot of progress has been by the brands and retailers regarding more sustainability so that we can only present a small portion.

The Sustainable Apparel Coalition published its tool, the Higg-Index 1.0, for more sustainability in July 2012, and provides this free of charge. (see extra report). The following new members were registered by the SAC in 2012: Clariant, DyStar, the IWTO, Avery Dennison Retail Branding and Information Solutions (RBIS) a in 2013 ANN INC., the parent company of the leading women’s specialty retail fashion brands Ann Taylor and LOFT, and LYCRA® brand owner INVISTA followed suit.

At November 13th 2012, the American Apparel & Footwear Association (AAFA) and the Sustainable Apparel Coalition (SAC) signed a memorandum of understanding (MOU) to further foster collaboration on key sustainability initiatives across the U.S. apparel and footwear industry.

UK retail giant Marks & Spencer (M&S) has joined the Greenpeace “Detox” campaign in October with a commitment to eliminate all releases of hazardous chemicals throughout its entire supply chain and products by 2020. And in November, the Spanish fashion company Zara explained that it would produce garments without chemicals that harm health and the environment by 2020. The umbrella group Inditex, which includes Zara and also a series of other fashion brands, made a statement committing itself to a „Zero Pollution“ strategy. The German news magazine Spiegel quotes the chemical expert from Greenpeace Christiane Huxdorff as follows: „This is a milestone for clean textile production. The whole fashion branch must now follow the market leader.“

„This is a milestone for clean textile production. The whole fashion branch must now follow the market leader.“

Christiane Huxdorff, chemical expert, Greenpeace

It would appear that she is right with her bold statement, because in January first Uniqlo and then Benetton joined up. Greenpeace reported: „The biggest global fashion brand based in Asia, Uniqlo, and its parent company Fast Retailing Group, today committed to eliminate all releases of hazardous chemicals throughout its entire global supply chain and products by 2020, in response to Greenpeace's global Detox campaign." And one week later: "Here in Italy we are celebrating the latest Detox commitment, announced today by the Benetton Group, which owns brands such as Sisley, Playlife and most famously, the United Colors of Benetton."

The outstanding conference on sustainability was surely the Sustainable Textiles Conference in Hong Kong in October that was hosted by Textile Exchange, EcoTextile News, Messe Frankfurt and Planet Textiles. Over 200 companies from all parts of the world participated, including heavy weights from various sectors, such as Adidas, Puma, Nike, C&A, H&M, Marks & Spencer, Otto, Bayer CropScience, Cotton Incorporated, Clariant, DuPont, Dystar, Huntsman, Ramatex, and Greenpeace, the SAC, Fairtrade, GOTS and OEKO-TEX.

Textile Exchange announced on the conference: „Presenters at the Sustainable Textiles Conference couched the environmental impact of manufacturing in dollar terms, emphasizing not only the cost of cleaning up after poor environmental practices, but also the potential cost to brand names. Putting a price tag on the environmental impact makes more people pay attention, said Reiner Hengstmann, global director of Puma Safe, a social and environmental responsibility department within Puma.

"With some people, [talk about environmental impact] goes in one ear and out the other," he said. "You have to put it in terms of money for them to start to pay attention." Hengstmann described the company's creation of an "environmental profit and loss account" estimating the environmental impact of greenhouse gas emissions, water use, land use, air pollution and waste. Puma estimated that the company's "EP&L" generated by its supply chain totaled 145 million euros, or $188.6 million, a year in 2010. Within that total figure, Hengstmann said, much of the impact came from lower-tier suppliers. So Hengstmann suggested sourcing from more "low-impact countries," using environmentally efficient suppliers, consolidating material purchasing and reducing the amount of styles being made. The EP&L program is to be rolled out across other brands within PPR, which owns Puma, Hengstmann said. PPR also owns luxury brands such as Gucci, Yves Saint Laurent and Bottega Veneta, as well as sport brands such as Tretorn.

"With some people, [talk about environmental impact] goes in one ear and out the other."

Reiner Hengstmann, global director of Puma Safe

And there is gratifying progress to report also regarding the [quality] seals. Up until now, there were just seals for certain areas in the huge jungle of seals, such as for example GOTS for environmentally friendly production, Fairtrade for the social aspect and Oekotex 100 for consumer tolerance. In January Ökotex announced a seal that will consider all areas. The new certification system with the name ‚Sustainable Textile Production (STeP) by OEKOTEX ®' will be presented to the public for the first time at the Prime Source Forum in Hong Kong on 26 March 2013 and will replace the current OEKO-TEX® Standard 1000. The launch for the STeP certification is planned for the presentation of the OEKO-TEX® Sustainability Award in Frankfurt on 12 June. From this date on the OEKO-TEX® Association will be able to carry out the first certifications of production facilities. "The heart of the new STeP certification", explained OEKO-TEX® Secretary General Dr Jean-Pierre Haug, "is the modular analysis of all relevant company areas such as quality management, use of chemicals, environmental protection, environmental management, social responsibility and health and safety. As the certification tool is specifically tailored to the situations in the individual processing stages of the textile and clothing industry, it can provide interested companies with targeted support for continuous improvement of their production conditions." Precondition for certification is the successful auditing of the production facilities through one of the OEKO-TEX® institutes.

The assessment in how far STeP certified companies are already working sustainably is made on the basis of a scoring system by means of a web-based process. In order to create widespread acceptance for the new STeP certification from the start, the aim is to include as many interested parties as possible – brand manufacturers, production facilities, retail companies, associations and NGOs – with regard to the weighting of the individual modules for assessment of sustainability.

With that we would like to close our little update on sustainability in the textile industry in 2012.

"The heart of the new STeP certification is the modular analysis of all relevant company areas such as quality management, use of chemicals, environmental protection, environmental management, social responsibility and health and safety."

Dr Jean-Pierre Haug, Secretary General, OEKO-TEX®

For the current year, we cast a glance in the crystal ball and see that, in the wake of the large brands and market leaders, further companies will decide to anchor the topic of sustainability in their corporate strategy, join committees and participate in the numerous conferences.

It would certainly be desirable that as many companies as possible participate in developing and adopting joint solutions and then operate sustainably together on the same level in such a way that sustainability, quasi as an axiom, can be eliminated from competition. That will probably not quite happen in 2013, but the point is to lay the groundwork and advance progress in this important field because everyone knows and has understood where the industry is heading.

And for those who still do not really understand or would like to learn more, there are again this year numerous events where they can inform themselves comprehensively. For example on the Eco Summit of the Munich Fabric that starts on 06 February in Munich, Germany, in the Workshop on Textile and Apparel Sustainability in NYC on 19 and 20 March, on the Techtextil in Frankfurt, Germany in June, at Planet Textiles 2013: The Sustainable Textile Event in Shanghai, China in October and at the 2013 Textile Sustainability Conference in Istanbul, Turkey in November.

Further information is available under the links listed below.

http://www.baumwollboerse.de/
http://www.itmf.org

http://www.cottonusa.de/
http://www.cottoninc.com/
http://www.cotton.org
http://textileexchange.org/2011_organic_cotton_market_report

http://www.greenpeace.de
http://umweltinstitut.org
http://www.fairtrade.net/cotton.html
http://www.flo-cert.net

http://bettercotton.org
http://www.cotton-made-in-africa.com
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http://www.radicigroup.com

http://www.monforts.com
http://www.e-save.oerlikontextile.com
http://www.groz-beckert.com
http://www.schoeller-wool.com

http://www.vdma.org
http://www.bluecompetence.net
http://www.acimit.it
www.rina.org

http://www.apparelcoalition.org
http://www.facebook.com/apparelcoalition
http://textileexchange.org
http://www.facebook.com/TextileExchange

http://www.sustainablebrands.com
http://roadmaptozero.com

The Higg-Index 1.0

Within the scope of our main topic of sustainability we would like to also present you with a tool that has been developed by Sustainable Apparel Coalition (SAC) based on the Eco Outdoor Index and Nike' s Materials Sustainability Index (MSI) and for all those having a specific interest, version 1.0 of the Higg-Index has been available for downloading since July 2012.

The Higg-Index is a software tool available to companies that allows them to evaluate the sustainability of production especially in the textile and textile brand industry. It should be emphasised that the Higg-Index is not a tool for measuring the LCA of a product, it is not a compliance tool, it is not a tool for the selection of suppliers and it is also not designed to provide results ascertained to third parties such as customers.

If the Higg-Index is not any of these, what is it then? According to SAC the tool has the following functions: "The Higg Index 1.0 is based on life-cycle thinking and spans the apparel life cycle (materials, manufacturing, packaging, transportation, use, and end-of-life)".

The Higg-Index enables products to be designed in the most environmentally friendly and sustainable manner especially when selecting materials and processes in the planning of new textiles and new garments. The tool delivers a score or more precisely three independent scores (product, brand, facility) that can be compared with each other and optimised in respect of materials and processes.

The SAC describes the functions of the Higg Index as follows: „The Higg Index 1.0 is a tool to help organizations standardize how they measure and evaluate environmental performance of apparel products across the supply chain at the brand, product and facility levels. It is a self-assessment tool that enables rapid learning through identification of environmental sustainability hot spots and improvement opportunities and a starting point of engagement, education, and collaboration among stakeholders in advance of more rigorous assessment efforts."

And furthermore: “The Higg Index 1.0 is an indicator-based tool designed to change behavior and promote continuous improvement. The Index asks practice-based, qualitative questions to gauge environmental sustainability performance and drive behavior for improvement. The environmental sustainability performance is not quantitatively measured in The Higg Index 1.0. Future releases of the Index will ask for quantifiable data.”

Interested organisations can download the tool on the website www.apparelcoalition.com free of charge although it is necessary to register your personal details such as name and email address as well as details as to the intended use. The tool is ready to download after successful registration that takes only a few minutes.

Should you have expected installation software then you might be a little disappointed, as the tool consists of two Excel files that specify macro selection criteria and conduct calculations. In addition there is a PDF file with directions for use of the facility module and a PDF file with the terms and conditions.

On opening the Excel file ‘Brand and Product Module’ it is necessary to approve the activation of the macros. Otherwise the tool does not function properly.

