

CONSULTATION DOCUMENT

on the revision of the Energy Labelling Directive 92/75/EEC of 22 September 1992  
on the indication by labelling and standard product information of the consumption of  
energy and other resources by household appliances

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VELUX A/S is a global company founded in 1942 on a vision of daylight, fresh air and quality of life – and these benefits are enjoyed in millions of homes around the world. Today, more than sixty years after the first VELUX roof window was installed in a Danish school, our vision has evolved.

VELUX, which has manufacturing companies in 10 countries and sales companies in just under 40 countries, is one of the strongest brands in the global building materials sector and our products are sold in most parts of the world. The Group has around 9,500 employees. The factories are certified in accordance with ISO 9001, ISO 14001, and OHSAS 18001 certification. Our product programme contains a wide range of roof windows and skylights. In addition, VELUX offers many types of decoration and sun screening, roller shutters, installation products, products for remote control and thermal solar panels for installation in roofs.

VELUX has a vision to lead the development of better buildings with daylight and fresh air through the roof, which among others strengthen the focus on energy efficiency of both buildings and products. In the following we allow our self to answer on the consultation paper focusing on windows only.

**1 How do you suggest the Commission could best ensure coherent product policy?**

To ensure a coherent product policy the commission need to coordinate activities across the most important directorates. At the moment the window industry is implementing CE marking under the CPD, which among others include labelling of energy performance figures like U-value, g-value and daylight transmittance.

A product policy for construction products must take the starting point in the CPD and the technical values required there. A product policy must not be in conflict with the internal market and should not create trade barriers, and therefore a product policy/label should be developed in order to use the same label in all EU countries. At the same time it must be secured that the technical basis for labelling is equal in between the member states in order to secure an open internal market for construction products.

A new product policy/labelling system could on the long term complement or replace the existing technical values like U-value in building regulations, as the energy balance are the most correct figure to show windows energy performance. The U-value however shall be used during energy calculation of the building and therefore it must still be available for the professional customer. In order to have a energy label upgraded to become a part of the legislation for windows, it is necessary to implement it into the CPD or at least secure that it follow the CPD.

A coherent product policy must be stable and focused on both short and long terms.

- On short terms the focus on window energy balance could be introduced in the revision of the Energy Performance of Buildings Directive, that will be re-drafted in 2008, for instance as a part of the component requirement for renovating.
- On medium term the energy labelling scheme could be developed in coordination with the structure in the CPD and thereby implemented in national legislation.
- On long term a target could be coordinate it with the EU energy policy 2020, asking for energy neutral windows as standard by 2020.

**2. Do you agree to the general principle of reinforcing the use of energy labelling in order to more vigorously contribute to the Union's objectives on climate mitigation, competitiveness and +sustainable product policy?**

Yes, for many years we have seen the value of energy labelling of white goods and other products. Common for those products are that they have the same energy performance over Europe. But this is not the same situation for windows, as the climate in northern, central and southern Europe differs.

This difference has to be reflected on, as we can not support a labelling scheme that require different national labelling, with trade barriers and confusion as a result.

An important focus area is that a window has different performances depending on climate and season. There is a heat loss through a window, but there are also solar gains through it which reduce the need for heating, a window is used for natural ventilation reducing the need for air conditioning, as well as a window can have integrated shadings which both reduce the heat loss but also reduce the need for air conditioning, finally a window supply daylight and save energy for lightning.

The European research study "European Window Energy Rating Scheme" under the SAVE program identified a number of possibilities as well as it identified barriers. It can be recommended to study the outcome of this project.

There is a ISO/CEN research project on energy labelling of windows, that prepare a methodology. It can be recommended to study the status of the project.

At the moment we only use the U-value of a window to declare the energy performance of the window. It is however not the 100% correct technical value, as it do not include the above mentioned performances.

An energy label that takes into consideration the heat loss (U-value), the passive solar gain (g-value), the daylight conditions, and the energy performance by dynamic solutions like external shutters and shading, will give the customer a far better understanding and influence the consumers choice towards more energy efficient windows and thereby reach the target for climate migration.

