

Painting the world greener



As the world becomes more eco-aware, the pressure on companies bidding for big contracts to ensure they're aware of sustainability issues has become increasingly intense. Now ICI Paints AkzoNobel has made meeting those expectations considerably easier with a range of paints that significantly lessen the impact on the environment throughout the production process – 'from cradle to grave'.

The need

In 2006, ICI Paints AkzoNobel was already working on reducing solvents in paints, in anticipation of an EU directive that eventually did come into force. But the company, aware of its responsibilities as the market leader in this country, wanted to look beyond that one issue to the sustainability of the whole production process, from the extraction of raw materials, through production and application, to the final disposal of old and surplus paint. Carillion, an important specifier for ICI Paints' products and a major force in hospital and other public works construction, had already flagged up that sustainability was becoming an increasingly important factor in their business. The result was a three-way partnership with Forum for the Future, the sustainable development organisation, in a three-year project.

The results

'There is a growing market for products which deliver the performance the customer wants – and that is sacrosanct, because there are a lot of products out there that are green but don't perform – but are also reducing the environmental burden,' according to Dr Phil Taylor of ICI Paints AkzoNobel.

In the US, sustainable, non-solvent paint solutions now account for about 70% of the total US paint and coatings market (iGreenBuild.com, 2007).

Both those targets, sustained performance and lower environmental impact, were achieved with the launch of the Ecosure range of paints in 2008, the VOC 2010 range in 2009 and associated products.

The benefits of the project have been felt throughout the supply chain, with a reduced carbon footprint and a lower waste and water burden. Raw material suppliers now capture and recycle processing water, and some

use hydroelectric power in the extracting process. ICI Paints AkzoNobel have also produced a paint solidifier, turning liquid paint into a crumbly solid which is easier and safer to dispose of, and leaves the can clean enough to be recycled.

And the development within the project of techniques such as the Streamlined Life Cycle Analysis tool and the Environmental Impact Analyser have ensured that the Forum for the Future will be able to apply lessons learned in this project to other manufacturing processes for products as diverse as washing machines and sandwiches.

'We haven't solved everything. We're on a journey to becoming increasingly green, and this is one step,' says Dr Taylor. There is more work to be done on the last stage of that journey, the disposal of surplus paint, even the environmental impact of paint still on walls that have been demolished and used as hard core.

Next steps

ICI Paints AkzoNobel has made further improvements to Ecosure, taking its carbon footprint to 35% lower than its standard matt paint. In January 2010 it also launched Ecosense, a retail paint, in DIY stores nationwide. Ecosense has a carbon footprint 50% lower than the standard Dulux retail paint.



'What the professional market wants is product performance and sustainability – and that's what this project has delivered.'

DR PHIL TAYLOR,
ICI PAINTS AKZONOBEL



Project no.
100247

Duration
1 July 2006 – 30 June 2009

Technology Strategy Board investment £984,000

Total project cost £1.97m

Project partners
Imperial Chemical Industries Ltd, trading as ICI Paints (During the course of this project ICI was taken over by AkzoNobel and is now ICI Paints AkzoNobel)
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