The Higg Index 1.0 is structured in three core modules to evaluate environmental sustainability performance at three levels – company (brand or retailer), product and facility (factory):

- **Brand Module:** to assess product-specific practices at a brand level;
- **Product Module:** to assess product-specific impacts;
- **Supplier Facility Module:** to assess materials, packaging, manufacturing supplier facilities;

Within each module, there are major groups of content called sections (e.g. materials, manufacturing, packaging) and each section includes indicator questions..

Finally we are presented with our familiar Excel work environment with a workbook of many individual worksheets that are differentiated by colour from each other. The following heading descriptions flow from left to right: Terms of Use, General Guidance, General Instructions, Navigation, Product Dashboard, Material Supplier Facilities, Package Supplier Facilities, Manufacturing Supplier Facilities, Package Components, Package Scenarios, Materials Master, Materials Input, Brand 1-5 and last but not least Product 1-10.

It looks a lot and seems to be rather confusing and one has to admit that, initially, it is.

The General Guidance worksheet provides detailed information on the purpose of setting up the Higg Index and how it is created. For example important information for the score is collected here: „The scoring system of the Higg Index 1.0 was designed to drive behavior change, however with the acknowledgment scoring is by definition a subjective function and that it will be improved in future releases as more data, information and methodologies become available and/or evolve."

The General Instructions worksheet provides directions on how to use the tool. For example there is information telling us to fill in the cells that are mostly coloured a light yellow. Step for step instructions or a definite example is however not available.

The Navigation worksheet presents the context for the individual processing sheets and data in the tool and provides us with the procedure to be taken to arrive at the individual values for each product. First of all the Packaging and Materials worksheet requires data to be filled in only once. Then the data is put in on the individual brands and products and finally the Facility Modules Dashboards are filled in. The result is the scores displayed in the Product Dashboard.

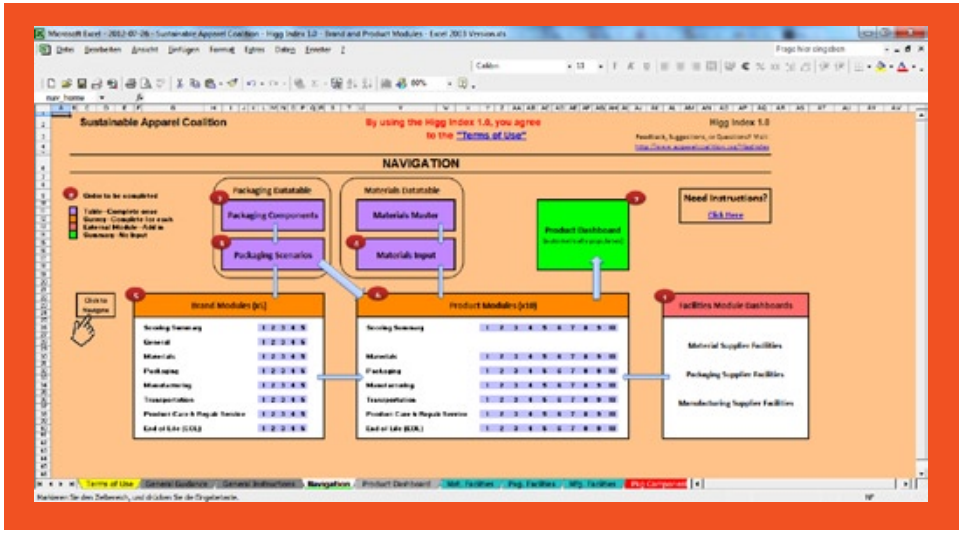
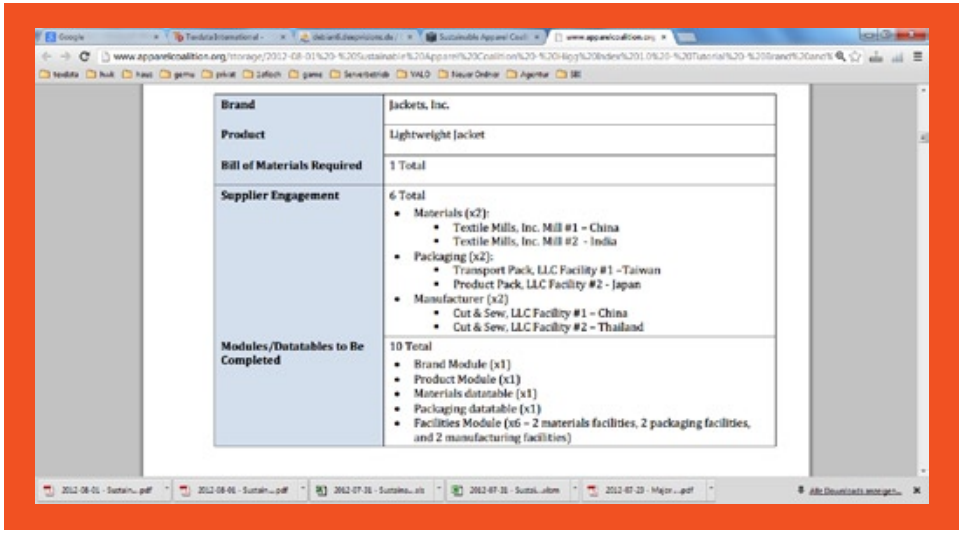


Illustration 1: The Navigation worksheet shows the structure of the tool.

So far so good. As is so often the case taking the first step is often the most difficult. According to the Navigation worksheet the process starts exceptionally with the packaging, although this is not normally the first step in the supply chain.

Help is provided on the website under the heading of Higg Index/Training. There are video tutorials finally providing the step-by step instruction required as well as a completed example. Now it is possible to proceed and what appeared to be of infinite complexity has suddenly become simple.



Brand	Jackets, Inc.
Product	Lightweight Jacket
Bill of Materials Required	1 Total

Supplier Engagement	6 Total
	• Materials (x2):
	  ▪ Textile Mills, Inc. Mill #1 – China
	  ▪ Textile Mills, Inc. Mill #2 - India
	• Packaging (x2):
	  ▪ Transport Pack, LLC Facility #1 –Taiwan
	  ▪ Product Pack, LLC Facility #2 - Japan
	• Manufacturer (x2)
	  ▪ Cut & Sew, LLC Facility #1 – China
	  ▪ Cut & Sew, LLC Facility #2 – Thailand

Modules/Datatables to Be Completed	10 Total • Brand Module (x1) • Product Module (x1) • Materials datatable (x1) • Packaging datatable (x1) • Facilities Module (x6 – 2 materials facilities, 2 packaging facilities, and 2 manufacturing facilities)

Illustration 2: completed module of a fictitious example called Brand Jackets Inc.

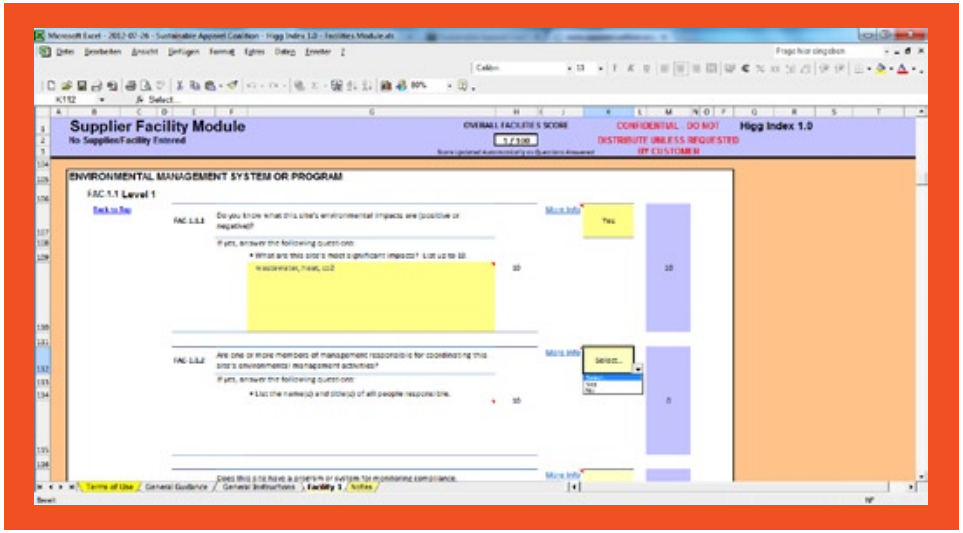


Illustration 3: Supplier facility module containing questions to be answered

Brand Jackets Inc. is a lightweight jacket producer and the application of the Higg Index 1.0 is completely simulated by using this fictitious example. There are a total of 6 facility modules **(see illustration 2)** to be filled out for the company: Two for both material suppliers, two for the packaging suppliers and two for the manufacturing suppliers.

The facility excel file is opened to complete this. Facility 1 worksheet requires a range of questions to be answered and the selection of performance values in percent that generate the respective facility scores. **Illustration 3** shows for example the answer to such a question. The questioning system appears extensive and detailed but also clearly shows that the Higg Index in the version 1.0 is not yet able to provide objective scoring results, as the answers to questions are highly subjective estimates and the user is also often required to choose between two rather widely spread percentage values such as 25% and 50%.

It is surely though a very successful procedure when the users impose strict measurement criteria on themselves and then make them transparent as well as recording them, so that the results can be considered 'objective' at least within the organisation.

The results determined in the facility modules are then copied into the main analysis sheet, the brand and product module **(Illustration 4)**.

