

TRADE SECTOR PROFILES

UK glazing sector – executive summary
June 2007



Energy
Efficiency
Partnership
for Homes

1. This report

This document represents a summary of the key findings of research conducted on the UK glazing market by Purple Market Research Ltd for the Energy Saving Trust and the Energy Efficiency Partnership for Homes. Purple Market Research has compiled a series of profiles of key UK industry sectors impacting on the use of energy by UK households. Each profile summarises information available in the public domain on the relevant sector, validated and supplemented through consultation with key players and commentators within the sector.

This summary relates to the UK domestic glazing sector. ***For the purposes of this report the ‘domestic glazing market’ has been defined as glazing installed in UK households, whether in the existing housing stock (refurbishments), in new builds or in social housing.***

Glazing products fall into three main categories, windows, doors and conservatories, although the main focus is on windows. Domestic glazing encompasses both single and double glazed windows, with the focus on products which have been accredited within the Energy Saving Recommended (ESR) scheme.

A full profile of the UK domestic glazing sector is provided in a separate document.

2. Windows: energy consumption and emissions

Heating and hot water in housing make up around 25% of total national energy consumption, and at the same time emissions from domestic buildings account for some 27% of all UK carbon emissions. An estimated 9.5 million windows are replaced each year in the UK, and if these replacements were all Energy Saving Recommended (ESR) products, around 285 million kilowatt hours of energy per annum could be saved.

In addition:

- ❑ Poorly insulated window frames and single glazed windows account for up to 20% of heat loss in the average home. Double glazing cuts heat loss and also reduces noise and condensation problems.
- ❑ Installing double glazing can cut heating bills by £80-£100 a year and 680 kilograms of CO₂ (or four double decker buses full of CO₂) each year.
- ❑ If everyone in the UK who could install double glazing actually did so, it would save £500 million and 3.5 million tonnes of CO₂.

3. Market size and key segments

The UK's domestic glazing sector, inclusive of domestic windows, doors and conservatories, reached an estimated £3.8bn in 2006 according to Market and Business Development (MBD) and trade estimates. Palmer Market Research estimates the size of the market in 2006 in units to be as follows.

Product segmentation of the UK domestic glazing market 2002-2009 (units)

Description	2002	2003	2004	2005	2006	2007	2008	2009
Windows (million)	9.82	10.12	9.89	9.38	9.20	9.02	9.09	9.15
Doors (Million)	1.88	1.98	2.00	2.00	1.99	2.03	2.09	2.16
Conservatories (thousands)	186	205	202	185	187	196	212	229
Secondary Glazing (thousands)	230	197	177	185	187	187	191	195

Source: Palmer Market Research

Windows therefore account for the major share of the market. In terms of number of frames, the windows market in 2006 is estimated by Palmer to be split 67% home improvement, 16% new housing and 17% social housing.

4. Market trends and forecasts

Sales of **windows and frames** have been erratic during the last few years, with the refurbishment sector showing signs of maturity following strong growth through most of the 1990s. The doors sector has shown more stable growth between 2002 and 2006, peaking at £786m in the latter year. This growth is largely due to door replacement programmes for social housing. Sales of conservatories also peaked in 2003 (at £1.1bn), before declining by some 3% during 2004 and 2005.

The total UK residential energy efficiency market inclusive of double glazing, central heating and building thermal insulation, will increase by around 10% between 2006 and 2009, driven by construction sector growth, the Energy White Paper as well as current and future changes in building regulations.

Other noticeable trends within the sector include:

- ❑ **The changing market share of various frame materials:** PVC-U predominates, although aluminium is gaining market share primarily as a result of its use in apartment style developments.
- ❑ **Increase in penetration:** 83% of homes had some form of double glazing by 2004.
- ❑ **Rising costs leading to price pressures** within the supply sector.
- ❑ **Market saturation:** a key issue, with a very high percentage of homes in the private sector now fitted with replacement windows.

5. Market drivers and developments

A key development in the sector has been the growth in the penetration of double glazing. In 1976 fewer than 10% of existing homes had double glazing in one or more rooms. In 2004 market penetration reached almost 83%. Other market drivers and developments are as follows.

- ❑ **Regulations:** one of the most important drivers of change in the broader residential energy efficiency sector and hence also in the domestic glazing market is legislation in the form of building regulations, discussed in greater detail in sections 3 and 4 of this report.
- ❑ **Government and other initiatives:** other government policies and initiatives that influence the domestic double glazing sector (again, outlined in detail in section 3 of this report), include Window Energy Ratings and Energy Saving Recommendations for windows, Decent Homes, Energy Performance Certificates (EPCs), the Code for Sustainable Homes, and the Market Transformation Programme (MTP).
- ❑ **Regulatory, certification and compliance bodies** such as Fenestration Self-Assessment (FENSA) and the British Fenestration Ratings Council (BFRC).
- ❑ **Levels of construction activity and housing trends.** The type, style and design of houses, as well as housing density also impacts upon the domestic glazing sector. During 2004 the continuing fall in the conservatory market was in part influenced by a decline in the share of detached houses. This movement away from detached houses towards private sector flats meant a further decline in overall share of windows during 2005 and 2006. In addition, the fall in market value of conservatories meant that, as a product category, conservatories had an overall market value less than that of sliding patio doors. Sliding patio doors, in turn, have regained some market share over hinged doors, due to their increasing use in flats. During the same period, aluminium frames have shown fresh growth to a fifteen-year high, mainly due to their usage in city centre apartments where commercial style products are used.
- ❑ More recently the introduction of Window Energy Ratings, the launch of the BFRC scheme in February 2004, and the forthcoming Energy Performance Certificates will, it is hoped, influence the uptake of energy efficient windows.

6. Suppliers and distribution channels

The domestic glazing supply sector is a very fragmented one, comprising as it does vertically integrated glazing companies, commercial glazed door manufacturers, rooflight manufacturers, PVC-U and aluminium systems fabricators and installers, bespoke glazing contractors, steel window manufacturers as well as major joinery companies.

Ongoing price pressures caused by increasing competition in a shrinking market, as well as the growing cost of raw materials has led to rationalisation within the industry, and it is thought that this situation is likely to continue in the short to medium term.

The past decade has seen the distribution chain evolve to reflect a maturing market, and AMA Research reports that product design, quality and manufacturing standards have all improved significantly, with the most recent trend being towards separation of the manufacturing and installation operations. Companies are now offering a wider range of products, with conservatories and roofline products in particular offering replacement window companies the opportunity to offset a declining window market.

Retro-fit and replacement windows are installed primarily by specialised installers and home improvement companies (which include the direct-sell sector), as well as, to a lesser extent, smaller builders. These specialised installers may either be part of a large vertically integrated group which manufactures their own products in-house, or they may buy them from window fabricators who supply made-to-measure products. The small independents, in particular small builders rather than specialist installers, usually acquire their products via DIY chains, as do the majority of DIY enthusiasts.

For a fuller analysis of this sector and details of sources of information accessed, contact:

- ❑ Energy Saving Trust: www.est.org.uk
- ❑ The Energy Efficiency Partnership for Homes: www.eeph.org.uk
- ❑ Purple Market Research Ltd: www.purplemr.co.uk