



## Making sustainability an integral part of your business

*from Bob Panitzki, CEO of AFRDI*

**It can hardly have escaped your attention that at AFRDI, we take the concept of sustainability in manufacturing very seriously.**

We have devoted a great deal of money, and three years' research, into developing AFRDI Standard 150, our Sustainability Standard which, together with our well-respected AFRDI Blue Tick certification scheme for product strength and durability, gives us the ability to scientifically assess and give certification to a wide range of furniture products.

Notwithstanding, it seems to be a frequently heard theme that sustainability is something you look at when the economy is booming, not when conditions are tight, when every dollar has to count.

**So I was encouraged when I read recently the annual sustainability report from one of the world's largest businesses, Wal-Mart. For some years, when others were only talking in broad general terms about sustainability, Wal-Mart saw the need to pursue this goal.**

Company president and CEO Mike Duke, an engineer by background, says the organisation is drawing nearer to the goals it set itself in 2005: to be supplied 100 percent by renewable energy; to create zero waste; and to sell products that sustain resources and the environment.

Mike Duke has an answer for those who query the company's ability to aggressively pursue its sustainability goals in difficult economic times. His response has been very clear and direct: "We can't afford not to. We need to accelerate and broaden our efforts." In his report, Mike Duke goes on to explain his deliberate use of the word 'accelerate' saying that the company must move more quickly and with a sense of urgency.

**Is this a case of big business jumping on the green bandwagon to give its activities a more acceptable public face? Mike Duke's answer is plain: "Simply put, sustainability is built into our business because it's so good for our business."** The full report is accessible at [www.walmartstores.com](http://www.walmartstores.com)

Wal-Mart is keen on sustainability, because in the long run, it sees sustainability as one of the means by which people – its customers in the widest sense - will benefit, and therefore Wal-Mart itself will benefit. That might be seen as a cynical attitude, but on the local scene, Standards Australia is promoting a core constituent of the sustainability package, CSR, or corporate social responsibility, often referred to simply as CR. **CONTINUES PAGE 2**

## Sustainability...from page 1

Standards Australia says CR can be so much more than a defensive measure to 'manage' issues and stakeholders. An increasing number of Directors and Chief Executive Officers view it as integral to their business and essential to creating long term competitive advantage.

So integral is it that the International Organization for Standardization (ISO) has developed a Guidance Standard on Social Responsibility, ISO 26000, for release this year. ISO defines social responsibility as:

**the "responsibility of an organization for the impacts of its decisions and activities on society and the environment, through transparent and ethical behaviour that:**

- **contributes to sustainable development, including health and the welfare of society;**
- **takes into account the expectations of stakeholders;**
- **is in compliance with applicable law and consistent with international norms of behaviour; and**
- **is integrated throughout the organization and practised in its relationships."**

Being of an age that I can well remember the effects of the tariff cuts of the 1970s on many Australian manufacturing industries, I would number myself amongst those who not so many years ago would have scoffed at sustainability and CR as unnecessary to the pursuit of core business activities. History would show that it doesn't pay to get too far out on a limb from one's competitors.

But in the case of sustainability, I think there are genuine benefits to those who pursue its goals, goals we have tried to define in AFRDI 150.

Certainly I think those manufacturers who choose to have products tested and certified to both AFRDI Blue Tick and AFRDI Green Tick (AFRDI 150) will mark themselves out as responsible people producing a verifiably superior product.

**And in a market where price alone is so often the main determinant in purchasing decisions, tested and certified products should create a niche market that sooner than we might expect will become the mainstream.**

*see also page 6  
Going Green?*



...it's plain blue, but the  
value is **solid gold...**

## The vexed process of defining what really is leather

**When AFRDI set out to define what is really leather (for furnishing) in the process of developing the AFRDI 146 Leather Standard, we thought we had a relatively simple task on our hands.**

As it transpires, such was not the case. Our organisation continues to be amazed at the inventiveness of manufacturers and distributors in developing new terms to disguise the true nature or origin of a leather product, or indeed some other product produced to look like leather. To us, the definitions on leather issued by the International Council of Tanners are clear enough – leather for furnishing falls into the following classes:

- Aniline (full grain)
- Semi-aniline
- Pigmented
- Corrected grain
- Finished split
- Pull up
- Nubuck

Further, the ICT goes on to say that the term 'leather' may only be used in furnishing if at least 80% of both the contact and non-contact areas are leather. If the term 'full leather' is used as a descriptor, 100% of the surface area should be leather.