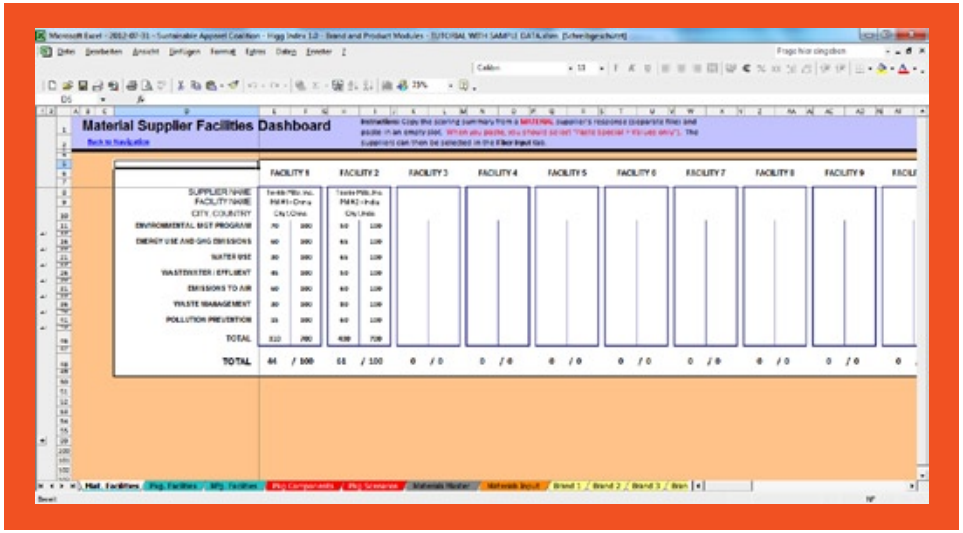


Illustration 4: The values included in the brand module for the material supplier from the facility module

The Material Inputs worksheet is now the next step in the evaluation process to be completed. The separate materials of the product are recorded here. It is possible to record up to four materials for blends with percentage values. Finally details on data relating to textile finishing are recorded.

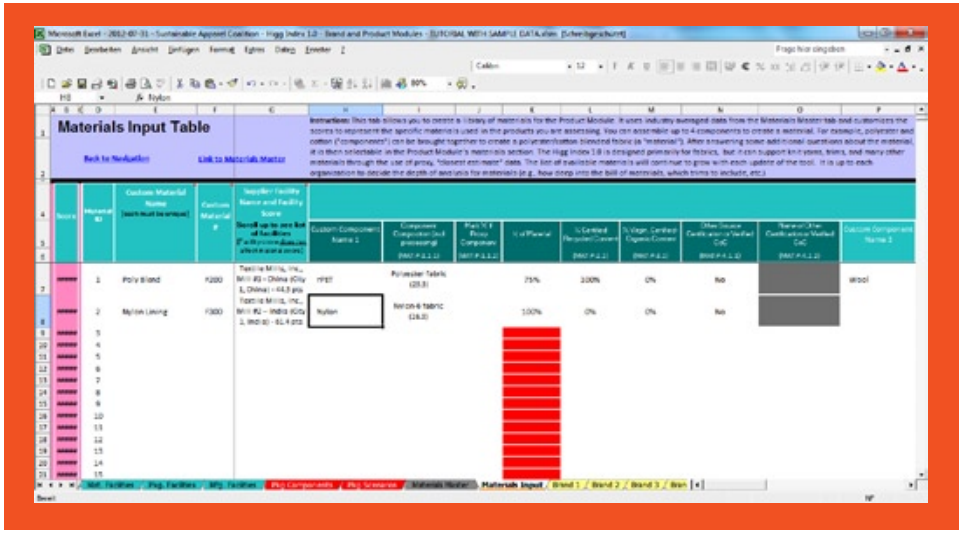


Illustration 5: The Material Inputs worksheet with details of the materials

The material score is produced from the Material Master, a section provided by Nike. SAC comments on the website in this respect: „In the Higg Index 1.0 materials are partially scored (50%) by the Materials Sustainability Index (MSI). MSI is a cradle-to-gate index informed by life cycle assessment (LCA) derived inventory data to engage designers and the global supply chain of apparel and footwear products in environmental sustainability. The Materials Sustainability Index (MSI) was originally developed by Nike. Nike MSI is the result of more than eight years of materials research and analysis of a wide range of processed materials, including textiles and footwear component materials."

The processing of the packaging occurs in parallel with the input of the various packaging and transport materials of the product. It is then possible to create scenarios for packaging and transport from the individual materials.

The next step is to input the details in the brand module and finally input the details in the product module. Yes/no questions also need to be answered in this section and percentage values given.
Once all details are complete the user is shown the Product Comparison Dashboard worksheet which is an overview of the sustainability of the individual products in relation to the Higg Index and it is also possible to compare the different products with each other.

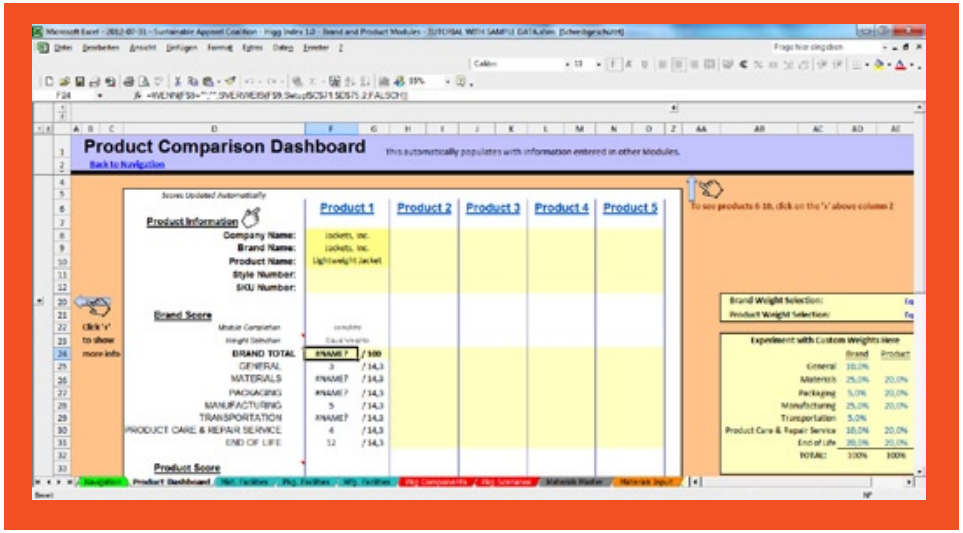


Illustration 6: Product Comparison Dashboard with the brand and product score

It must be said that working with the Higg Index 1.0 tool requires some considerable investment of time and effort. Organisations need to be convinced that changes are required in the sustainability of their products and as an initial step these need to be measured to enable a comparison to be made. Just by browsing around in the tool and conducting a few tests is something that would never work, as justifiably much of the detail needs to be produced and certainly researched in advance in order to achieve practicable results.

Companies that have the will described above should form a small team of experts that is surely able to produce good results in respect of the sustainability of their own products relating to the Higg Index within about half a year with the assistance of the tool. SAC is also dependent on the feedback from companies in order to improve on the use of the tool in producing a measurement that is universally valid and objective. Knowledge gained on the sustainability in the production of individual products will be a factor in the competitiveness of companies in the foreseeable future requiring in principal every textile producer of garments to come to grips with the Higg Index and to familiarise themselves with the criteria and the associated values. This method not only enables feedback on own products to be obtained but also a catalogue of criteria where improvements are possible and where key adjustments can be made. It is also useful to apply the results produced by the Higg Index in the planning of future products.

It would also naturally be desirable, besides companies using it intensively, to continue developing the software itself and not just the content of the tool. Software today places great emphasis on usability and convenience and this cannot be achieved in the current form by the rather laborious use of an Excel list. Excel is of course one of the most well known standards but web software would also have been available and usable worldwide as well as additionally having the many advantages of decentralised data collection. An organisation representing a group of global brand leaders as well as having access to several billions in capital should be able to afford this investment in the foreseeable future.

Despite this slight criticism SAC has made a start with the Higg Index 1.0 and has already achieved some success. Now it is necessary to keep up the initial momentum and not to let it ease off. Outdated announcements on the website such as e.g.the reference (as from November 2012 in January 2013) indicate that there are still a few problems.

We are interested in hearing about your experience with the Higg Index 1.0. Have you worked with it already? What do you like about it and what don’t you like, what is your evaluation of the tool in general? Kindly send us feedback on your experience to redaktion@texdata.com!

„Interview with Emrah Esder“

(by Oliver Schmidt)

Emrah Esder

Head of Marketing, Textile Chemicals,
Textile Chemicals Business Unit, Clariant

Clariant has introduced 25 new products at last ITMA in Barcelona and most of them have been developed with regard to sustainability. Is sustainability the most important topic for Clariant in the field of textile chemistry and if so, why?

Emrah Esder: As a company committed to developing products and processes that are safer for the consumer and have less impact on the environment, we believe in "sustainability by innovation". As a result, we have a worldwide network of six innovation centers and eleven technical centers, as well as four labs dedicated to product safety. And, logically, some of our most recent innovations have a more eco-advanced profile: Advanced Denim, a breakthrough finishing and dyeing technology that can allow up to 92% reduction of water consumption compared to traditional processes, Pekoflam® ECO/SYN, a halogen-free* and formaldehyde-free* fire protection system, and Arkophob® FFR a fluorine-free water repellence protection solution, to name just a few.

What makes sustainability such an important topic in this day and age? Which key industry and consumer trends are driving the move towards sustainable textiles?

Emrah Esder: The textile industry today sits in the center of the sustainability debate. The environmental impacts of the sector arise mainly from the use of energy and toxic chemicals. The sector's contribution to climate change is dominated by the requirement for burning fossil fuel to create electricity for heating water and air in laundering. At the same time, waste volumes are high and growing, and water consumption is also of major environmental concern.

Increasingly environmentally aware consumers are demanding that the brands that have clothed and shoed them for years find new ways to deliver the same stylish, high quality products in more sustainable ways.

The rapidness with which Clariant develops new processes for more sustainability is astounding. What is the reason for the speed? Is there a high pressure for new solutions in the industry or is it to stake a claim in a changing market?

Emrah Esder: There definitely is pressure in the industry. The textile market has changed considerably in the recent years. Pollution, especially of water, has shown dramatic consequences for local populations in production countries, such as China and India. The local authorities have taken strict measures to ensure cleaner production by local dyers or laundries, such as water treatment facilities or setting tight load limits in water effluents.

NGOs have brought the topic to the public. Greenpeace, for example, raised global awareness of the environmental issues of the textile supply chain since 2011 with its 'Detox Campaign'.

With increased consumer awareness and brand owners looking for ways to create a more sustainable textile industry, it is the whole textile supply chain that is now geared towards finding sustainable solutions.