An energy label that can be used all over Europe and do not create national trade barriers, will strengthen the competitiveness and move the industry towards the most energy efficient windows, however a labelling scheme that can not be used in several countries, will have the opposite effect as cross border sales will be more difficult.

A labelling scheme for windows should include information on

- the energy balance (solar gain - heat loss – air permeability) in kWh/m2,
- the dynamic performance in kWh/m2 using external shadings during winter
- the dynamic value for shading (g) of the window during summer period,
- the ventilation value during natural ventilation for summer period
- daylight figures and the savings from the utilization of the daylight in kWh/m2

A proper labelling scheme that takes into consideration all the above points can contribute to climate migrations, competitiveness and a sustainable product policy. But if it do not take into consideration all the above and if it do not consider different climate conditions in the member states, it can have the opposite effect.

An long term vision of labelling of products is a part of a sustainable product policy.

**3. For energy using products, would you favour the use of an energy label focusing on the energy consumption at use or of an 'eco-design label', (near to the Eco-label showing the 'best') giving the global environmental performance of the product throughout its life-cycle?**

In the above sense, we would favour the use of energy labelling as studies shows that it is the time in use that are effecting CO2 emissions. Therefore the objective to have the customer to choose the most energy efficient product, can and will be reached by the energy label only.

The revision of the CPD has already taken into consideration a new 7. essential requirement and the environmental requirement to materials etc, will be regulated through the new revision of CPD.

**4. Are you in favour of adding CO2 on the energy label? How could reliable information be assured in the light of different energy mixes in the 27 Member States?**

No, windows are used in buildings with different types of heating. If CO2 emissions should be included it would be necessary to know the source for heating. This is not known and therefore we would have to make an assumption, which would not give more accurate and correct figures for the customer. The best value - also in order to give customers an overview over the savings between different types of products - is the kWh/m2.

**5. Are you in favour of adding annual running costs on the energy label? How could reliable information be assured in the light of different energy prices in the 27 Member States?**

No, to many detailed information like running costs, CO2 emission and the like will only create confusions. At the same time the information will not be accurate. Keep the labelling simple and informative. Annual costs could be calculated from kWh/m<sup>2</sup>, by the consumer depending on the heating system in place where the windows are installed.

Once again we would like to bring to your mind that to many information that differ in-between the member states will force the manufacturers to have different labelling in between the member states. This will create trade barriers and work against the intention with the internal market.

**6. Would you like to add other products to the scope of the labelling Directive than those covered at present (household appliances only)? If yes, which products would you suggest (non-household or non energy-using products, 'energy-relevant' product, services such as holiday packages or other)?**

First of all it is important only to develop labelling schemes in areas where it can make a difference.

Windows and other construction products for new buildings do not need an energy label first of all because new buildings are calculated according to EPBD methodology, secondly as new buildings include architects and engineers (BtB).

It is another topic for renovating of the existing building stock, here the customers are often the private householders, (BtC). The private customer do not have the same technical knowledge's and they often need simple guidelines to chose the best energy performance product. Here the energy label for construction products can be valuable and better than U-value. In this sense labelling of products like glazing, windows, heat pumps, insulation materials, air conditioning and ventilation systems can be relevant.

The component requirement in national building regulations for renovating purposes should include energy label values, and here the UK energy requirement on windows could be used as example. It would be relevant to evaluate the possibility moving from U-value to energy value in legislation.

**7. In view of dynamic labelling, which approach would you suggest for the transition from an existing labelling scheme to a new labelling classification in order to cause minimum distortions?**

As some countries already has a label for windows, it is recommended to evaluate those systems first and try to copy as much as possibly from those.

A label should focus on the energy saving possibilities in the existing building stock.

A dynamic label for windows could have its first A level similar or slightly better than the heat loss from a well insulated wall. But windows can be better than an insulated wall, as windows can be energy neutral (0 kWh/m<sup>2</sup>), where the dynamic possibilities with shutters and shading could be included.

**8. Do you want to propose an alternative route beyond the considerations in this document?**

For construction products like windows, glazing, insulations etc, which are regulated under the CPD, it could be valuable to investigate if the CPD methodologies for the individual product families could be used.

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