Yet, despite what should be a fairly clear-cut situation, we find that a variety of terms find their way into some furniture showrooms or catalogues:

- PU leather (polyurethane and leather)
- Waxed aniline
- Protected leather
- Masked aniline
- Crackle wax
- Leatherette
- Combination bycast leather
- Cruet grain
- Impregnated leather and laminated leather

AFRDI considers that our industry needs to embrace a recognised naming convention.

**We see such a move as overdue, for the industry has reached a point where, in the public interest and in the interest of those who already do the right thing within the industry, a necessary brake must be applied to the proliferation of leather descriptors.**

The intent of such descriptors may not necessarily be to deceive, but in some cases the end result is highly predictable – a sometimes gullible public is enticed into buying something which appears to be leather, but which may in fact be either reconstituted leather, a low-grade leather, not fit for furniture upholstery, or consist substantially of plastics engineered to simulate leather.

## Playpens in product recalls

**Target has recalled the Wotabout Toys Sesame Street and Thomas the Tank Engine Musical Activity playpens.**

The playpens were available between June and October last year. Potential problems have arisen because humidity is believed to have caused the front label sticker to bubble and peel. If this were to be torn off, it would pose a choking hazard to young children.

**Bugaboo International** has recalled the Bugaboo Bee Stroller, sold between January and June last year. A fault means that the brake may only work one side. Bugaboo has made available a set of clip brackets to rectify the fault.

**A four piece children's garden setting** has been recalled by Sam's Warehouse, Crazy Clark's and Go-Lo after it was found that the product did not meet product safety requirements, and could pose an entrapment hazard.

**Kmart has recalled Roomates** Squishy Cushions because the outer seams of the cushions may break, causing the polystyrene beads to spill out, posing a choking hazard.

**More dropside cribs recalled in US.** In yet another incident highlighting design issues inherent with dropside cribs and cots, the United States Consumer Product Safety Commission has issued a recall on half a million units, citing failure of plastic fittings.

The faulty units, sold under the names Generation 2 Worldwide and chilDesigns, are implicated in the suffocation deaths of three infants, and injuries to many more. Some of the units were manufactured in the US, others came from China.

In Australia, the broad safety guideline is that it should take **two separate movements** to put the drop side down so that a child cannot open it. This of course does not address the structural integrity issues which dog this design style, such as the top and bottom rails detaching.

Later this year, Australia will have a single national product safety law and harmonised product safety mandatory standards and bans across the country. The ACCC and state and territory consumer protection departments will work together to enforce these laws.

## *A reflection on the Global Financial Crisis*

**We chased the dollar, which has no heart or allegiance, and it responded in kind**

*from Harvard Business Review*

## NEWS BRIEFS

### Mattress springs made from foam

A Belgian company, Zele, has produced what it calls the Octaspring, a mattress spring made entirely from polyurethane foam.

The company claims that using many octagon shaped PU springs as an analog of the coil springs commonly found in mattresses better exploits the qualities of the foam, compared with its use in traditional block form.

The PU spring can also be used in pillows, seating and furniture, as well as in automotive applications.

*from Urethanes Technology*

### Sign of changing times in Asia

In a move that marks a change in attitude towards the true cost of manufacturing, in areas such as the environment and in sustainability, the China based German leather producer ISA Tan Tec has opened a new tannery in Vietnam.

The tannery aims to provide a new standard for sustainability in leather manufacture with consideration of environmental and social responsibilities.

Applying German standards to working conditions, ISA Tan Tec is making innovative use of renewable energy and is using waste heat from production processes. Concern for the environment extends to the construction of an engineered wetland, in which waste water is cleaned for re-use.

Opening of the new plant marks a change in attitude from two or three decades ago when heavily polluting industries such as tanneries were established in the third-world to avoid western standards for toxic waste and working conditions. It comes at a time when recent surveys of some tanneries in Bangladesh recorded chromium levels in factory outfalls at several hundred times permitted values.

### Are shopping patterns changing after the recession?

The answer, according to a recent US study, is an unequivocal yes, with many respondents saying that their spending habits have been changed for ever.

They also claimed that buying now gives them less pleasure than before the downturn started in 2008, and that buying less has become a habit that will probably stay with them for some time.

### The coming year in the US

A tough year ahead, but cause for some optimism, is the summation of a series of trade fair interviews about the year US furniture manufacturers face, as consumers slowly return to purchasing.

And a piece of advice to retailers: aggressively promote, do not rely on the old-fashioned pull of branding to bring customers into the store.

# Furniture raw resource under threat in US

In the US, \*BIFMA has expressed concern at government moves to subsidise use of wood fibre normally destined for furniture and cabinets to instead be used as fuel.

The move comes under the government's Biomass Crop Assistance Program (BCAP). BIFMA sees the move as a threat to all industries that rely on composite panel products.