At the same time, Clariant opted for a proactive approach and we anticipated the challenges that the industry is facing today. Our newly introduced ONE WAY service, for example, builds on a long experience of introducing and promoting solutions with an improved eco-profile. ONE WAY helps mills and brand owners to develop innovative textile solutions that are both more ecologically and economically sustainable. Our ultimate aim is to provide a fast, measurable and reliable approach to the selection of chemical product and process solutions. ONE WAY includes the industry's most stringent eco-standards (bluesign®[1], Oekotex®[2], GOTS[3], the eleven substances of the Joint Roadmap Towards Zero Discharge of Hazardous Chemicals, etc.) and 20 of the major Restricted Substances Lists (RSLs), and allows an almost immediate answer on how ONE WAY products score in regards to those requirements, standards and RSLs, is ideally suited to support our customers in these challenging times.

The big brands and retailers have announced that they are going to examine the textile value chain of their suppliers. Companies who will not be able to reach a defined minimum have to upgrade their production facilities or will be kicked out. Can you feel this situation in the demand of your customers?

Emrah Esder: Absolutely. With increased consumer awareness and brand owners looking for ways to create a more sustainable textile industry, it is the whole textile supply chain that is now geared towards finding sustainable solutions. As a result of the Greenpeace's detox campaign, six major brand owners and retailers made a shared commitment to the Joint Roadmap to Zero Discharge of Hazardous Chemicals (ZDHC). With new brands and retailers regularly joining the original group who committed themselves to the Joint Roadmap towards ZDHC, textile mills worldwide today know that they can no longer afford to ignore the situation if they want to stay in the game. They have already been approached by some brands and retailers and they of course turn to the most reliable chemical suppliers for support.

What exactly do your business partners in the market, the mills and brands, expect from you?

Emrah Esder: They expect exactly what we decided to offer them when we designed our ONE WAY approach more than one year ago:

- Reliable tools to measure products and processes against the industry's most stringent environmental standards;
- A fact-based approach of improving environmental performance while increasing production efficiency and business profitability;
- More efficient product lifecycle management and faster speed-to-market;

- Innovative and sustainable solutions with a comprehensive product portfolio allowing to covering the needs of the entire textile value chain;
- More transparency;
- Better understanding on sustainability, ecology and environmental impact of product and processes, for better-informed decision making.

We invested in the data analysis and efficient tools that will now be of considerable value for our customers in their discussions with brands and retailers.

And what kind of support can you offer your customers?

Emrah Esder: With ONE WAY, Clariant wants to offer a systematic, fact-based selection process to those textile mills, brands and retailers who are willing to explore more sustainable dyes and chemicals solutions, while balancing the twin objectives of ecology and economy. To help customers meet their sustainability targets in a fast and reliable manner, the ONE WAY methodology takes a highly systematic approach to the selection of chemicals and production processes.

We can also add training, improve existing knowledge level. This is our social responsibility

And how do you evaluate the demand for the new processes?

Emrah Esder: With ONE WAY, we can proceed to an evaluation as accurate as possible by following a systematic methodology backed by a unique toolbox:

- **a product database (the ONE WAY Selector)** that includes more than 200 dyes and chemicals that have been screened and pretested by Clariant's product stewardship specialists against more than 15 textiles eco-standards and criteria, including bluesign®[1], OekoTex®[2], GOTS[3], 11 restricted substance groups classified under the Joint Roadmap Towards Zero Discharge of Hazardous Chemicals, 20 of the major Restricted Substances Lists (RSLs), and other relevant criteria, such as high bioelimination;
- **a tool (the ONE WAY Process Cluster)** for process short-listing based on environmental focus, be it climate (indicated by CO2 emissions), resource (indicated by savings in water, energy and time consumption) or waste water (indicated by the volume of waste water, and others);
- **a sophisticated software (the ONE WAY Calculator)** that enables ONE WAY team members to assess the cost, performance and environmental profile of ONE WAY products almost instantly. The measurements made possible with the ONE WAY Calculator include parameters such as dyes and chemicals, water, energy, or time; as well as bioelimination (COD, BOD, CO2 emissions, energy consumption, and water usage).

These tools provide textile mills and brands with a reliable way of measuring products and processes against the industry's most stringent environmental standards. When using Clariant's ONE WAY, responsible fashion brands and retailers will be able to benefit from innovative solutions that help lessen the environmental impact of textile production whilst supporting their need for new technology and design freedom.

Differs the demand for new processes countrywise? Or -with other words- are there countries where the demand is significantly high?

Emrah Esder: There is a demand from many countries, but the demand is even more significant from India, China and Pakistan. We assume that this is related to country-specific situations, such as lack of resources for Pakistan, tight environmental regulations and size of the textile industry for India and China.

In the actual FYP, China has expressed highest goals concerning environment protection. In addition Mr. Du Yuzhou, president of China National Textile & Apparel Council, has announced a big change in the landscape of Chinese textile industry. He spoke at the last World Textile Summit about a high-tech country with more automation and more sustainable processes. What is your impression? Is there a change and is China on the way to reach the goals? If yes, can you describe some reasons and if no, what are your wishes concerning China/from Chinese Textile Industry?

Emrah Esder: China will most certainly make everything possible to achieve the goals set concerning environment protection. China has 7% of world water reserves and has 20% of world population. Pollution from industry has significant impact on fresh water reserves. For 77% of 26 lakes and reservoirs, 50% of ground water in the cities and 43% of 7 major river basins, water quality do not fit for human contact. The most important costs relate to the health risks associated with polluted drinking water sources. Over 300 million people living in rural China have no access to safe drinking water. The economic cost of disease and premature deaths associated with the excessive incidence of diarrhoea and cancer in rural China has been estimated, based on 2003 data, at 66.2 billion Yuan, or 0.49 per cent of GDP. Considering that the textile industry is responsible for 10% of total water pollution, there is not much option left for China but to achieve its goals towards sustainable textile production.

((All above mentioned data from: Addressing China's Water Scarcity (World Bank) -Jian Xie with Andres Liebenthal, Jeremy J. Warford, John A. Dixon, Manchuan Wang, Shiji Gao, Shuilin Wang, Yong Jiang, and Zhong Ma, and China's real liquidity crunch - Debra Tan, China Water Risk (Sustainable Textile Conference- Hongkong October 4-5 2012)))

What are the main challenges facing the textile industry in your opinion?

Emrah Esder: One of the main challenges we need to overcome for a more sustainable textile industry is that the textile supply chain is extremely complicated. And nevertheless, full control on all links of the chain will be essential if we want to succeed: from contamination of the fiber to the chemicals used in the wet process, from the raw materials used in chemical production, to the consistency of the fiber, to the chemical quality. Companies who are committed will have to implement strict mechanisms to control their supply chain. And for that, close collaboration between textile mills, brands and chemical suppliers will be needed. This is where the experience of reliable partners, such as Clariant, will be very precious to our partners.

Clariant is a member in the Sustainable Apparel Coalition since June and the SAC has introduced its tool for measurement 'Higg Index' last December. The Higg Index 1.0 is primarily an indicator based tool for apparel that enables companies to evaluate material types, products, facilities and processes based on a range of environmental and product design choices. Now you have announced a new sustainability service by Clariant called ONE WAY which addresses the need of mills and brands to be able to measure the ecological impact of their textile production on the environment, resource and climate.

Is ONEWAY a stand-alone tool or a part of the big plan to calculate exactly what resources a single textile uses during the production process?

Emrah Esder: Well, the two concepts do not address the same audience. The Higg Index has been designed to help organizations standardize how they measure and evaluate environmental performance of apparel products **across the entire supply chain** - at the brand, product and facility levels. The Higg Index would ultimately provide consumers with an idea of the environmental performance of a given garment they consider buying. Clariant's ONE WAY, on the other hand, aims at providing fact-based information and precise measurements to textile manufacturers, brands and retailers within the scope of what we can measure: our own products and process, in some cases in comparison with the competition products and processes.

Why are you offering an own solution with a special focus on Clariant products and not a common tool developed by the textile chemistry?

Emrah Esder: We provide dyes and chemical solutions to the textile industry. We are experts in the applications where our products are used and we deeply understand the processes and the partners (machine manufacturers for instance) involved. Therefore we can be confident that ONE WAY provides reliable information. We couldn't offer the same degree of confidence outside of our area of expertise. Our customers are desperately looking for the reliability of offered with ONE WAY.

Emrah Esder

Head of Marketing, Textile Chemicals, Textile Chemicals Business Unit, Clariant

Emrah Esder has more than 20 years of experience in the textile industry and has been working with Clariant for 18 years. He joined the company in Turkey in 1995 and, since then, held various positions such as Head of Textile Chemicals, Turkey (1998-2002), Technical Manager, Canada (2002-2005), Head of Product Line Functional Effects, Asia pacific, based in Shanghai, PRC (2005-2009) and Head of Competence Center, Chemicals, Asia, based in Bangkok, Thailand (2009-2011).

He is Head of Marketing, Textile Chemicals since 2011, a position based at the Textile Chemicals Business Unit headquarters in Singapore.

Emrah Esder He graduated in 1990 as Textile Engineer from Uludag University in Bursa, Turkey and completed a Management Diploma program in Concordia University, in Montreal, Canada in 2006.
Emrah Esder was born in Turkey in 1969. He is married and has one son.

For your Advanced Denim process Clariant has been awarded an EU Ecolabel for denim in February 2012. The new denim shall save around 92% of water and 27 % of energy in production. The cotton waste decreases by 87.5 % and no wastewater is generated at all anymore. 14% of the worldwide cotton production is used for denim and this leads to the result that the Advanced Denim Process has a high potential for a change to more sustainability. Can you tell us something about the demand for the Advanced Denim process?

Emrah Esder: The process is currently under evaluation with a number of brands and textile manufacturers. There has been no real technological advance in the denim manufacture process for more than 150 years, therefore we know that the Advanced Denim technology will need a bit of time to pick up as a new denim dyeing process. But the industry is progressively looking at Advanced Denim as the kind of eco-advanced breakthrough that can make a difference for the future of our planet. Advanced Denim technology has just been honored by two of the prestigious 2012 Innovation Awards organized by ICIS. ICIS Chemical Business magazine today revealed the winners of the 2012 edition of its awards. Not only was the Advanced Denim breakthrough eco-advanced dyeing technology recognized by the jury as “Innovation with Best Environmental Benefit”, but it was also judged as this year’s overall winner.

