

**From:** Dijk, H.A.L. (Dick) van [mailto:dick.vandijk@tno.nl]  
**Sent:** Friday, February 22, 2008 6:58 PM  
**To:** TREN ENERGY LABELLING  
**Subject:** Stakeholder consultation on the revision of the Energy Labelling Directive 92/75/EC

LS,

As coordinator of the **EU DG TREN RTD Thematic Network "WinDat"** (*Windows as Renewable Energy Sources for Europe - Window Energy Data Network*) I herewith respond to your call to submit views on the revision of the Energy Labelling Directive 92/75/EC.

In particular I like to respond to question (6):

(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)?

I would like to propose to add **window products for buildings** to the scope of the Directive.

In WinDat, a collaboration between the main industrial parties and research organisations and persons involved in European (CEN) and international (ISO) standardisation, procedures have been developed and component databases created to calculate the main standard properties of windows (glazings, solar shading provisions and frames): the thermal transmittance, solar transmittance and light transmittance.

Simultaneously, in the **EU DG TREN SAVE project EWERS** procedures were developed to use these standard window properties, in combination with reference building and climate data, to generate data that can be used for window energy rating.

At this moment **ISO TC 163 "Thermal performance and energy use in the built environment"** is producing the international standard ISO 18292 "Energy performance of fenestration systems - Calculation procedure", as a follow up of the work of EWERS.

As is written in the introduction of this (draft) standard:

*This International Standard describes a procedure for the determination of energy rating of window and door products. As the fenestration industry and their clients move towards using energy performance instead of thermal transmittance to assess their products, the acceptance of this superior approach is being hampered by the wide variety of procedures being adopted. There is a need to produce a simple, clear, accurate and transparent procedure that enables the energy performance of these products to be assessed using national climate data and nationally selected reference buildings.*

*One of the most important aims of the world community is to reduce the consumption of energy with the associated reduction in CO<sub>2</sub> production; considered by many to be a vital prerequisite of reducing the harmful effects of global warming. Ensuring that fenestration products are selected on the basis of optimizing their energy performance in their specific environment will have a significant impact on achieving that goal. The accumulated additional energy loss through poorly selected fenestration products, over their lifetime, is truly enormous, and any steps that can help reduce that loss must be taken as soon as possible.*

*The scope for developing different procedures for determining energy performance of fenestration, in very specific environments, is very large. The drive to assess these products by considering the net energy flows through them is growing (e.g., the European Building Energy Performance Directive, North American procedures and others) unless we can produce a reliable and acceptable generic methodology, many countries will develop their own procedures that will constitute new free trade barriers.*

*This International Standard gives detailed procedures for energy ratings of fenestration products. These procedures require the use of reference conditions, not actual conditions. The rationale for doing it this way is to allow the use of national climatic conditions for the rating of specific products.*

To summarize:

This standard gives a procedure to calculate the energy performance of fenestration systems for rating of windows, doors and skylights, including the effects of frame, sash, glazing and solar shading components. The standard is to take into account the heating and cooling energy use in residential buildings, internal and external climatic conditions and relevant building characteristics.

The development of the methodology in this standard, to convert from window product data to window energy performance rating, has been made one-to-one compatible with the CEN standards to calculate the energy performance of buildings for the **Energy Performance of Buildings Directive (EPBD)**. This has been achieved by following the procedures in EN ISO 13790:2008, the standard explicitly mentioned as key standard in the EPBD.

To put it briefly: the basic technical information has already been developed in close cooperation between research and industry and is highly compatible with the current EU policy on energy efficiency.

Yours sincerely,

Dick (H.A.L.) van Dijk  
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*Convenor of ISO TC163/WG3 (energy performance of buildings)*  
*Active member of several CEN and ISO working groups on energy performance of buildings and on thermal and solar properties of windows and glazings*  
*Coordinator of IEE project CENSE on the CEN standards for the EPBD*

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