

SolaVeil® - Cool Natural Daylight

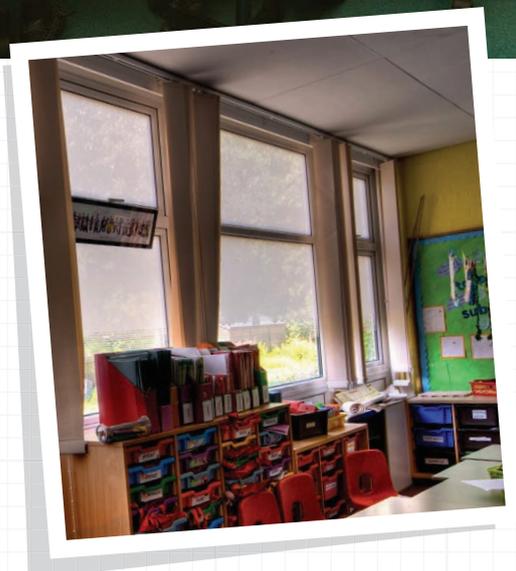
In February 2010 Technology Strategy Board opened the Energy Efficient Whitehall Small Business Research Initiative (SBRI) competition. Among the proposals received was a unique technology that reduces building carbon emissions by controlling daylight. Manufactured and distributed by Cardiff-based company, Daylight Business Solutions Ltd (DBS), SolaVeil® won a contract to install its product at the Department of Communities and Local Government (DCLG) at Eland House in central London.

Saving government money and reducing emissions

SolaVeil® is a hi-tech material applied to glazing that stabilises and reduces solar energy transmission through the building fabric. It enhances levels of internal illumination with daylight, reducing artificial lighting usage and mitigating glare. The technology reduces a building's solar heat gain, air conditioning needs and related energy costs. SolaVeil® reduces payback periods by extending lamp life, lowering equipment service and maintenance costs and optimising building environment controls.

New application in healthcare

SolaVeil® is also inherently anti-microbial, which offers an alternative to curtains and blinds which can harbour harmful bacteria, creating a much healthier indoor environment. The anti-microbial properties are undergoing clinical trials at Warwick NHS and have enormous potential in the global healthcare sector where the NHS alone spends



Technology Strategy Board

Driving Innovation

£400m on energy and produces one million tonnes of carbon annually (according to the *Industrial Microbiological Services Ltd Report 2011*).

Gaining credibility and market potential

The SBRI programme has enabled DBS to take full advantage of, and gain real credibility in, the multibillion pound global market in energy reduction with its unique 'daylighting' technology. Since the installation of the technology in Whitehall in 2011, DBS has installed SolaVeil® in council offices, school buildings, hospitals, workplaces and supermarkets across the UK. The company has also generated significant interest around the world - including Tokyo, Malaysia and the US. The estimated market for SolaVeil® technology (based upon UKTI funding in market research) is \$3.5bn in the US; \$1.2bn in Japan and \$3.4bn in Europe.

Further success follows

DBS has now gained a US patent and trialled the technology in one of Malaysia's government buildings, with results showing combined energy savings of 65% over eight months of testing. They were also recently invited to Tokyo by a major Japanese company to discuss the introduction of SolaVeil® into the Japanese market with a noticeable increase in the number of large national and multi-national companies who are contacting them with a view to licensing SolaVeil Technology into their specific markets.

'The support of SBRI and the opportunity to apply SolaVeil® has proven invaluable to a small research focused SME such as ourselves. Creating a platform to demonstrate the effectiveness of our retrofit technology certainly helps to give credibility to the technology.'

BRIAN HUGHES, TECHNICAL DIRECTOR,
DAYLIGHT BUSINESS SOLUTIONS LTD
WWW.SOLAVEIL.CO.UK

COMPETITION

In February 2010 the Technology Strategy Board and Department of Energy and Climate Change launched an SBRI initiative to retrofit government buildings in London to make them more energy efficient. The Energy Efficient Whitehall programme saw the Technology Strategy Board and DECC jointly invest £2 million in nine pilot projects, which included systems and approaches to help encourage users to reduce energy use, LED lighting, and a natural cooling system.

Four Whitehall buildings acted as technology demonstrators: the Department for Business Innovation and Skills, the Department of Energy and Climate Change, the Department of Communities and Local Government, and the Foreign and Commonwealth Office.

SBRI enables government to engage with industry and act as a lead customer.

Through this engagement it provides:

- innovative solutions to public sector challenges
- and business opportunities for technology companies.

KEY FEATURES

- Competition is demand driven by a defined challenge
- Stimulates the creation of innovative new products or services
- Operates under EU pre-commercial procurement guidelines
- Fully-funded development contract – not a grant
- Fast-track, simplified process
- Particularly suitable for small and medium-sized businesses
- Government department acts as the lead customer
- Intellectual property is retained by the company.