BCAP is being promoted as fostering the diversification of America's fuel supply through the use of unutilised renewable biomass.

*\*Business and Institutional Furniture Manufacturers Association*

## British furniture industry downturn

Last issue we highlighted the downturn in the local furnishing industry, but pointed to a brighter future as the economy recovers and strengthens.

Now the British Contract Furnishing Association has outlined the extent of the decline of their industry, with UK furniture manufacturing worth £8.3 billion at ex factory prices, down 17% from pre-recession levels. The Australian industry officially contracted 4.3% for the same period (anecdotal evidence would suggest this figure under-estimates the true state of the market by a considerable margin).

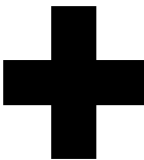
The British industry directly employs around 96,000 people (Australia 70,000), with exports worth £1b (approx \$A1.78b), but imports around £4.5b, giving a trade imbalance of £3.5b.

According to the BCFA, 58% of UK output is for the domestic market, 13% for the office market, and 29% for the contract market which includes government.

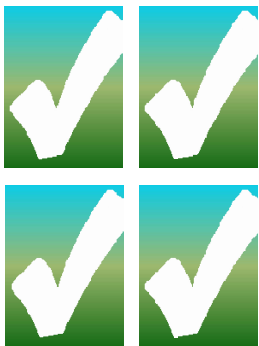
...in testing and certification,  
as in life...the whole is  
sometimes greater than the  
sum of the parts...



Blue Tick  
Product  
Certification



Green Tick  
Product  
Certification



**AFRDI Blue Tick for strength and durability, Green Tick for sustainability.  
Together, the very best products in the furnishing market.**

# AFRDI discounts up for grabs on testing and certification

In our quotes to clients, we often mention the availability of discounts, but surprisingly, very few companies have availed themselves of the maximum discount potential, which can be quite substantial.

AFRDI provides a range of discounts, depending on factors such as the level of AFRDI membership, and membership of the FIAA, CFIAA or INPAA (enquire with AFRDI (03) 6326 6155). In addition, the discount offered varies according to the number of similar items submitted for **full testing** (i.e. not AFRDI Blue Tick renewal) at the same time.

The series or quantity discount applies to the third item of the same kind submitted for full testing at the one time by the same client, and further applies to subsequent items submitted for full testing at the same time from the same client.

Combined, these discounts can be extremely attractive, as the following case studies of recent work done by AFRDI show. They also clearly demonstrate that it is possible to do more testing at lower unit cost if the discount guidelines are followed.

## CASE A

Company approached AFRDI to fully test 6 items.

The company **was not a 20% membership holder but decided to become one**. Membership attracted a discount of 20%.

Because a number of items were submitted for full testing at the same time, a discount applied for the third and subsequent item.

Total cost for testing was	\$17,500
Less 20% AFRDI membership	\$3,500
Less quantity discount	\$3,900
Plus 20% membership	\$2,000
<u>The bottom line cost</u>	<u>\$12,100</u>

Looked at another way, the client had 6 items tested for the list price of 4

## CASE B

In this recent example, the company asked AFRDI to fully test 4 items.

The company was already a 20% member with AFRDI, thereby attracting a discount of 20%. Membership of the CFIAA attracted a further 10% discount.

The total cost of testing was	\$20,000
Less 20% AFRDI membership	\$4,000
Less 10% CFIAA membership	\$2,000
Less quantity discount	\$3,333

The bottom line cost \$10,667

In effect, 4 items were fully tested for the price of 2

## ALWAYS CHOOSE THESE TRUSTED PRODUCTS FROM AFRDI



AFRDI Blue Tick. Tests for strength, durability, flammability and ergonomics, and in office chairs, at loads up to 110 kg. New AFRDI Standard 142 extends the ability to test chairs for heavy people at two levels, 135 kg and 160 kg.



The AFRDI Green Tick uses AFRDI Standard 150 to test for sustainability and environmental credentials.

Together, they are the truly responsible choice for all furniture manufacturers.



# Trials and tribulations in getting an unusual product on to the market

## CASE STUDY

**Necessity, we are reminded, is the mother of invention, and how often have so many of us been caught without a high chair while travelling with infants?**

To inventor Betul Madakbas, the solution (inspired by the model of the take away coffee cup) seemed elementary...design a disposable or recyclable 'high' chair that can be folded up as a flat-pack and taken with parents while they're away from home.

From such a simple brief, the Belkiz Feedaway chair has evolved, built from cardboard, and able to be quickly assembled and re-used a number of times. But would the chair perform well, would it be stable, and above all, would it be safe? These were some of the questions Betul wanted resolving when she approached AFRDI to comprehensively test her invention.

