

Sustainability: can it last?

Eco-friendly textiles and apparel production is now making the headlines — but for how long?

The issue of sustainability in textiles and apparel has climbed to the top of the agenda for many major apparel brands and retailers, driven by increased consumer awareness of this issue in Europe and the USA.

In the August edition of *The Apparel Analyst*, we reported the unexpected news that Wal-Mart CEO Lee Scott is busy drawing up a sustainable vision for the giant US retailer. This includes using recyclable packaging, renewable energy sources and looking at sourcing more organic textiles.

However, critics have said that Wal-Mart is simply using the green issue to improve its image with consumers after a chequered public relations history, when it has clashed with trade unions and has had to defend its corporate responsibility programme to certain pressure groups and disgruntled former employees.

However, it does seem that Wal-Mart is serious about its green credentials. In June, it held a special two-day meeting on sustainability at its Arkansas headquarters, when it invited specialists in every area of the apparel supply chain from both inside and outside the company. This included environmental consultants and representatives of non-profit organisations.

The company uses over 60,000 suppliers in 70 countries, which means that even one small change in its procurement policy will have big ramifications on all, or some of its supply pipelines. The company has already identified the use of organics in apparel and textiles as an area of change which will

have implications for fibre, yarn and fabric suppliers to the world's biggest retailer.

At the moment, Wal-Mart buys around seven million kilos of organic cotton from suppliers in Turkey and India, which is tiny in terms of its total fibre use, but moving ahead it has also lined up additional suppliers of organic cotton in China, Texas and elsewhere.

Other retailers and brands are also looking more closely at the organic cotton route. For example, Nike recently stated that its goal is to blend a minimum of 5% organic cotton into all of its cotton-containing materials by 2010, while expanding its offer of 100% certified organic cotton products.

Currently, the world's supply of organic cotton is less than 1.5% of the conventional cotton supply, but global organic cotton product sales have increased by an estimated 35% annually, from \$245 million in 2001 to \$583 million in 2005 and are projected to skyrocket to \$2.6 billion by the end of 2008. Altogether, brands and retailers incorporated an estimated 9,066 metric tons (19,945,200 pounds or 42,552 bales) of organic cotton fibre into the products they offered to consumers in 2005.

Brands and retailers currently leading the push towards organics are Nike, Timberland, Edun, H&M, Marks & Spencer and Coop Switzerland who are all active in the market and expanding their programmes. Levi's will for the first time include jeans made with 100% organic cotton in its fall 2006 product line. Organic cotton will be used in select new and popu-

lar men's and women's styles within its Red Tab and recently launched Levi's Capital E lines. The jeans will be identified as "Levi's Eco" and be available in November 2006. The Organic Exchange organisation estimates that over 1200 small and medium sized brands and retailers also now offer organic cotton products to the European, North American and Asian consumer markets, with a burgeoning market in South and Central America.

Some of the synthetic fibres producers are also trying to muscle in on the sustainable scene. Unifi, the Greensboro yarn supplier last month launched its 'Repreve' recycled polyester yarn at Outdoor Retailer in Salt Lake City. Although recycled polyester yarn is not new – Patagonia sold fleece jackets made from recycled polyester in 1993 – the demand for recycled synthetics will likely gain momentum.

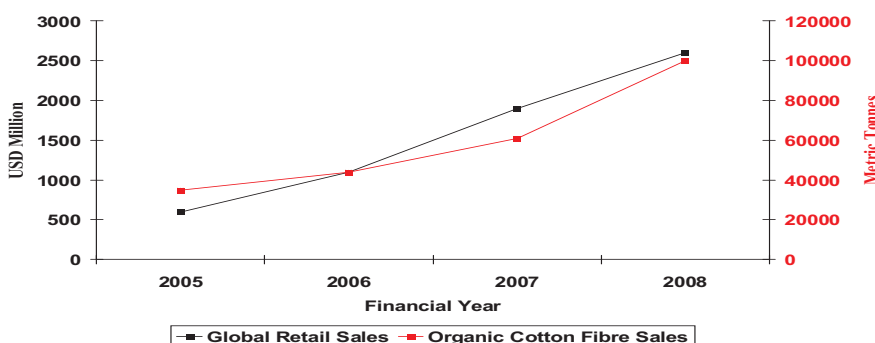
Adding more fuel to the eco-friendly fibre debate, a group of Australian wool growers said last month that it planned to launch an 'ethical wool' brand. Wool now accounts for a tiny fraction of textile fibre usage, and the Australian Wool Growers Association believes it can capitalise on consumer demand for environmentally and humanely grown products to help lift low wool prices and stop the loss of growers from the industry. Director Will Crozier wants to see all sectors of the growing, processing and manufacturing chain benefit from the brand. "Our brokers have been talking to people in China and Italy," he said. "Their customers say that this will give us a huge differentiation in the marketplace and we think that more and more it will be demanded by every consumer in the Western world and we think that's where we need to be positioned."

In recent years other companies have broken into the fibre business on the back of the sustainability issue. NatureWorks LLC, part of the Cargill Dow Group offers a family of commercially available polymers derived from 100% annually renewable resources under the NatureWorks PLA (polylactide acid) and Ingeo fibre brands. The raw materials for Ingeo, are fermented sugar extracted from corn and turned into pellets, which are then extruded into filament yarns. However, Ingeo still supports the use of genetically engineered crops and some organic purists such as Patagonia will not use the fibre.

Is it sustainable?

A question on most apparel retailers lips is will consumer's interest in sustainable textiles and apparel continue? In the fickle world of fashion, this season's trends are

Estimated Organic Cotton Global Retail Sales V Fibre Sales



Source: Organic Exchange

often consigned to the trash can the following year. So although eco-labels may be cool right now, what will happen next year?

