

## Sustainability mission of an “innofactorer”

by Kelvin Yau

**A** group of global apparel and footwear leaders recently joined forces to form the Sustainability Apparel Coalition to address the industry’s social and environmental issues. Among the coalition’s founding members is TAL Apparel Limited (TAL), one of the market leaders in the production of innovative clothes that combine style, comfort and functionality. The company regards itself as an “innofactorer”, as it is committed to innovation and supply chain solutions to ensure that it delivers high quality garments quickly and effectively. TAL underscores the importance of sustainability, and is one of the few Asian manufacturers who partake in the Sustainability Apparel Coalition. Dr Delman Lee, President and Chief Technology Office of TAL, spoke to *ATA Journal* on the company’s latest developments and his insights into the sustainability issues.

**ATA** — *ATA Journal*

**Dr Lee:** Dr Delman Lee, President and Chief Technology Officer of TAL Apparel

**ATA:** *Could you tell us some of TAL’s special products? What are your latest product developments?*

**Dr Lee:** TAL offers a wide range of high quality garments that are not only machine-washable and dryable, but also products that don’t require ironing. TAL’s most well-known innovations include our wrinkle-free technology which keeps clothes pristine and crease-free throughout the day. Despite the number of wrinkle-free garments available in the market, no one has mastered this innovation better than TAL Apparel.

Many of TAL’s garments are also stain-resistant – liquids simply ‘bead’ and roll off the garment to prevent unsightly stains.

TAL was also the first company to offer 100% wool pants that are machine-washable, dryable and shrink-resistant.

In terms of latest innovations, TAL is currently developing a body scanner, which uses body-scan data to better understand different body types. This technology is aimed at helping make clothes that fit better on people. A large retailer in London

will be the first retailer to use the scanner to take measurements of customers and create custom apparel. TAL believes that there is an upward trend towards “true-customization” and once this technology is perfected, it will be available in every retailer store.

**ATA:** *What advanced technologies and machines is TAL employing in the production? What benefits do they deliver to your company?*

**Dr Lee:** We have a range of technologies in production to help us improve our efficiency and quality as well as lessen our environmental impact.

For example, we have employed an auto-dosing machine to control the exact chemical recipe needed for our wet processes. This helps us to achieve accuracy and consistency that would not be possible if the process was done manually.

We also have simple innovations that help to reuse the wastewater from our garment rinse processes; often up to 20% of wastewater can be reused.

We must not underestimate the importance of people management. We have been applying lean production philosophies to the shop-floor with great success. We have seen a reduction of work-in-progress while at the same time maintaining the same efficiency. This most certainly equips us with the flexibility that is now demanded by the marketplace.

**ATA:** *Sustainability is under the spotlight in the industry. What does sustainability mean to TAL? And how has TAL realized sustainability in your operation?*

**Dr Lee:** The garment industry contributes to global warming as environmental impacts occur at every stage of the product lifecycle - from the growth of cotton, spinning of fibers, weaving of fabric, manufacturing of the garment to the disposal of the product after use. As a leader in eco-friendly technology and sustainability in the industry, TAL has been making strides in producing sustainable clothing, which include participation in a number of global



TAL’s headquarters in Hong Kong



Dr Delman Lee



sustainability initiatives to better understand the environmental impacts of the entire supply chain.

Since TAL's announcement of its three year sustainability plan to reduce the company's carbon footprint by 15%, the company has embarked on a pioneering path to make sustainability an integral part of all aspects of its business from the sustainable manufacturing of the apparel to making its factories and working environment more eco-friendly and energy efficient.



**TAL's production facility in Vietnam**

TAL is also a supporting member of the Low Carbon Manufacturing Programme (LCMP), formed by the WWF.

The environmental management system at one of TAL's factories in China was recognized by the LCMP after the company's participation in the LCMP road test and was awarded a 'Silver Label' for its best practices in proper waste recycling, exhaust emission management and energy efficient facilities and procedures.

As one of the two apparel manufacturers to participate in the worldwide road test for the Greenhouse Gas Protocol Initiative, TAL reports on its carbon footprint of manufacturing its garments on a cradle-to-grave basis. This not only increases the transparency and environmental accountability of its products but also leads to more sustainable decisions from the company.

**ATA: Could you tell us more about the Sustainable Apparel Coalition? What does TAL intend to achieve through the coalition?**

**Dr Lee:** The Coalition is a group of sustainability leaders in the apparel and footwear industry whose aim is to successfully design a pre-competitive, universal index to measure and benchmark sustainable practices and products for use by the entire apparel and footwear supply chain. Eventually, the Coalition hopes to use this index to create a consumer label that can be placed on individual products to inform consumers about the apparel's sustainability rating.

As one of the founding members of the Coalition, TAL is working on an initial set of deliverables that include evaluation of existing measurement efforts and development of a prototype index suitable for pilot testing by Coalition companies in 2011. The goal of the Coalition is to lead the industry toward a shared vision of sustainability. As one of the few manufacturers in Asia invited to join the coalition, TAL is proud to provide a perspective on the topic of sustainability from the garment manufacturing side.

**ATA: What, in your opinion, are some of the unrelenting challenges for Asian textile and apparel manufacturers in promoting sustainable production?**

**Dr Lee:** I believe more and more people in Asia are beginning to understand sustainability issues and are putting efforts towards improving the situation. However, one of the biggest challenges is that environmental sustainability is still a pretty new discipline, so there are a lot of different views and opinions when it comes to measurements and standards. As a result, Asian manufacturers who supply to brands and retailers in US and Europe will often get pulled into different directions by different brands and retailers when it comes to sustainability.

It is for this reason that TAL has gotten involved in the Sustainable Apparel Coalition. We believe that we must begin some type of standardization at this early stage with leading brands and retailers. The Coalition provides a forum for all the players in the supply chain to come together and figure this out.

**ATA: What is your outlook of the Asian textile industry in implementing sustainability? In what areas should Asian manufacturers work more on?**

**Dr Lee:** I think the Asian textile industry can play a crucial role in promoting sustainable practices. In a product lifecycle analysis, the upstream supply chain of the textile and apparel manufacturing is a large contributor of the carbon footprint.

And, with the majority of manufacturing outsourced in Asia, there is no doubt that Asia is a dominant player in the upstream apparel supply chain, so the difference that Asian manufacturers could make in reducing environmental impact could be huge. Thus, it is important we start to measure and track how our processes are affecting the environment. And, this is where a universal sustainability index would be critical.

TAL's key information	
Company name	TAL Apparel Limited
Year of establishment	1947
Location of factories	Hong Kong, Thailand, Malaysia, China, Indonesia and Vietnam
Production capacity	Over 55 million pieces of apparel per year
Main products	Shirts, blouses, pants, knits and tailor suits
Key customers	Ashworth, Banana Republic, Brooks Brothers, Burberry, Dockers, Givenchy, Hugo Boss, J. Crew, JCPenney, Nordstrom, Patagonia, Septwolves, Tommy Hilfiger and so on