

INNOVATION ACCELERATION



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Rob Coombs

President and Chief Executive Officer
Interface Asia Pacific

Just five years ago, a trip to the local hardware store was a challenge for any environmentally-conscious renovator. Shower heads used 22 litres of water a minute, light bulbs were incandescent and most paints contained chemicals that left you with a headache.

Today, green products that were once expensive and hard to source are now affordable and accessible – and these products are now stocked on the shelves of every hardware store in the land. Water-efficient fittings, LED lights and compact fluorescents, paints low in volatile organic compounds – the list is endless.

With an increasing number of building professionals guided by Green Star in the design and construction of their projects, as well as in the procurement process, the demand for green products is greater than ever before. In fact, a 2012 report by Accenture found that a third of firms selling environmentally-friendly products are struggling to keep up with demand.

The vast majority of businesses surveyed by Accenture said that sustainability was vital to their future growth, and that regulation and corporate reputation were becoming less important as sustainability continued to rise in a virtuous circle of commercial opportunity and investment growth.

President and Chief Executive Officer of Interface Asia Pacific, Rob Coombs, believes that Green Star has had a far-reaching impact across Australia's supply chain and we are now reaping the benefits.

"Manufacturing has been driven to comply with new benchmarks for emissions, recycled content and product stewardship. In fact, Green Star has introduced a new competitive dynamic that, these days, is often the difference between winning and losing business," Rob says.

Interface has established a goal to be entirely sustainable, which it calls 'Mission Zero', by 2020. As a result, Interface views all its product development and work processes through a lens of sustainability.

Rob says manufacturers today must ask themselves "to what degree do products and the processes adopted demonstrate a commitment to a lower environmental footprint and compliance with Green Star standards?"

"Once you influence upstream supply, the effect on the environment is multiplied. Interface read this change very early and our ability to support Green Star compliance has been one of the key drivers behind our growth in recent years," Rob explains.

Dulux sustainability specialist, Rod Vockler, agrees, saying that Green Star was the primary driver for the development and release of Dulux Professional Enviro2. ▶

AHM Building

4 Star Green Star – Office Design v2
4 Star Green Star – Office As Built v2

One of the first low-VOC product offerings on the market, Enviro2 paved the way for future low-VOC paint innovations such as the reduction of VOC levels in the mainstay Dulux Wash & Wear range.

"Certainly, the Green Building Council of Australia is influencing product choice," Rod says. "We felt it was important to provide the industry with sustainable products. Early adoption has made it easier for Dulux to provide innovative products that meet painters' needs and environmental requirements, while maintaining a leading position in the market."

"Rating systems have supported the growth of our business for many years. As our research and development is undertaken in the US, product innovation has been, in part, driven by the USGBC's Leadership in Energy and Environmental Design (LEED) rating tools," says Frank Harrington, Commercial Manager of Solatube Australia, which produces high-performance daylighting systems.

"We are starting to see the design community take on our daylighting systems for Green Star projects, and, as we found in the US, we expect that Green Star will also help drive our sales in the commercial space in Australia"

Furniture manufacturer Schiavello Group has established a reputation for environmental sustainability. According to Mark Thomson, Schiavello's Corporate Sustainability Principal, Green Star has "complemented our natural approach to ESD and has assisted us to fine-tune various processes and market offerings. Green Star gives us an industry-leading benchmark as not only a baseline for measuring our efforts, but a respected medium to highlight our capabilities," Mark says.

One of Schiavello's most recent innovations is a workplace platform which can adapt to new workplace developments and technologies. This means workspace managers can redeploy existing infrastructure rather than replacing entire systems to accommodate ever-evolving workspace needs. "It's a significant shift away from heavy workstations that become quickly dated and end up in landfills," Mark says.

From green dreams to everyday reality

Countless case studies of Green Star-rated projects are positive proof of how Green Star has accelerated the innovation cycle to a lightning speed. Many green building design features and technologies that were once leading-edge are now integrated into new projects as a matter of course.

