



March 2009

Energy Label for windows could help unlock significant energy savings potential

Why an energy label for windows?

It would not be unrealistic to say that a concerted effort to replace Europe's outdated windows with existing state-of-the-art products most notably making use of low-emissivity and solar control¹ double (or triple) glazed units, could easily deliver a third of the EU's savings target for buildings (energy/CO₂ emissions).

A clear and dynamic energy label for windows would help unlock the major energy savings potential of windows by:

- promoting the faster uptake, by both consumers and the construction sector, of high performance windows rather than the windows complying with the minimum required performance.
- providing a basic tool for Member States on which to base their incentive and promotion programmes to encourage installation of the most energy efficient products, especially in existing buildings.

Energy labelling of windows has already been successfully introduced in a number of countries including several in Europe. There is every reason to believe that, if designed appropriately, an EU-wide energy labelling scheme could be highly beneficial to the environment, consumers, governments and the glass and glazing industries.

To unlock the savings potential the energy label has to respect certain guidelines

A potential energy label for windows would have to respect certain criteria in order to be effective:

- The energy label needs to provide ***clear and understandable information***, so that it can be used as an easy and effective decision-making aid by consumers, architects and others. We therefore believe that the label should be kept simple and communicate only essential information. To remain understandable the label should not be turned into a comprehensive environmental label, but should focus on energy performance.
- The energy label should be ***dynamic, allowing it to be easily adapted to technological change and energy efficiency improvements***. It should not require a complete overhaul every time better products are placed on the market. A static energy label loses its significance if all products are at the top of the scale. It also prevents manufacturers from showing their best products if these perform





better than the top category on the scale, and prevents Governments from promoting the best products if they cannot be identified.

- An energy label for windows should **take into account the variation of climates across the European Union**. A practical solution needs to be worked out, which would guarantee clear communication on the one hand and is no barrier to the functioning of the internal market on the other.
- The energy label should furthermore be **compatible with technical performance requirements** such as requirements of CE Marking and any European or internationally-agreed framework or methodology for energy rating of windows.
- Finally, **effective market surveillance by Member State authorities** should be guaranteed to ensure that products carrying a label actually meet the performance claims made on the label. Without proper market surveillance those organizations, associations etc. that do not subscribe to such a scheme would gain unfair advantage.

More about the significant energy savings potential of windows

Our products can help make considerable energy savings and can contribute to attaining the ambitious environmental goals set by the EU's Heads of State and Government. The EU aims to cut 300 million tonnes of CO₂ emissions from residential and non-residential buildings by the year 2020. Studies show that:

- optimum use of solar control glass to reduce use of air-conditioning could save as much as 25% of that targetⁱ.
- fitting state-of-the-art insulating ("Low-E") glass units to reduce use of central heating could save up to 30% of the targetⁱⁱⁱ.

About Glass for Europe

Glass for Europe is the trade association for Europe's manufacturers of building, automotive, and transport glass, all derived from the base material known as flat glass. Flat glass is the basic material that goes into end-products that we see (and see through) every day: It is used to make windscreens and windows for automobiles and transport, and windows and façades for houses and buildings. It is also used, in much smaller quantities, for many other applications like interior fittings and decoration, furniture, "street furniture" (like bus stops for example), appliances and electronics, solar energy equipment, and others. Glass for Europe has currently three members (AGC, Pilkington and Saint-Gobain Glass). In total, these companies employ over 16, 000 people across the EU and have an annual production capacity of around 11.500.000 tonnes of float glass.

ⁱ Low-emissivity ("**Low-E**") glass contains a coating which reflects heat back into the building therefore helping to prevent unwanted heat loss from buildings and reducing the amount of energy spent on heating. **Solar-control glass** on the other hand reflects away a large degree of the sun's heat, thus reducing energy spent on air-conditioning. They can be used in combination with each other as well as with other double- and triple glazing technologies.

ⁱⁱ "Impact of Solar Control Glazing on energy and CO₂ savings in Europe" TNO Report 2007.

ⁱⁱⁱ "Potential impact of Low-Emissivity Glazing on energy and CO₂ savings in Europe" TNO Report 2008.