What are Clariant's goals for the next five years in the terms of sustainability?

Emrah Esder: Environmental protection is a top priority at Clariant. The group has formulated the following environmental and sustainability goals for 2020 – targeted reductions based on benchmark reference values established for the year 2005:

- Energy consumption to be cut by 30 percent
- Direct CO2 emissions to be reduced by 45 percent
- Direct and indirect emissions of greenhouse gases to decrease by 35 percent
- Water usage to be reduced by 25 percent
- The volume of effluents to drop by 40 percent
- The volume of waste to fall by 45 percent

At the end of this interview we would like to know something about your personal vision for a sustainable future. What needs to be done for a sustainable production, what are the indicators and when will we reach this goal?

Emrah Esder: I wish that we can achieve a transparent, knowledgeable, cooperative, pollution-free textile industry. Brands, textile manufacturers and chemical suppliers must collaborate with transparency, and rules and regulations should be clearly defined for this collaboration.

We should not forget that we are responsible not only to ourselves only but also to the people living on this planet and sharing the resource for living. And we are responsible to future generations too. The additional cost for protecting the environment is so little compared to what we will lose if we don't do it now.

(®1) Registered trademark of bluesign Technologies AG
(®2) Registered trademark of Forschungsinstitut Hohenstein Prof. Dr. Jürgen Mecheels GmbH & Co. KG
(3) GOTS (or Global Organic Textile Standard) is a standard of International Working Group on Global Organic Textile Standard

**below levels of detection*

Country Focus:

Vietnam

In the last 10 years Vietnam has developed into one of the most important textile and apparel producing countries of the world and now proposes to further consolidate its position by the year 2020.
This is enough reason to take a closer look at the textile business of the country, the forecasts, the opportunities that present themselves and of course the problems that involve specific risks.

The textile industry in Vietnam continues to boom although this was not indicated by the the 9-month key figures. At the beginning of October Le Tien Truong, secretary of the Viet Nam Textile and Apparel Association (Vitas) and also deputy CEO of the Viet Nam National Textile and Garment Group (Vinatex), had called on his members to increase their efforts to reach their target of 18 billion US$ in export turnover as only 10 billion US$ had been achieved after 9 months.

The annual conference of the ITMF, the International Textile Manufacturers Federation, that took place in Hanoi on 4 - 6 November 2012, surely arrived at an opportune moment for the Vietnamese textile industry. This led the who-is-who of the international textile industry to travel to Vietnam, offering an excellent opportunity for the Vietnamese textile industry to present the possibilities, targets and plans of the First General Session of the conference directly to the highly distinguished delegates and to make the case for more investment and orders.

The conference began with an opening speech 'Vietnam's Textile and Apparel Industry on the Rise ' by Tran Quang Ha (Deputy General Director, Light Industry Department, Ministry of Industry and Trade, Vietnam). He was then followed by Le Tien Truong (First Vice President , VINATEX - Vietnam National Textile & Garment Group, Vietnam), mentioned already above, who gave a talk on the subject of 'Investment in Vietnam's Textile and Garment Industry' and Mr Kenneth Atkinson (Managing Partner, Grant Thornton (Vietnam) Ltd., Vietnam) concluded by speaking on Vietnam's Economic Outlook and Investment in the Textile and Garment Sector'. The VCCI reported the following in mid January: "In November 2012 alone, nearly 10 foreign companies proposed setting up material production joint ventures with Vietnam National Textile and Garment Group (Vinatex) and its affiliates in Vietnam. They are large fibre, yarn and textile production corporations like Texhong (China) and Toray International and Mitsui (Japan), Lenzing (Austria), and Sunrise Textile Co., Ltd. (China)."

The figures for the complete year are now available and the appeal for more work and sales has apparently not been without effect. In 2012 the Vietnam Chamber of Commerce and Industry (VCCI) reported in mid January that exports of textiles and garments had been able to grow 12 percent to a total of 15.8 billion US$. If fibre export are added, the value reaches US$17.2 billion, representing an increase of 8.5 per cent against 2011. That is markedly less than the enormous growth of 38% between 2010 and 2011 but should be sufficient to reach the interim target of 20 billion US$ set for the year 2015. Continued growth of 8-12% in the coming years is enough to achieve this target.

Turnover exceeded 1 billion US$ in the four markets of the US (US$7.6 billion), the EU (US$2.6 billion), Japan (US$2.1 billion) and the Republic of Korea (US$1.1 billion). Japan once again recorded the greatest increase (+27%, 2011 +43%) and was able to displace the EU (+8%, 2011 +25%) as second highest ranked importer already during the year.
Vietnam imported US$8.8 billion worth of raw materials in the year, meeting a half of the demand while the rest was offset by domestic sources. The net trade value was US$8.4 billion in 2012.

VCCI reported furthermore that in particular, Vietnam was estimated to spend US$7,045 million on fabric import in 2012. Major fabric suppliers for Vietnam were China, South Korea, Taiwan and Japan. The country's imported cotton was forecast to weigh 416,000 tonnes valued at US$875 million, up 27.3 per cent in volume and 16.9 per cent in value over 2011. The Vietnamese textile and garment industry is strengthening its prestige and utilising domestic competitive supplies to enlarge the global market share.

The country was estimated to export 628,000 tonnes of fibres and yarns valued at US$1,842 million in 2012, up 2.9 per cent in value and 22.6 per cent in volume against 2011.
The prospects for the current year 2013 also look relatively positive, even when a global demand for garments and textiles is only to increase moderately in the estimation of VITAS. The US is expected to need 3% more, Japan 10% and other markets around 5%.

VCCI reports the following targets: : „In 2013, the world demand for garments and textiles is forecast will increase slightly. Vietnam expects to maintain the export growth at 12 per cent - 15 per cent to reach US$18.8 - 19.3 billion. Thus, the garment - textile industry will complete the targets of localisation rate of over 50 per cent and export turnover of US$20 billion set for 2015 ahead of time. It expects to earn US$8.5 billion from shipments to US (up 11 per cent year on year), US$2.4 billion to Japan (up 18 per cent), US$1.5 billion to South Korea (up 15 per cent), US$2.4 billion to the EU, and US$4.2 billion to other markets. Reportedly, more than 50 per cent of garment and textile companies have received export orders for the first quarter of 2013 and about 10 per cent, mainly large enterprises, have got orders for operations through the second and the third quarter of 2013."

The export targets set by VCCI were also confirmed by Le Tien Truong at the beginning of the year at a press meeting: "The garment and textile sector has set an export target of US$18.5-19 billion in 2013". He forecast that the global demands for apparel products would jump 2.32% to hit US$713 billion in value and that the industry will strive for a 50% localization rate, which was 49% in 2012 and 45% in 2011. And he announced that the industry will generate 200,000 new jobs this year. He was quoted as saying by Lao Dong (Labor) newspaper that for every $1billion in turnover, the industry has typically been able to create an additional 100,000 jobs.

Truong urged textile and garment companies to develop solid strategies to consolidate their status in the increasingly volatile market, suggesting focus be placed on small- and medium-sized orders that require fast delivery turnaround, while improving both productivity and product quality.
The annual targeted growth in the garment and textile industry of 12-15% is a part of the strategic plan Vision 2020 whose target is to raise Vietnam to one of the top 5 exporters in the world and to significantly increase the global market share. In this regard the aim is to achieve export turnover of 20-22 billion US$ for 2015 and 32 billion US$ for 2020.

The following forecast was originally issued by Vision 2020, was however adjusted to comply with the latest developments: "The Vietnam Textile and Garment Association (VITAS) notes the strategy for Vietnam Textile and Garment Industry development for 2015-2020 is: (1) production growth from 12-14% a year, (2) export growth at 15% a year, (3) providing employment to 2.75 million people in 2015 and 3.0 million people in 2020, and (4) export revenue attaining US $18 billion dollars in 2015 and US $25 billion dollars in 2020."

In order to better understand the growth and the maintenance of the ambitious targets we need to take a look at the development over the last few years as well as the production environment. The trade agreements concluded in the last few years and the upcoming agreements with other countries also play an important role.

The textile industry took over as the new number 1 export industry by overtaking the former industrial leaders of the oil and gas sectors already in 2009 by achieving exports of 9 billion US$. There followed exports of US$11 billion in 2010 (+24%) and US$13.8 billion in 2011 (+38%).

These exports formed 16.5% i.e. one sixth of the total export turnover of the country in 2011. Some 2.2 - 2.4 million people are employed in textile related industries according to VITAS. That means, from an estimated population of around 90 million people, of which about 45 million are of employable age, approximately 5% of those are distributed among ca. 2500 companies.

Whenever you talk about textiles and garments, then you need to consider that the textile and garment industry in Vietnam is highly differentiated as Hal Hill of the Australian National University established in the discourse „VIETNAM TEXTILE AND GARMENT INDUSTRY: NOTABLE ACHIEVEMENTS, FUTURE CHALLENGES“ in 1998 and Kenta Goto reconfirmed in his essay 'Is the Vietnamese Garment Industry at a turning point' in 2011. Goto established the following: „Despite the presence of a large domestic textile sector, Vietnam's export-oriented garment industry is highly import intensive as the local textile industry is uncompetitive, particularly in terms of quality. Therefore, production for exports takes the contractual form often referred to as CMT, which stands for "cut, make and trim". Under a CMT production modality, Vietnamese garment suppliers receive input materials free of charge from international buyers.

The CMT modality is essentially an international putting-out system in which Vietnamese garment suppliers are compensated primarily for their labor costs, the functions of which are highly labor intensive and relatively low skill-intensity."

A lot has changed though in respect of wages in Vietnam. While Goto states that the wages for a worker in the 2008 were still around US$ 200 per annum, a minimum wage prescribed by the government has led to large wage increases in the last four years. In 2009 the minimum wage was fixed at US$ 31 per month and increased in 4 stages thereafter to the current US$ 66. Since January 2013 Decree 103/2012/N_-CP applies which provides for a minimum wage of between US$ 82 and US$ 117 per month in 4 different regions. According to ILO Vietnam has a wage level that has increased more than productivity in contrast to the general trend worldwide. While the government considers the minimum wage to be sufficient to support a worker and his family there are critical voices that refer to prices that are rising at the same rate.

