# PVC TODAY

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### USA: "Green Builders" re-discover PVC

Good news from the GreenBuild International Conference & Expo in Denver, the US's top green building exhibition: PVC is once more one of the preferred materials for "green" buildings according to industry officials.

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#### P/C TODAY

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### Sustainable windows

In the building and construction sector, in addition to technical specifications, environmental and ecological requirements are frequently included in public and private tenders.

An informed choice of materials, as well as technical and architectural solutions, can contribute to energy saving and to minimising environmental impact, whilst increasing a building's comfort. The sustainability of building materials is also becoming an evaluation criterion for certification and for international eco-efficiency standards. Energy saving, in particular, is becoming a mainstream issue.

A study 'Potential to save energy through the use of modern window systems in Europe' by engineer Marcus Hermes presented at the 'Plastic Profiles in Construction' conference

in Brussels on 29 November showed that upgrading inefficient windows could save enough energy annually to provide heating and hot water for almost four million people. After five years of upgrades, this could reach an annual saving of 13 billion euro.

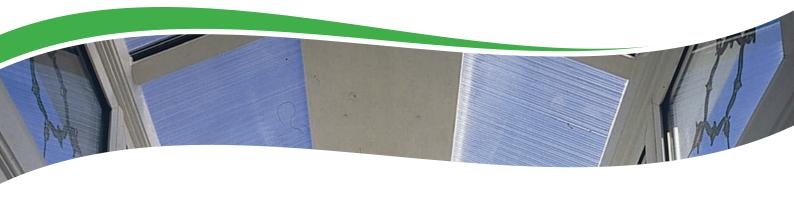
The study commissioned by EPPA (European PVC Window Profiles and Related Products Association) and PVCplus quantifies the contribution energy-efficient PVC window frames can make to sustainable development.

Replacing old inefficient windows with new insulating PVC window frames in Europe, for example, would lead to huge savings of energy and heating costs as well as  $\rm CO_2$  emissions. According the study, the energy saving could be 39,360 million kWh per year, with a potential  $\rm CO_2$  saving of 8.58 Mt (mega tonnes), if type D (very low insulating windows) were upgraded to type A (good insulation level).

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### Sustainable windows



In Europe, the growth potential for PVC window frames and related energy savings is significant. "Making the right choices and opting for energyefficient window frames is essential for Europe's sustainable future, particularly in the new EU Member States where the market for building renovation and upgrading windows is booming", says EPPA Executive Secretary Ulrike Grawe.

Last but not least, PVC windows frames can also be stylish. Confirmation of this

comes from Australia, where a sustainable Sandringham home, featuring PVC double-glazed windows, was acknowledged by the Building Designers Association of Victoria (BDAV) and the City of Bayside in recent awards.

The owner Richard Potter chose PVC windows because they combine lower maintenance and better thermal performance with high design potential.

To make the most of the natural sunlight, the main living areas of the house were built on the north side, and less-frequently used rooms on the south side.

To further maximise insulation in the Sandringham home, the PVC window and door frames were sealed with foam to protect against possible air gaps. The windows also have removable pergola like structures at the top of the north facing windows which can be manoeuvred in response to the sunlight available and can be removed during winter when they are not required.

The house was awarded Best Environmentally Sustainable Design in the 2006 City of Bayside Built Environment Awards in October. The construction company Solar Solutions which created the project was recently awarded two Building Designers Association of Victoria (BDAV) 2006 Awards for the house, in the categories of Best Energy Efficient Design and Best Residential Design.



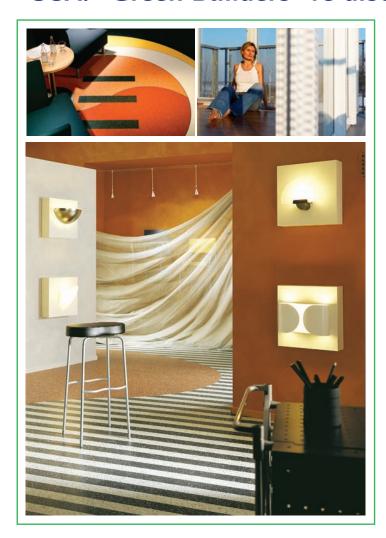
## UK: PVC recycling sets a record in 2005

The announcement was given in the Vinyl 2010 Progress Report, and confirmed at the seminar on "PVC Sustainability" recently held by the BPF's Vinyls group in Leicester. The 2005 target figure of 3,000 tonnes set for the UK within the Vinyl 2010 programme was comfortably exceeded, Roger Morton of Recovinyl told the 150 delegates. In 2005, he said, the UK recycled 8,300 tonnes of window, pipe and flooring waste and with 5,000 tonnes already treated mid 2006 another positive year is expected.

