



# A successful energy label.



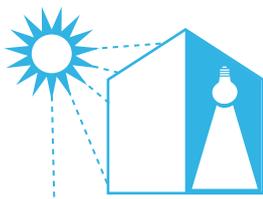
## The energy balance

Because windows have the combined effects of insulating buildings to prevent heat losses and of capturing solar heat gains to heat buildings free of charge, the rating of windows' energy performance must be based on the calculation of the 'energy balance' of windows. This balance must be calculated so as to limit both heating and cooling needs throughout the year in order to properly inform consumers about the performance of products regardless of seasons.



## The climatic zones

The window energy label needs to take into account the different climatic conditions of Europe and how they affect the choice of most energy-efficient windows. To convey this climatic complexity in an easy way to consumers, an indicative map of Europe showing different climatic zones according to average levels of solar irradiance and temperature differences could provide most optimal guidance.



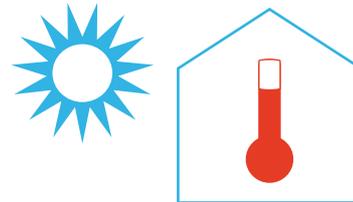
## Natural daylight

The provision of daylight has several positive implications in terms of health, happiness and well-being of buildings' occupants. The window energy label could indicate the light transmission factor of windows to inform consumers about the daylight provision capacity of the different windows products.



## The ranking

The window energy label should guide consumers towards more energy efficient windows, by way of an A to G scale to identify products' performance. The 'A-G' scale is correctly understood by consumers and can be easily used to inform about other performance parameters such as summer comfort, light transmission, acoustics, etc. in different climatic conditions.



## The summer comfort

The window energy label should inform consumers about the performance of windows in preventing overheating in summer. This information is very relevant in areas where cooling needs dominate like Southern Europe in particular, but also in areas characterised by temperate climates with hot summers. This information could be very useful for consumers to know which product will offer them the best comfort in summer time so as to choose between two equally energy-efficient windows.



## Acoustic insulation

The window energy label could also inform on windows' performance in reducing noise. Acoustically insulating windows contribute to improved comfort levels in particular for people living near busy high streets, motorways, railway lines and airports. Based on existing EU standards, acoustics performance can easily be incorporated and rated in an EU label.