In his essay Goto goes into specifics in respect of the approximate 2500 companies. He differentiates between state-owned enterprises (SEOs), non-SEOs ('collective enterprises', 'private enterprises' and 'household enterprises') and 'foreign invested companies'. According to his data there were still SEOs and household enterprises in 1995 as the Vietnamese textile and garment industry began exporting their production to Western markets. Since then the industrial environment has changed enormously.

Goto writes: „In 2010, however, the shares of both SOEs and household enterprises had shrunk, to 7.4 percent and 12.6 percent, respectively, and instead foreign-invested companies (54.3%) and private companies (25.6%) have become important actors in the industry.

Nevertheless, it should be noted that, as a significant number of SOEs have undergone an "equitization" program and are being re-classified as either SOEs or private companies, it is highly likely that the former SOEs still play dominant roles particularly in the export of garments."

Just as interesting is the size of the individual garment companies. Goto states the following for the year 2010 using the annual statistical report as a source. The size of almost 1000 companies is between 5-9 and between 10-49 employees. 220 companies have between 500-999 employees and 185 companies between 1000-4999 employees. There are 13 companies that actually have the imposing figure of more than 5000 employees that corresponds to a share of 14% of all companies with more than 5000 employees.

The biggest garment and textile company in Vietnam is the Vietnam National Textile and Garment Group (Vinatex), located in Hanoi with over 50 joint stock companies and 40 joint venture companies and approximately more than 120.000 employees. The Hanoitimes reported three weeks ago that Vinatex earned US$2.6 billion from exports in 2012 (15% of the total export), a year-on-year increase of 16%, exceeding the annual plan by 2%.

At a review conference on January 8, Vinatex's Deputy Director General Le Tien Truong said in 2013 the group aims to achieve a growth rate of 12% over 2012. He revealed that Vinatext has received bulk orders from its importers in the first and second quarters of 2013.

To fulfil the set target, the group will give priority to accelerating the equitisation of its parent company and prepare for an initial public offering (IPO) in the second quarter of this year.
Vinatex is therefore the locomotive for the targets set by Vision 2020. The current and new trade agreements are also first and foremost to pave the way for the predetermined plan for growth.

Vietnam joined the World Trade Organisation (WTO) at the beginning of 2007. To date, Vietnam, an ASEAN member, has become involved in Free Trade Agreements (FTAs) with partners such as China, the Republic of Korea, India, Japan, Australia, New Zealand and Chile. It also signed an Economic Partnership Agreement (EPA) with Japan, and is conducting FTA and Trans-Pacific Partnership (TPP) negotiations and started an FTA agreement with the EU. Vietnams Zeitung 'Saigon Gian Phong' meldete dazu: "Meanwhile, the second round of Free Trade Agreement (FTA) negotiations between Vietnam and EU began in Brussels, Belgium, on January 22. The four-day discussions will be focused on exchange of goods and services, investment, intellectual property, labor, and the environment, among others. After the success of the first round in October 2012, the second round is expected to speed up bilateral negotiations as agreed upon by top leaders of the two sides.

The Vietnamese delegation is led by Tran Quoc Khanh, Deputy Minister of Industry and Trade, and the EU delegation is headed by Mauro Petriccone, Director for Asia and Latin America at the Directorate for Trade of the European Commission. The two sides plan to hold four rounds of talks this year.
The EU is Vietnam's largest export market, consuming $20.3 billion worth of Vietnamese goods in 2012."

Once the FTA is signed, it will help promote trade and investment cooperation between Vietnam and the EU, bringing practical benefits to both business communities and people. The FTA is expected to cut tariffs on more than 90 export items, including garment and textiles.

Even more important for Vietnam is the Trans – Pacific Partnership agreement TPP. According to Le Quoc An, Senior Advisor to VITAS Vietnam could increase exports to the USA in 2020 to US$ 22 billion while a figure of some US$ 13 billion would be considered 'normal' growth. With TPP products can enjoy the zero export tariff in the future instead of the current 17-35 percent. The key problem for TPP is that Vietnam is heavily dependent on the import of material from China, Taiwan and South Korea and the USA, as one of the TPP Partner, supports the 'yarn forward principle' that states that Vietnam's exports must be made of the fiber and materials made in Vietnam or the TPP countries.

Japan and South Korea are good examples of how important the agreement is for the growth of the Vietnamese textile industry.

The Vietnam-Japan Economic Partnership Agreement, which took effect in late 2009, has opened major opportunities for the country's growing industry as it regulates to cut all tariffs on apparel products to Japan to zero percent. This led to the growth of 43% in 2011 and 27% in 2012 as previously mentioned.
Similarly, the industry's exports to the Republic of Korea (RoK) saw strong growth, reaching US$1.1 billion thanks to an FTA between ASEAN and the RoK, which came into force in 2010.

One of the most important trade fairs for textile machinery is the Saigontex, the Vietnam Saigon Garment and Accessories Machinery Expo, that has taken place every year since 1992 in Ho Chi Minh City and exhibits i.a. garment and textile machinery, parts and equipment.
The exhibition is the only UFI (Global Association of the Exhibition Industry)-approved textile and garment industry event in Vietnam. The last expo was successfully held on 11-14 April, 2012 at Ho Chi Minh City with more than 285 companies from 20 countries and regions. The next Saigontex, the 24th,will take place from April, 11 – 14 2013 in the TBECC, Ho Chi Minh City, Vietnam.

The German machinery manufacturer Karl Mayer, an exhibitor at Saigontex in 2012 reported besides good business that many foreign investors from for example Korea, Taiwan, Italy and China visited the stand and the trade fair with the intention of setting up their own production line in Vietnam with the effect that the country has been flooded in recent times by a wave of newly founded textile and garment companies.

Karl Meyer sees this as a clear indication of the importance of the Vietnamese textile industry in the business activities associated with textile machinery manufacture.

The future looks more than bright for the country and more than likely Vietnam will manage a further increase in productivity with moderate wage growth, expanding domestic markets and particularly to implement the targets of Vision 2020 through further lucrative trade agreements and partnerships. Only - what is to happen then? In all likelihood the country will be faced with the same problems that China is confronted with today.

Experts suggest that Vietnamese businesses need to thoroughly study each market to make full use of benefits. Besides traditional competitiveness factors such as capacity, quality and prices, and market trends the textile and garment industry of the world is facing the issues of environmental protection and social responsibilities, which related enterprises need to address.

To manage the situation, Prime Minister Nguyen Tan Dung in 2011 has approved the Strategy for the Development of Vietnam's Garment and Textile Industry by 2015 and Orientations by 2020. Accordingly, the industry will become a spearhead sector for exports, meet the increasing domestic demands, create more jobs and enhance national competitive edge to integrate deeply in the regional and world economies. The Strategy aims to enhance competitiveness of businesses and products instead of increasing generated quantity and values.

The Prime Minister has passed a Program to develop Vietnam's cotton cultivation by 2015. Accordingly, the cotton cultivation areas will be expanded to 30,000 ha by 2015 and to 76,000 ha by 2020. The active implementation of this program will help enterprises secure input materials.
Deputy Prime Minister Hoang Trung Hai has urged the garments and textile sector to enhance corporate and product competitive edge by improving product quality, increasing localization rate and securing input materials. He also stressed on the importance of product designs and cotton supply, which is essential for enhancing values of Vietnamese these items in the world markets.

The garment industry along with its CMT production locations could nevertheless migrate to countries that are today still in the starting blocks, such as Myanmar, where there is still a lower wage level. Vietnam needs above all to expand the domestic textile industry and massively promote and support investment in order to avoid that happening.
The mega trend of sustainability offers just such an opportunity to refrain from making the same mistakes other textile producing countries have made in the past, i.e. by setting up the most modern production locations sufficiently adequate for today's demands for sustainable production, and that are equipped for future requirements, not only by growing through productivity but also through quality ensuring that they a broader and more secure basis for the future.

Investment in high-tech, as China is also planning, seems to make good economic sense as it stops long-term migration or at least limits it.

Heimtextil 2013 *kicks off the new furnishing season to a great start* ***with an increased level of internationality*** *on the visitor side*

With 2,658 exhibitors from 62 countries (2012: 2,601*) and growth for the third year running, Heimtextil 2013 kicked off the new furnishing season to a successful start. Around 66,000 visitors from 129 countries (2012: 67,451[1]) came to the International Trade Fair for Home and Contract Textiles in Frankfurt. “
Despite the current difficult economic climate, Heimtextil achieved an outstanding set of results and underscored its preeminent position as the world’s leading trade fair for home and contract textiles”, said Detlef Braun, Member of the Executive Board of Messe Frankfurt.

The fair was rated a success by both exhibitors and visitors: the great majority of exhibitors (80 percent) and almost all visitors (94 percent) achieved their goals, a result almost identical to that of the previous year (79 and 93 percent respectively). Martin Auerbach, Director of the **Association of the German Home Textile Industry** (*Verband der Deutschen Heimtextilien-Industrie*), Wuppertal, was very pleased with the good start to the season for the domestic industry: “We are highly satisfied with the successful course of business and the positive mood among exhibitors and visitors of Heimtextil 2013. At the beginning of the year, the fair is a reliable indicator of the level of activity to be expected in the home-textile business over the coming months. Thanks in particular to the high level of internationalisation, we anticipate more impulses from abroad again in 2013”.
More visitors than last year came from the USA and Canada, the United Arab Emirates, Great Britain, Ireland, Italy, France, the Benelux countries, Switzerland, the Czech Republic, China and Taiwan.

The biggest visitor nations after Germany are Italy, China, Turkey, Great Britain, the USA, France, Spain, the Russian Federation and Poland. Thus, the proportion of visitors from outside Germany amounted to 66 percent (2012: 65 percent). Thanks to its high degree of internationality, Heimtextil is the perfect presentation platform, especially for export-oriented companies.

Heimtextil once again attracted more interior decorators and bed dealers from Germany – more than 7,000 interior decorators and 1,000 bed dealers registered in advance for the ‘Heimtextil Insider’ and ‘Bed’n Excellence’ visitor programmes.