Some apparel industry observers argue strongly that 'ecotextiles' may have been 'in' at the height of the eco-debate in the 1980s, but they no longer appeal to today's trendy consumers. Nowadays, clothing must be colour-fast, easy to wear, and of course fashionable and cheap – and need no ironing. And there's no doubt that what attracts customers is image – brand name, style and design – rather than product characteristics. And in our throwaway society, very few people are concerned about the production process – how a product is made, and where it comes from. After all, do most people read garment labels?

However, a recent survey showed that over half of the UK's consumers think that the ethical production of the clothes they buy is important, but only 14% felt the use of organic fabric was very important

The survey conducted in August 2006 by TNS Worldpanel Fashion, said: "One of the most interesting findings was the perception of what is most important in ethical production – only 14% felt the use of organic fabric was a very important consideration. This was particularly low for the under 25's, and is contrary to some retailers' decision to focus on organic ranges."

The study also revealed that 76% of people feel an end to child labour and sweat shops is a very important driver of ethical production, closely followed by offering producers a fair price (60%) and damage caused to the environment (50%).

However, while the survey showed that UK shoppers felt far more strongly about the fair treatment of people rather than organic textile production, this is to be expected. In addition, since this is the first ethical trends survey from TNS Worldpanel Fashion, there are no comparative results from the recent past which detail the growth of consumer awareness for organic products. It's likely that 5 years ago organics would not have even been registered as a concern by consumers.

The survey also revealed that over a quarter (27%) of all people said they would pay more for ethically produced clothing, compared to 53% who would choose ethical if they didn't have to pay more, indicating a need for shops to keep the prices of ethical clothing reasonable.

Such consumer feedback indicates that issues of sustainability are indeed here for the long-term. And although the demand for this type of apparel is still relatively small, its growth is being driven by legislation and the need for economic sustainability rather

than short-term fashion trends.

Take Europe as an example. The REACH legislation is a new EU law, due to be fully implemented in 2007, which is designed to protect human health and the environment from the unknown risk of chemicals within the EU. Article 6 of this legislation requires the importers of consumer articles (such as apparel) to register any chemical that is defined as dangerous and likely to be released in quantities greater than one tonne. This would be difficult enough for European retailers when backed up by a REACH compliant EU supply chain, but is likely to be almost impossible with non-EU supply chains which are widespread.

Despite reservations about the workability of such legislation, major European apparel retailers and brands do want to see consumer issues and concerns addressed. The clothing industry wants to avoid the recent scares associated with dangerous dyestuffs in foods, fake drugs, and so on. Subsequently, bans on specific Azo dye structures are in place across the EU, and on-going issues relating to the use of PVC and phthalates in garment panel printing have rightfully become hot topics.

Driven by legislation and consumer awareness, the use of 'ecotextiles' will continue to be a growing influence on apparel retailers and brands. The idea that aggressive litigators may also find themselves in a position to sue a retailer of a brand should a particular garment dye, for instance, become linked to consumer health problems, brings the issue into even sharper focus. But bigger issues are also around the corner, and these issues of sustainability are not just confined to the West.

Looking ahead

It's estimated that energy accounts for approximately between 10 – 15% of total textile production costs, and given that world energy costs are rising due to higher consumption in emerging economies, coupled with regional instability in the Middle East, the apparel industry needs to more tightly control these costs.

The Economist magazine recently said that 60% of the energy converted in power generation is wasted, illustrating that the price of energy is high, both in terms of the actual cost to the consumer and the consequences of the climate change that generating power from fossil fuels causes. So even if a small proportion of this wasted heat could be converted to useful power, it would be a good thing for both the apparel supply chain and the consumer.

Water is another big global issue. Last month, hot weather and a severe drought in

China left over 18 million people short of drinking water, and damaged millions of hectares of cropland in the Sichuan basin, southwest China.

As the global climate becomes more unpredictable, governments such as China's will seek greater control over water supplies, and how it is being used. We may be able to find and develop alternative energy sources, but we cannot manufacture any more water.

The textiles and apparel industry is a huge consumer of water, especially dyeing and finishing. And China's growing textile industry is consuming increasingly huge amounts of water in an environment where it is already scarce. For example, every tonne of rice needs 2000 tonnes of water to reach maturity, and to produce 1 tonne of steel – the backbone of China's new infrastructure – 20,000 gallons of freshwater are required. And, more pertinently, it takes 1200 gallons of water just to make one 1 kg of cotton fabric, whereas the production of 1kg of wool fabric soaks up an astonishing 44,000 gallons of water.

Hong Kong-based Esquel Group, one of the world's leading producers of cotton shirts with facilities in China, is taking the issue of sustainability very seriously. In April, Esquel partnered with the Zhejiang Institute of Science & Technology in China to establish the 'ZIST Esquel Eco-Textile Research Center (ZERC). The collaboration is a first of an expected growing number of such joint initiatives by academia and private enterprise in China to foster scientific research on eco-textile production, and sets a precedent for the promotion of research in textiles and ecology in China.

Consumers in the west will become more aware of these 'big' issues in the future as the issues of water and power availability become increasingly topical and eventually impinge on the consumer's way of life. The very recent water supply problems already experienced in China, along with other textile and apparel producing regions of the world, such as India, clearly show that it's far more likely that the production of sustainable textiles and apparel will increase in the future. In the long-term, the trend towards ecotextiles and their production may not even be driven by consumer awareness, or by apparel retailers who want to promote their 'green' credentials. Scarcity of water and the prohibitive cost of energy in certain regions may result in the sustainable production of textiles and apparel becoming an obligation and certainly not a passing fashion trend.

A new publication on **Ecotextiles** will be launched in 2007. See: www.ecotextile.com