Some of the fundamental problems she had already addressed early on; the chair is now made from coated cardboard effectively making it moisture resistant. But the question of mechanical strength and durability remained, within the context of the chair's materials and usability. AFRDI testing officer Arch Robinson did the testing, based partly on **AS/NZS 4684:2009 High Chair safety requirements**, along with various British, European and US standards excerpts plus additional AFRDI suggestions.

"It was an unusual case. We simply could not apply the tests we would give to, say, a normal high chair, because Betul's 'high' chair is in fact quite low, relatively speaking. We had to devise procedures that would take into account its distinctive design and its likely use.

"We considered that the upper age limit should be approximately 18 months - that's a fair-sized walking child - and then tested for a user mass of up to 20 kg.

"As is our usual practice, we applied loads in various positions to simulate a child rocking back in the chair. The fundamental truncated pyramid shape of the chair ensures a high degree of natural stability.

"We also devised a test for stability based on the probability that a sibling might try to climb up on the chair while it was occupied."



*Belkiz Chair under test at AFRDI*

Other recommendations from the AFRDI team included:

- Reshaping the fold on top of the chair back to improve appearance and reduce the tendency for the material to split
- Testing to prove a simplified table design was adequate, thereby obviating the need for a more complex and expensive design
- Evaluating alternative materials for the harness restraint
- Evaluation of the clasp/buckle assembly on the harness in terms of resistance to activation by children within the relevant age group.



Betul Madakbas is now well on the way to marketing the chair internationally, having successfully promoted it last year in Australia through ABC-TV's New Inventors program.

### AFRDI help with R&D

AFRDI is a Registered Research Agency (RRA) able to do research on behalf of others. This work attracts taxation concessions. It was under these provisions that much of AFRDI's development work for the Belkiz Feedaway chair was carried out.

The RRA scheme currently allows tax deductions of up to 125% of the cost of the developmental work (this figure will increase from July to 150%). Importantly, it also eliminates the need for an individual or a small company to meet a threshold level of spending before becoming eligible for the allowance.

# Major shifts in world furniture production

There's been a considerable shift of focus in world furniture production, according to data contained in a new report by Britain's FIRA on the competitiveness of the UK furniture manufacturing industry.

On the latest figures – now almost two years old – world furniture production is valued at \$A360 billion, with the seven major industrial economies of USA, Italy, Japan, Germany, Canada, France and the UK making up just under half of the total.

Not surprisingly, China accounts for almost a quarter of world production, having experienced a six-fold growth over the past decade.

Rapidly industrialising economies such as Poland have grown markedly, in Poland's case the output increasing four times over the decade, but Mexico, once a rising star, has seen a considerable decline.

In our region, the emerging nations are now India and South Korea, while in Malaysia and Indonesia, growth has slowed considerably.

In Europe, the former Eastern bloc countries of the Czech republic, Slovenia and Romania are beginning to make their presence felt in the world market.

## A lack of ambition?

In the same report, there are pointers to the inherent weaknesses of the British industry, and Australian manufacturers may find some resonance in the comments.

British furniture manufacturing is characterised as being relatively labour intensive, and therefore under threat from low wage economies.

Moreover, the report finds scant evidence of time being spent on planning for the future, because many concerns have gone into survival mode, to cope with the GFC.

But the report adds, that while the majority of manufacturers predict some long term growth, the level of growth is expected to be small.

**All of this may point to a lack of ambition amongst British furniture manufacturers, the report suggests.**

Compounding the problem is the fact that there is an increasing reliance on imported materials and components, with the usual associated trading challenges and the unpredictability of currency fluctuations.

The report goes on to identify what is seen as a significant contradiction within the industry. That is, the majority of manufacturers believe that quality and service are the main competitive drivers, yet the same companies consider that competitors are price driven.

## Going green? Do it yesterday!

*from Bob Panitzki, CEO Furntech-AFRDI*

At AFRDI, our focus has been on going green i.e. to formally consider environmental and sustainability concerns, for quite some time, culminating in the publication last year of AFRDI Standard 150, for sustainability in the manufacture of commercial furniture.

Many is the time when there have been niggling doubts about whether this is the right way to go just now, in the throes of international financial uncertainties – questions about 'getting ahead of the game' arise frequently.

Now, in a report by FIRA, the company says materials suppliers and furniture manufacturers in the UK are gradually embracing the principles of sustainability.

The report adds that some manufacturers acknowledge the short-term costs of sustainability, but accept it is a worthwhile trade-off for a stronger competitive position in the future.