Carpets and wallpapers attract attentionThe InHouse Group Denmark

Scandinavia's largest carpet importer and distributor, exhibited for the first time in the very busy Hall 3.0, which also attracts many visitors – including interior decorators. Sales Director Frank Naur Jensen was delighted by his company's first appearance at the show: "To sum up our participation in the show in one word: it's been excellent! We have been particularly surprised by the quality of the visitors. We even concluded deals on the stand with decision makers from all over the world – you don't find that very often at a trade fair.
Our search for an appropriate platform for interior furnishings has ended with exactly the right show at Heimtextil."

Moreover, the wallpaper segment in Hall 3.1 created a considerable stir. New design developments and appearances by Dieter Bohlen and Luigi Colani, who were presenting their collections from Pickhardt + Siebert and 'Marburger Tapetenfabrik', received a lot of admiring attention. Well-known fabric editors **Clarke & Clarke** from Great Britain were also delighted by the huge amount of interest: "We have been able to acquire new markets for the wallpaper collections we launched three years ago," reports Mark Kennedy, Export Sales Manager. "As one of the largest textile fairs in the world, Heimtextil is an outstanding platform for contact with both new and existing customers."

'Design live': new concept successful

Hall 4.2, the world's largest platform for fabric design, presented the work of some 200 exhibitors in a re-worked environment under the new name of 'Design live'. Among them, for the first time, was Hewlett-Packardfrom Great Britain with their new printing techniques. "Coming to Heimtextil has been a tremendous first step in evaluating the market for digital printing and estimating visitor interest in our products. We brought along our latest graphic printing solutions, particularly those for wall coverings and presented them at Heimtextil in collaboration with top designer Karim Rashid," reports David Sharpe, European Communications Manager at HP.

Focus on innovative sleep systems

In the field of home textiles, exhibitors in the heavily attended Hall 8.0 were jubilant about visitor trends: "Numbers during the first two days were markedly very good. We recorded improvements on the previous two years in terms of both quality and quantity. So we rate Heimtextil as one of the best trade fairs of recent years," sums up Hans-Dieter Giesen, Head of Sales at Bierbaum. Altogether, there were ten newcomers to the sector who presented themselves and their products as part of the "New&Next" platform for start-up companies. One such company wasErgoVitalis, who brought some innovative sleep systems to enhance the range of furnishing products at the fair. Managing Director Markus Kroll was very satisfied with their first time at the show: "We have been able to establish some successful contacts – particularly amongst German speakers – and have also had excellent discussions with some of the Asian visitors."

Great launch for bed linen

As one of the many fashion labels, the Spanish fashion brand Desigualsaw new sales opportunities in the context of home textiles and came to present themselves and their products to the Heimtextil public in Hall 11.0 for the first time – with considerable success: “I have never seen such a crush of customers: we were talking to people non-stop. After just three days we had counted more than 2,000 customer contacts, including with many decision makers, who had concrete purchasing intentions. It has been a very successful trade fair for us; there is no doubt that we shall take part again,” revealed Mehmet Kardesler from Desigual Sales Division, Germany.

Ricardo Lemos, too, Member of the Board of Directors of António de Almeida & Filhos, which belongs to the important Grupo More Textile from Portugal, was in an extremely positive mood and emphasised the great importance of Heimtextil: “It has been outstandingly well received. True, we didn’t have more visitors at the stand, but the really important people, the decision makers, were there. That makes the show a more professional affair and we don’t waste time with inconsequential discussions. There was great interest from the USA in particular: representatives from the big chain stores were all there. As far as we are concerned, Heimtextil is the major trade fair, and we invest most in it. It gives us a platform on which to introduce our new products.”

Spectacular trend presentation

As well as its potential for generating orders, the trade fair also provided a convincing road map in matters of design.

Designer Luigi Colani, Marburg Wallcoverings booth - © Messe Frankfurt

The spectacularly staged trend show – designed and realised by the Stijlinstitut Amsterdam – proved to be a much-visited highlight of the show. Pedro Hernando, Director, Buying Department of Europe’s largest department-store chain,El Corte Inglés, was equally thrilled: “We came to Frankfurt with a 20-strong team. We see here a broad selection of products and a high concentration of manufacturers, which serves as the basis for our orders; no other trade fair comes close. Our designers were particularly interested in the Heimtextil trend show, which is an important source of inspiration for them and provides a clear overview of current design trends.”

The most important trend to emerge involved products that are created by a process of ‘up-cycling’ from waste materials: several companies showcased carpets produced from textile residues. And the competition for young talents, held for the first time, the “Young Creations Award: Upcycling” also picked up on the topic and introduced some market-ready product ideas. A large number of the sustainable textile products, moreover, also bore witness to the continuously increasing popularity of textiles produced in ecologically acceptable and socially just conditions. 128 exhibitors qualified to be listed in the ‘Green Directory’, the index of sustainable home and interior textiles – more companies than ever before.

Trend forum - © Messe Frankfurt

‘Contract Creation’ spotlights new textiles for the contract business

The interdisciplinary ‘Contract Creations’ special show spot lit the latest textile innovations for contract-business visitors from the fields of architecture, interior design and property development. There, manufacturers presented special products and services, experts discussed the latest developments in the market and competitions showed outstanding corporate achievements and product solutions. The ‘Contract Creations’ programme proved to be extremely popular among architects and interior designers from home and abroad. “For me as an architect, it is important to see the latest product and technological innovations. Heimtextil is a great source of inspiration for the inside of a building”, says Gus Wüstemann, proprietor of the firm of architects of the same name in Zurich and Barcelona.

Heimtextil in downtown Frankfurt

Consumers could also see the latest furnishing trends on the Saturday of the fair. For the ninth year running, the ‘Heimtextil goes City’ consumer campaign attracted well over 2,000 customers and home-textile aficionados to downtown Frankfurt. Under the motto ‘Saturday is Trend Day’, 25 interior decorators, bed dealers and public institutions showed highlights from the fair and trend-oriented decoration ideas.

The next Heimtextil, International Trade Fair for Home and Contract Textiles, will be held in Frankfurt am Main from 8 to 11 January 2014.

DOMOTEX gets business off to a solid start in 2013 with innovative designs and bold colors

„DOMOTEX has once again delivered proof of its great international appeal and its pivotal role as the flooring industry's flagship fair," remarked Dr. Jochen Köckler, Member of the Deutsche Messe AG Managing Board, at the close of the event. **"40,000 visitors from over 80 nations came to discover the latest product innovations and trends for the upcoming season."** This constitutes a slight rise in attendance over 2011 as the most recent comparable staging of the event. Köckler continued: **"Our exhibitors succeeded in reaching their international clientele and laying the groundwork for the business year ahead. DOMOTEX thoroughly fulfilled its function as a unique business platform and an idea-giver for the international carpet and floor coverings industry."**

1,350 enterprises from 60 nations presented their latest products and collections, including carpets, textile floor coverings, resilient floor coverings, parquet flooring and laminated coverings as well as installation, cleaning and application technologies. This year the industry stressed bold colors and daring designs. "The time when floors played a subordinate role to interior furnishings is over. The current diversity of materials, colors and designs is unlimited, making floors an interior design object – a trend which was clearly visible throughout the exhibition halls," stated Köckler.

High satisfaction among exhibitors and visitors

Exhibitors praised the highly international diversity of the show's attendees, with more than 60 percent coming from abroad. Half were from European countries other than Germany, while 21 percent came from Asia and 11 percent from the Americas.

A gratifying jump in attendance was registered from North America as well as South, East and Central Asia. Visitors' professional qualifications and decision-making authority were compelling across the board. More than 90 percent of all attendees reported being directly involved in their companies' purchasing decisions. "If you want to cultivate international contacts and tap into new markets, you can't afford to miss out on DOMOTEX. This is where companies can meet up with potential business partners from every corner of the globe," continued Köckler. The show's attendees once again consisted primarily of wholesale and specialized retail buyers, at 30 percent and 20 percent, respectively. Skilled tradespeople, buyers from interior design and furniture stores as well as architects also used DOMOTEX 2013 to check out the latest market offerings.

Köckler's appraisal was echoed by Joe Williams, Vice President of International Sales for Beaulieu of America (based in Dalton, Georgia): "DOMOTEX is the biggest global trade fair of its kind, and that is what makes it so important to us. Here we can get in touch with buyers from the Middle East, Africa, Asia and Europe. Beaulieu of America benefits from the special drive emanating from DOMOTEX Hannover, which sets it apart from other tradeshows."

Geert Vanden Bossche, Marketing Director of the Balta Group (based in Sint-Baafs-Vijve, Belgium), added: "For us, being at DOMOTEX is important because we can see about 90 percent of our customers here in just four days. The show's stand-out virtues are its size and the large number of attendees. Beyond that, the 'DOMOTEX' brand stands for a 20-year tradition of excellence which inspires trust and draws in the crowds."

Sheer creativity: Industry presents unconventional designs and bold colors

At the Flooring Deluxe display, premium textile floor coverings, parquet and laminates took center stage. "Fresh, modern designs are proving instrumental in triggering end-consumer interest in high-grade, designer floor coverings," said Köckler. "By picking up on this trend and dedicating a showcase to it, we are giving our exhibitors rich opportunities to highlight their creativity and increase their impact," he continued.

Textile floor coverings, parquet and laminates were featured at the Flooring Deluxe exhibits in halls 6 and 9, where visitors could immerse themselves in unconventional installations and experience trends for the upcoming season.

In the textile floor coverings segment, graphic and geometric patterns, stripes and classic weaves were en vogue. The latest trends in hand-made carpets were on display at the "Souk Deluxe" show as well as at the presentation of the Carpet Design Awards. Here as well, the interplay of intense colors and striking designs dominated the scene. The future role being carved out by photo print optics was also conspicuous, with all three finalist carpets in the "Best Innovations" category at the Carpet Design Awards making use of such motifs.