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Schiavello



Lend Lease's 30 The Bond in Sydney, which achieved Australia's first Green Star – Office As Built rating, featured the first large-scale application of chilled beam technology in Australia. Paul Edwards, the then General Manager Environment at Bovis Lend Lease, said at the time that "everyone was sceptical about chilled beam technology working in Australia."

It took only a few 40 degree days, during which 30 The Bond maintained a comfortable 23 degrees, for the technology to become accepted. In fact, by 2007 – just three years later – chilled beam systems were used more widely in Australia than in the United States.

The highest ever scoring Green Star building, Pixel, showcases so many leading-edge ideas that the team submitted 30 separate innovation claims and were awarded the maximum of five Green Star Innovation points. The Pixel team's commitment to green thinking even drove changes to government regulations.

Schiavello

Climate workplace platform

The project was restricted from using innovative vacuum toilets due to local council policies. Determined to get a positive outcome, the Pixel team successfully lobbied the local council and Grocon is now distributing the technology throughout Australia and integrating the vacuum toilets into other projects, including Melbourne Water's new headquarters.

Innovation and investment

Green Star requirements have been a key consideration in product development, says Laminex Group's General Manager – Marketing, George Bej. "How products will perform in line with Green Star helps drive innovations and directs investment. Sustainable design is socially responsible but it is also smart design. It requires a willingness to take the next step in product research and development, and invest in the solution."

The Laminex Group has adopted a serious approach to sustainability. All four Australian manufacturing plants are Chain of Custody (CoC) certified, which requires tracking at all stages of manufacturing and distribution to ensure the final product is produced from legally-sourced wood fibres. In addition, The Laminex Group took the pioneering step to transition all E1 raw and decorated MDF products to an even lower formaldehyde classification E0 MDF as standard – which emits half the formaldehyde of E1 – at no extra cost to customers.

And the move has been good for business. "We find customers are increasingly turning to us to share our sustainability expertise. Our leadership in this area has helped to shift attitudes internally – we find our manufacturing staff are more environmentally-conscious than ever before, and are always looking for ways to improve our company's environmental performance," George says.

Kingspan's Karim Muri says his company's sustainability initiatives also gained a push from Green Star. Kingspan manufactures high-performance insulation and Karim says "Green Star has accelerated our initiatives. We were noticing a lot more demand from architects about our applicability to Green Star and our relevant credentials."

Green Star's presence in the market has driven manufacturers to find more sustainable processes and reduce environmental impact on the factory floor. "As well as helping to reduce the carbon footprints of buildings, we also wanted to show that we could reduce the carbon footprint of our products before they even get to the site," Karim says.

One of Kingspan's innovations was the redesign of the Air-Cell cross-linked foam

range so that it no longer needs to be packaged with cardboard cores. Kingspan estimates this saves almost 22,000 kilograms of cardboard waste material on construction sites annually. "If all those cores were rolled flat, they'd cover close to 30,000 square metres, or about 5 soccer fields. While cardboard is a recyclable waste, it's clearly far better not to produce the waste in the first place."

Another innovation reduced manufacturing waste by eliminating the need to trim the edges of the Air-Cell bubble range before being packaged. This has saved almost 15,000 square metres, or 5,500 kilograms, of waste going to landfill each year.

Equally impressive is Godfrey Hirst's \$3.5 million water recycling facility that opened in 2010 and is now saving 250 million litres of water a year. By reprocessing 175 million litres of effluent production water along with 75 million litres of captured storm water and returning it to Class A water for reuse, the facility saves 250 million litres of water each year – the equivalent of 100 Olympic-sized swimming pools.

Robert Lunardelli, an environmental engineer at Godfrey Hirst says that both external and internal forces have driven the company's environmental initiatives – and Green Star is one of them. "Increased cost of resources and services and increasing consumer demand for products with positive environmental credentials manufactured by companies with sustainable practices" have converged, Robert says.

In this environment, manufacturers and suppliers are beginning to understand the importance of maintaining responsibility for their products throughout their lifecycle. This, in turn, helps purchasers to make buying decisions based on what's right not just today and tomorrow, but well into the future. Now THAT'S true sustainability. ●



Pixel Building

6 Star Green Star – Office Design v3
6 Star Green Star – Office As Built v3