This positive progress was in line with the theme of the day, outlined by the Group's Chairman Alex Hay from Arkema who urged the industry to "go on the front foot" in promoting PVC's sustainability. "We are all working in a highly dynamic industry, well supported by extensive research and development," Hay told delegates.



### **USA: "Green Builders" re-discover PVC**



"We were amazed at the traffic at our booth," said Vinyl Institute President Tim Burns. "More than ever before, architects, designers and builders came by to tell us of their increased interest in vinyl as a key factor in sustainability. We are seeing **pro-vinyl momentum**. We see much more interest in the fact that vinyl is not only a truly sustainable product, but is energy-saving, cost-saving, flexible and eminently practical. Very few products offer all these advantages, and this expo showed that our message is really getting through."

A real draw for designers at the Vinyl Institute booth was a high-style PVC chair by Los Angeles lifestyle design firm Aqua Vitae which became the major conversation piece in the booth.

The success of PVC was also confirmed by the fact that there were more PVC exhibitors than ever before as well as a growing understanding among visitors of how PVC can help designers and builders meet their needs. Furthermore, PVC exhibitors experienced far more traffic, positive comments and business leads than in previous years, including very favourable comments from building owners, the ultimate clients.





### Incredible gadget from Japan

A Japanese firm launched in December a spectacular mascot to connect to the USB cable of a personal computer. "USB Chameleon" is made from PVC. After connecting to a USB port, the mascot can be placed on top of the display. Its eyes roll around as the mouth opens to show its tongue. This gadget may be useless, but it's fantastic!!



### Window recycling

Recycling pure windows is easy. But it's not so easy when windows from demolition are muddy and contaminated for example by metals, concrete or other materials.

A new automated system to solve this problem has been proposed by British company Shredtec, which plans to invest in a new dedicated plant. The automated plant would be able to take all waste PVC window frames, regardless of their condition, and produce clean chipped plastic, ferrous and nonferrous metals. Glazed frames would also be accepted on a free tipping basis.

"With no disrespect to other recyclers it is no good everyone kidding themselves and saying they only want clean frames. That's not the way forward. The product is there as it is and you have to shape the plant around it," said Shredtec Managing Director lan Murray.

The plans to expand and improve its Oldham-based site will be dependent on the success of its application for a Waste & Resources Action Programme WRAP) grant from the Construction Waste Recycling Infrastructure Capital Support Programme.

### Stuttgart: SETAC Europe ponders the future of EPDs and LCAs



The 13th LCA Case Study Symposium organised by SETAC Europe (The Society of Environmental Toxicology and Chemistry - a non-profit, worldwide professional society) in Stuttgart on 7-8 December aimed to review and discuss the guidelines and standardisation methodologies for EPDs

(Environmental Product Declarations) and LCA (Life Cycle Assessment), with a focus on the building and construction sector.

EPDs are seen as an "information carrier" for transporting reliable environmental information to the customer, and must be based on LCA indicators. The main issue is how to define a standardised and shared methodology which would allow the creation of a true tool to design a sustainable future.

The 140 experts from 27 countries attending the symposium put their efforts in establishing a common platform of discussion.

As a third party which is interested in the development of product sustainability, the PVC industry represented by Vinyl 2010 attended the event with informative posters as well as making available documents (Voluntary Commitment and Progress Report) to all the participants.

#### FLASH NEWS - FLASH NEWS

**EUROPEAN PARLIAMENT APPROVES REACH** - The European Parliament approved a landmark law on 13 December to regulate chemicals, after many years of discussion. REACH (Registration, Evaluation and Authorisation of Chemicals), will mean that companies have to prove that substances used in everyday products, from cars to clothes to computers, are safe. The law will enter into force on 1 June 2007.