**But here is the clincher from the report: one leading manufacturer stated that: 'I felt that we were being forced into adopting environmental principles. In retrospect I only wish that we had done this earlier as we could have saved a lot more money much sooner.'**

We are now seeing some of our clients demonstrating a forward-looking attitude to testing and certification – they're having both Blue Tick and Green Tick full testing done at the same time. *(see also in this issue our advice on AFRDI full testing discounting, page 5)*

At the moment, this gives accredited products a strong marketing point of difference, but we anticipate that in the near future, such a level of product certification will become commonplace as society strives to produce better quality products with greater longevity, and the capability for end-of-life refurbishment or recycling.

## AFRDI's Consumer Concerns Service

*can help you by providing professional intermediaries to assist in resolving consumer disputes*

Call Stacey Saunders on  
(03) 6326 6155 or  
email: [stacey@furntech.org.au](mailto:stacey@furntech.org.au)

# Grants available now to boost sustainable manufacturing

An Australian Government program to help improve manufacturing efficiency is now open.

Called Re-Tooling for Climate Change, it focuses on improving energy use and reducing water consumption.

Small and medium sized manufacturers (turnover less than \$100 million) can apply for grants between \$10,000 and \$500,000. Up to half the cost of improvement projects can be funded, with the work scheduled over periods up to 18 months.

**The government says the projects must demonstrate a commitment to reduce the environmental footprint of a business.**

Some schemes already funded include:

- applications to improve water capture and recycling
- process re-engineering to reduce the energy and water consumed or wasted in production, and
- use of renewable energy sources to fuel production, including use from hot water biomass production.

The program continues until the 2011-12 financial year, and applications will be assessed on a regular basis this year.

## Changed tax benefits for R&D

**The federal government is replacing the existing R&D Tax Concession with a new enhanced R&D Tax Credit, effective July 1, 2010.**

Treasury describes the new tax credit as a broad-based and market driven incentive package, with two core components:

- a 45 per cent refundable tax credit (equivalent to a **150 per cent concession**) for companies with a turnover of less than \$20 million, and
- a 40 per cent standard tax credit (the equivalent of a **133 per cent deduction**)

The existing scheme gave rebates of up to 125 per cent.

Treasury says the new tax credit is decoupled from the corporate tax rate and through this, creates certainty in the level of assistance to be provided.

**AFRDI is a Registered Research Agency (RRA), and can carry out research work which is eligible for the R&D tax break.**

# Technical standards star at Hollywood's Oscars

As millions of people around the globe tuned in to watch Hollywood's who's-who walk the red carpet for the 82nd Annual Academy Awards, or "Oscars," **technical standards** were in the house, on the screen, and behind the curtain making the magic of the movie industry's biggest night possible.

While motion picture technology is developing in new directions – and dimensions – most movies, including many of this year's Best Picture nominees such as *The Blind Side* and *An Education*, are still recorded on 35-millimeter (mm) film. The International Organization of Standardization (ISO) Technical Committee (TC) 36, *Cinematography*, Working Group (WG 1), *Production technology*, has developed a large number of standards related to motion picture photography, sound recording, reproduction, and projection.

In contrast to those traditionally filmed flicks, the sci-fi/fantasy box-office behemoth *Avatar* was shot entirely with digital cameras. [INCITS/ISO/IEC 13818-2-2000 \(R2006\), Information Technology - Generic Coding of Moving Pictures and Associated Audio Information: Video](#), specifies the coded representation of picture information for digital storage media and digital video communication and specifies the decoding process. This standard was developed by the ISO and International Electrotechnical Committee (IEC) Joint Technical Committee (JTC) 1, *Information technology*, Subcommittee 29, *Coding of audio, picture, multimedia and hypermedia information*.

Movie sets, whether on-location or in a studio, can create unique hazards for cast and crew as they recreate dramatic scenes of real-life or fantasy. From the fiery bombs of Best Picture winner *The Hurt Locker* to the machinery and materials used in *District 9*, unusual environments are the norm when movies are being made.

To ensure fire safety on soundstages and on location, [NFPA 140-2008, Standard on Motion Picture and Television Production Studio Soundstages, Approved Production Facilities, and Production Locations, 2008 Edition](#), provides complete safety requirements for the design, construction, operation, and maintenance of facilities used in motion picture and television industry productions. The National Fire Protection Association (NFPA), an ANSI member and audited designator, developed this standard.

**Whether you got all choked up watching Sandra Bullock's Best Actress acceptance speech, or fell asleep during the first dance number, standards were there to make the 2010 Academy Awards a star-spangled night of fun for film fans everywhere.**

*from ANSI News*