

— Eco-Innovation success story from Malaysia —

Green Solutions for a Growing Adhesives Business

Malaysia's Wilron Products is an adhesives manufacturer with a plan. Thanks to a new eco-innovative strategy, the company is providing its customers with the ecological adhesives they want, while aiming for a bigger share of domestic and foreign markets. Here's why going green makes business sense for an ambitious SME.



A small company of 38 employees, Wilron Products has been in the adhesives manufacturing business for nearly 40 years. Throughout its history, the company has made adhesives for clients in the construction industry, automotives, packaging, bookbinding and paper conversion. But staying with the competition and producing for domestic *and* foreign markets means that Wilron has to innovate and make a greener product fit for the 21st century.

Traditionally a producer of solvent-based adhesives, Wilron acknowledges that “global trends are moving towards green products”. Customers are becoming aware of the risks of volatile organic emissions from solvents, but also, more and more regulations require “eco-label” certification before adhesive products can enter a given market.

“The adhesives market worldwide is being driven by a rising trend in various end-user segments to use eco-friendly or green adhesives, or those with low volatile organic compounds,” notes the company. As a result, Wilron and its competitors see the need for a new business model and a better product.

Innovation through ecology

To take the business forward, Wilron has turned to eco-innovation; not just to regain market share, but to improve efficiency and working conditions at its 23-year old manufacturing plant in Selangor. And according to business director Vicki Lim, “this is the right time for expansion at Wilron, as well as profit maximization.”

So how is Wilron doing it?

First, the business is focusing on a new product for its customers: eco-friendly, water-based adhesive.

Geared towards eco-label certification, Wilron believes the water-based product will increase the company’s market presence – especially with export-based customers who require eco-certified components in their products. In fact, Wilron is particularly interested in the adhesive’s eligibility for the Green Building Index; a key entry point into the construction sector.

As for overseas markets, currently only 5% of the company’s production targets North America, Indonesia, Singapore, the Philippines and Cambodia. Here the company sees real export potential – especially in the ASEAN region, but also to Europe and the Middle East.

By targeting the water-based adhesive segment, Wilron estimates an annual revenue increase of some 10%. And in future, Wilron says that solvent-based adhesives will be phased out, and the business strategy will firmly focus on newer water-based and “hot-melt” adhesives.

But this isn’t the only reason Wilron has switched to eco-innovation.

The production of solvent-based adhesive is hazardous to human health, and the company has borne a high price in staff medical costs. But by switching to a water-based product, Wilron can provide a safer environment for employees: less accidents at work, and less medical leave – leading to greater productivity.

Indeed productivity is another big reason for Wilron’s eco-innovation strategy.

How to boost quality, productivity and employment

Through eco-innovation, the company has been able to attract support from government agency SIRIM to boost its process efficiency. Attracted by Wilron's innovative and eco-friendly ambitions, SIRIM's Industrial Innovation Model Fund financed a much-needed upgrading of the company's aging plant. This freed up funds for Wilron to invest in a new, automated conveyor at the factory.

According to Wilron, the automated conveyor "eases the work of employees" as they transfer one-tonne adhesive containers to the store of the adhesive filling plant. With 200 tonnes produced daily, this process had become a huge concern for the company's more elderly employees, in terms of both performance and health and safety. Now, sub-optimal performance and staff medical leaves have given way to increased efficiency and a more attractive working environment. Wilron expects that automation will boost product quality by 10% to 20%, and hopes that new, young employees can be attracted to a more modern factory floor.



As for the company's eco-friendly strategy, it has boosted employment down the supply chain and at Wilron itself. Raw material suppliers have taken on new workers, and Wilron has hired a new marketer to promote the eco-friendly adhesive, and a consultant and contractor to support green initiatives such as the Green Building Index.

The basis for success: “hotspot analysis”

To achieve all this, Wilron used a straightforward methodology created by the Eco-innovation Project.

As the company devised its new business strategy, it identified priority “hotspots” where the eco-innovation process would have the most impact.

What could the company do about a small and shrinking local market for adhesives? What could it do about a manufacturing plant with aging machinery and workers? And how could Wilron improve its own chemical product, a product which was hazardous during production and final use?

Using hotspot analysis, Wilron identified the big risk areas across the supply chain, deciding on holistic changes – not only to business operations but to production itself. This meant addressing its economic, environmental *and* social burdens. And through cooperation and training events with SIRIM and UN Environment, new ideas were developed on customer demand and exports.

In a competitive global chemicals sector, Wilron has a new and ambitious plan. This Malaysian SME recognises that the global shift towards greener production is a business opportunity; an opportunity that makes business sense.

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