Ten winners celebrated at 2013 Carpet Design Awards

There were many happy faces in Hall 16 after the announcement of the winners of the 2013 Carpet Design Awards on Sunday, 13 January. It was the eighth time that this fascinating competition has been staged at DOMOTEX and the winners in ten different categories received their awards. Every year the prestigious Carpet Design Awards sets the highest standards in terms of the quality and design of handmade rugs and carpets.
An international panel of top professionals selects the winners in ten product categories.

Winners of the 2013 Carpet Design Awards:

01 Best Studio Artist Design
Autumn Leaves by Deirdre Dyson

02 Best Modern Design Standard
Soleil by Choudhary Exports

03 Best Modern Design Superior
Bohemian Rhapsody by Wool and Silk Rugs

04 Best Modern Design Deluxe
Com u Camp Llaurat by DESIGNER CARPETS by Teppich Drechsle

05 Best Traditional Nomadic Design
Celest No1 by Werner Weber

06 Best Traditional Workshop/Formal Design
Razia Jan by Amadi Carpets

07 Best Old/Antique Carpet
Heriz Silk Rug by Mollaian

08 Best Collection Modern
Water Dance Collection by Wool and Silk Rugs

09 Best Collection Traditional
Erased Heritage Collection by Jan Kath Design

10 Best Innovation
Trompe L'oeil by Zollanvari

In a sense it is not so much the magnificence of the individual products that matters as much as the amazing overall picture presented by the 214 imaginatively designed, innovative handmade carpets from 25 countries. This is because the products exhibited in connection with the Carpet Design Awards not only represent the main trends in contemporary carpet design but also serve as an indication of the patterns, colours and materials that will dominate in the future.

"I have been involved with the jury of the Carpet Design Awards now for four years and I continue to be surprised and excited by the stream of new ideas presented each year for us to judge. This year it has been noticeable that traditional carpet patterns have re-entered the contemporary rug design lexicon, opening up many new possibilities for the coming years", says James Ffrench, chair of the Judging Panel.

This year's high-calibre panel of judges comprised six top names from the field of materials, so the emphasis of the competition was on the quality of the materials used and the quality of the product itself, as well as such properties as novelty, imaginative design and the implementation of creative ideas. For the first time this year the competition also included three modern design categories in the competition.

Next DOMOTEX fairs

The next DOMOTEX, which will be staged from 11 to 14 January 2014. Deutsche Messe is also represented in the world's fast-growing markets with its global array DOMOTEX events, opening the door to even more new opportunities for companies from the carpet and floor coverings sector. From 26 to 28 March 2013, DOMOTEX asia/CHINAFLOOR will be staged in Shanghai. DOMOTEX Russia will take place from 25 to 27 September 2013 in Moscow. And from 7 to 10 November 2013, Istanbul will be the venue for DOMOTEX Middle East.

Nonwovens & Technical Textiles:

“Luminescent textiles”

We intend to more closely examine certain applications and uses of technical textiles in the coming issues and to include results and developments from the field of research and development.

The opening is made by ‘Luminescent textiles’. These technical textiles belong to the smart textiles group and have achieved interesting research results in the last few years, mostly in the improvement of production procedures and were developed in industry-related conditions. Should luminescent textiles seem at first glance less interesting than other smart textiles as the question arises why textiles need to glow, could on closer consideration be just that product that becomes an absolute hit - all it is missing is a certain fashion hype for wearing luminescent textiles or to use them to enhance the home. So far the area of application has shown a rather sober response, mainly for warning purposes for example for children, sports and rescue teams. In the last few years however the creative arts have increasingly been discovering this fascinating form of smart textiles.

designtransfer, the gallery and transfer point of the faculty 'Gestaltung an der Universität der Künste Berlin' says, in a work by Eugen Buchner on luminescent textiles: 'The technique of EL textiles opens completely new possibilities for the development of textile designs. [..] The direction of my interest in research is in the design of interiors: A completely new 'tone' and look was produced with the help of EL textiles in the development of patterns in the Op-Art style. This textile generates different moods in a room depending on the lighting. During the day the interior recalls the look of the 60s - when Op-Art was widespread and popular. In the evenings or at night the contemplative look encourages a feeling of reflectiveness. Luminescent textiles have great development potential for the future, they have found application in interior architecture as well as in the design of clothing and architecture.' Other lighting companies such as Berliner Selux (Germany) have discovered the new possibilities and their effect on people: 'The corporeality of the light sources are steadily reduced, while the interactivity of the bundled LED points of light and diffuse OLED surfaces lend the illuminated room a new and virtual corporeality. People learn about light from a completely different perspective.'

That sounds as promising as it is bizarre as living in a house where a room develops a radiant life with the setting of the sun is a leap of faith that initially needs to be made. There is no lack of technical advances in this area as distinguished institutes around the world are constantly working on further developments that have led to some astounding successes.

In order to understand the developments we should briefly look at the principles of the technology. Luminescent textiles are defined as textiles that glow when stimulated or glow independently. Luminescent textiles are differentiated between active and passive, which as the differentiation indicates, glow either when illuminated or as an afterglow, or glow independently when stimulated by applying electric tension.

The effect of illumination is generated by fluorescent, phosphorescent (passive) and electroluminescent (active) pigmentation. The pigmentation is applied to the fibres of the textile substrates by means of a print or dying process or integrated in the fibres during the manufacturing process. Fluorescent pigmentation glows only under ultraviolet (UV) light or under blue-violet light. Invisible UV light is transformed into visible light and sheds light on the textiles in the same way as e.g. warning colours on safety jackets and special effects produced under ultraviolet radiation. Phosphorescent pigmentation produces and afterglow in the dark and electroluminescent pigmentation is actively stimulated to glow by an electric field or alternating electric field. In the case of electroluminescent pigmentation, additional conductive yarns, filaments, litz wires or printed conductive channels need to be integrated in the textiles or imprinted.

In cooperation with the faculty of Lehrstuhl für Feststoff- und Grenzflächenverfahrenstechnik (LFG) of the Universität Nürnberg-Erlangen and the Institut für Textiltechnik of the RWTH Aachen the DWI at the RWTH Aachen e.V. has developed a new type of nano-pigmentation with a very high light density.

Even the addition of a small amount of pigmentation causes higher light, heat and moisture stability as with conventional systems.

Electro-luminescence (EL) is a form of luminescence by which an electric field or electric tension stimulates a solid to produce electromagnetic emissions e.g. in the form of light. Electroluminescent textiles (EL) possess a structure of conductive electrodes through which the pigmentation is stimulated to glow. By these means the Textilforschungsinstitut Thüringen - Vogtland e. V. (titv) achieved a feasible solution by using ultra-fine ELITEX® yarns with a filament electrode gap of less than 200 µm, accomplished with a density of over 100 wefts and a yarn fineness of 22 dtex. It is possible to print the woven fabric with different colour emitting EL pigmentation pastes enabling glowing photo-realistic images to be visible on the textile substrate. The EL pastes currently being used produce prints that can be stimulated to glow with an electric tension of 70 - 250 volts and a frequency of 400 Hz - 10 kHz analog to EL films. The EL fabric possesses an layer of insulation because of the high electric tension. The electroluminescent pigmentation is applied to the fibres of the textile substrates by means of a print or dying process.

As this process was however not sufficiently economic due to the high weft density and cost of yarn, titv cooperated with ITCF Denkendorf on a research project that promised cost-effective production.

Both institute combined their experience with ink jet printing and electroluminescence to develop a method that enables the manufacture of flexible and soft electro-luminescent textiles with low-cost ink jet printing methods using electrically conductive printing ink.

The Textile Research Institute Thuringia Vogtland with its project „Actively luminescent textiles for more safety from Thuringia“ is one of the „Selected Landmarks 2012“ in the German competition „365 Landmarks in the Land of Ideas“.

The Forschungsinstitut für Textil und Bekleidung der Hochschule Niederrhein (Germany) reported at the end of 2011 that it had been possible to apply polymers with an intrinsic electrical charge to create partially transparent electrodes in self-luminous textiles by using new types of dispersions, also water-based, in a coating process on a textile medium. This new development made it feasible for textile coating to make the previous solvent based process environmentally safe and to implement it with conventional equipment.

Besides these electroluminescent textiles light can also be produced very well by integrating LED. With high light intensity, high efficiency, widespread availability and low prices of the SMD-LED and µ-LED these light sources become interesting for the production of luminescent textiles. Furthermore the miniaturised and energy efficient LEDs in the flexible, light and shapeable textiles are ideally suited for lighting effects.

LEDs can be positioned almost anywhere and connected according to the textile cable structure. The cable structure can be set up in a similar way to the electroluminescent textiles. The automatic contact (‘solding’) of the LEDs with the conductive filaments could also be completed automatically by means of an embroidery machine at titv in Greiz, which could help a cost effective mass production of this technology to achieve a breakthrough. LED lamps have been soldered to textiles by hand up to now.

Luminescent textiles with integrated fiber optics are also part of the active group should also be mentioned here to complete the record. Textile processable fiber optics of polymetylmethacrylat (PMMA) or polycarbonate (PC) are superficially impaired with additional devices so that they give off the light injected at the fibre ends via the lateral surface. These filaments are then woven, knitted or embroidered into textile surfaces. The fiber optics are bundled, so that light can be injected at the ends via super light LED or other light light sources.

Even if much about the topic luminescent textiles sounds very much like research and technology and less of products ready for the market, crucial steps have been taken in that direction with the latest developments in respect of cost effective production with established processes and taking environmental aspects into consideration. We are looking forward to the innovations and products that await us this year at Techtextil in Frankfurt.

Even if the hype of a global change from garments and interior decorating to light effects is still to take a long time, new applications such as protection wear that glows even in absolute darkness or a new type of interior illumination in vehicles could soon be reality.

By the way, researchers of A*Star Research in Singapore chose a completely different yet just as fascinating approach for the production of luminescent textiles. Their study has shown that the addition of fluorescent dyes into silkworm feed, creates a simpler, ‚greener‘ way to introduce color and luminescence into silk fibers. By adding fluorescent dyes to silkworm feed, they were able to produce luminescent silk fibers in a palette of colors including pink, green and orange.

Topics of the next issue 2 /2013

TOP STORY:

Automation

Interview

Home Textiles

eCommerce

Country focus: *Turkey*

Nonwovens & Technical Textiles:

“Filter”, „Geotextiles“

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