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TECHNICAL ASSOCIATION
OF THE EUROPEAN NATURAL GAS INDUSTRY

Position paper on Directive 2009/125/EC Eco-design implementation policy for boilers and water heaters

Introduction

MARCOGAZ supports the principle of the energy efficiency goals proposed by the European Commission. Taking into account the fact that a finalized version of the calculation model for energy efficiency is nearly ready, this paper aims at presenting constructive views on the implementation aspects of the Directive and underline some concerns of our Industry regarding a few issues.

General

The original ambition of the Eco-design measures was to give the end user a tool for the calculation and the choice of heating system. Due to compromises and discussion with stakeholders and Member States the ambition has been revised and it seems that today the "system approach" has been partly abandoned and we are now having a system that is more simple and adapted to the idea of labelling giving a rough guide in terms of information on the product performances in an installation (simple but not always very accurate) but not adapted to the specific end user case.

As a result the sophistication of the model may seem unnecessary for the purpose of the labelling alone when the National situation or end user specific installation conditions are not really taken into account. We do however think that the model developed is a positive move and it also opens up options for possible future additional developments

Also our Industry understands that due to the constraints of implementation, the time is not right to discuss the model any further and therefore we can accept that the implementation measures are based on the model discussed with reasonable reservation but would welcome the opportunity to be involved in any future development.

We would recommend that once the implementing process is finalised, work is carried out to discuss the development of information systems that would enable a more specific evaluation of products, and combined product installations, by any individual end user, taking into account it real installation data, the National energy situation (National electrical conversion factors) etc. The information system should have no legal obligation, but can also include information on CO2 emissions and even running costs (The Gas Industry has already made developments that can be used).

This information system would help end users achieve the goals of the Eco-design measures in comparing products prior to final selection and installation. This information system would also be a reference tool for installers and those designing the specification of the installation.

The information system may be based on a product database that can also be used for market surveillance.

We are aware that such initiatives should result from an agreement within the Industry, but the support and help from the Commission and Member States would be needed to establish those instruments.

We would also suggest that labelling of the appliance by the manufacturer against the model criteria is accepted as the best way forward and that any labelling by the installer at the point of installation is too late in the process to allow end users to make product comparisons.

We also support the idea of a mandate to CEN in order to produce the relevant standards needed for the implementation of the Directive, including the calculation model.

Main comments

1) How will the label be calculated and who has or will have the responsibility of labelling?

Issue:

The fact that the specific efficiency given by the model is greatly depending on the heat distribution system in the installation (floor heating or radiators) or additional components in the system (e.g. solar) seems to indicate that the label can only be given at the end of the chain by the installer. The implementing measure shall make clear how to use the calculation method (model) developed and especially what will be the installation condition used as basis for the label.
The solution adopted for the attribution of the label must also consider that in some Countries, installers design the system but smaller installers may not deal with the complexity of the labelling without specific additional training.

Questions:

- How to attribute a label to an appliance when the same appliance can be installed with radiators or floor heating, with solar or not, with other appliances or not?
- Who should bear the responsibility for the labelling?

Proposed solutions:

- The manufacturer provides with the appliance documentation a matrix showing the performances (specific efficiency, rating) of the appliance with the different situations possible
- The label on the appliance is calculated when fitted in a standard installation (without taking into account additional equipments such as solar panel, etc)
- The installer or designer can select the appropriate combination from the matrix and guide the consumer choice. This is where the use of an information system would help end users check the advice being given; also small installers who have a knowledge gap could use it as a support tool.

Our main concerns

- How to make sure those appliances such as heat pumps will be given the correct label? Example for heat pump: will installers not be tempted to use the efficiency

obtained with floor heating in any case (this will generally give 10% more efficiency to the system according the calculation).
The best labels should only be achieved with optimal installations, in order to convince end user to ask for such installations.

2) The calculation model

Issues:

The proposed model is extremely complex but is probably an acceptable compromise today. This being said, we are quite certain that the necessity of improvement will quikly appear as soon it is used in real situation for the labelling. It is therefore very important NOT to FREEZE the model. Therefore this model should be a reference in the implementing measures but not part of a binding regulation for a better flexibility in case of modification.

Proposed solutions:

It is proposed to use it as a basis for an EN standard as part of the mandate given to CEN. When needed, an external assessment of the model can be done as part of the mandate.

3) Labeling and reliability of the data used

Issues:

- Reliable labeling should be based on independent performance measurement with the highest possible accuracy.

- The label will compare appliances that have been until now tested and approved based on different standards and certification shemes and habits. In order to make the competition fair, harmonisation of the testing and certification of all appliances falling under the scope of the Directive shall be undertaken. Different labels should be based on real performances of appliances and not being biased because of diffrences in testing or certification procedures.

Proposed solutions:

- In order to guarantee the accuracy of the data used for the labelling different routes are possible:

1) Third party certification, including type examination and production surveillance, based on tests performed by an accredited and qualified laboratory.

2) Manufacturer self certification, with an efficient market surveillance so to guarantee a fair competition and correct consumer information

Our main concern

Existing market surveillance for energy using products is not always very effective. An action at EU level or Member States would be needed if manufacturer self certification route is chosen

4) Electricity conversion factors

We propose that the determination of the primary energy factor should be done according the real European situation of the electricity mix, using Eurostat data (see our paper UTIL-10-05 (§1 – Primary Energy Factor).

5) Specific issues and mandates to CEN

Issues:

Our industry has identified a number of technical issues which should be solved by the mandate given to CEN/CENELEC.

There are basically two needs there:

1) The development of standards covering the measurements of the parameters needed for the application of the Directive;
2) The resolution of some technical issues with some of the standards.

Among the points to be examined:

1) The description of the model in a standard. A possible validation of the model should be envisaged especially regarding some aspects that are controversial (e.g. brine temperature etc.);
2) The improvement of the existing methods for the measurement of low NOx emissions and the control of interlaboratory reproducibility (*).
3) The control of interlaboratory reproducibility for hot water production of gas appliances (*). Contrary to boiler efficiency, our Industry has only a limited experience with the standards for the hot water production performances. Test shall be done and standard improved when needed.
4) Micro-CHP testing methods. The method suggested by COGEN Europe shall be implemented in a standard and laboratories shall test the procedure in view of validation.
5) Equivalence of standards used for the different appliances under Lot 1. Appliances under the Lot 1 are very different and are standardized by different CEN groups with experts representing rather different Industries. As a result the standards, the certification processes, the testing of those appliances are very different. For example, when standards require measurement of efficiency with accuracy of at least 2% some other requires 5% or more! Therefore we believe that a study should demonstrate that the various standards, certification and testing procedure are not bringing market distortions.

Proposed solutions:

MARCOGAZ having been involved in many standardization mandates would like to propose its help and support in the definition phase of the mandate and in the execution of the mandate.