Market, environment and objectives of CEN/TC 312 – Thermal solar systems and components,

as approved by resolution BT C105/1999

Scope

Preparation of European Standards to cover terminology, general requirements, characteristics, test methods, conformity evaluation and labelling of thermal solar systems and components.

Market, Environment and Objectives

This section establishes a sequential development of thoughts regarding the Market for which the CEN/TC aims to fulfil the needs. This sequence of thoughts starts from a description of the current market situation relevant to the product or product grouping under consideration by the CEN/TC, continues on to an analysis of the different factors motivating/influencing the activities of the CEN/TC, to come to clear description of objectives for the CEN/TC, together with an accompanying strategy how to reach those objectives. Finally, a general 'risk analysis' is included highlighting issues that may delay or stop the CEN/TC achieving its set objectives.

Market Situation

Installed collector area in the EU at present is over 7 million square metres, which annually saves 1.4 million tonnes of CO2 emissions and the equivalent of 450 thousand tonnes of oil, and has created 10,000 new jobs. This figure corresponds approximately to 20 square metres per thousand inhabitants.

At a European level, about 300 manufacturing companies are active in the solar systems and components field, most of them Small and Medium Enterprises. Sales of solar collectors in Europe are currently (1997) in the region of 1 million square metres per year, with major markets in Germany, Austria and Greece. Turnover of the European Solar Systems and Components market is worth approximately 1.2 billion DM per annum. Sales **are predicted** to grow by 23% per year between now and 2005.

The CEN/TC 312 was created after a request of the European Solar Industry Federation (E.S.I.F.) to CMC. Afterwards, a liaison between CEN/TC312 and E.S.I.F. was established.

Market Environment

Political, economical, social, technical, legal and international factors that either directly require some or all of the standardization activities proposed by the CEN/TC, or significantly influence the way these activities are carried out are the following:

Political Factors:

The European Commission policy for environmental friendly technologies towards the aim of CO_2 emissions reduction provides a valuable support for the work of CEN/TC 312. Besides, the work of TC312 has been mandated from the EU/EFTA and financed through the ALTENER Programme. It is estimated that future extended work of the Committee could be favourably considered by the EC.

Economical Factors:

E.S.I.F. is particularly interested in TC312 work, since recognition and acceptance of European standards throughout the EU will significantly contribute to the decrease in extra costs burdening the solar manufacturers which are mainly SME and cannot undertake to test their products in every country according to local requirements. Furthermore, these standards will promote a fair competition among producers of solar energy equipment on the market, since low-quality/low-price products will be easier to identify for the customers on the basis of uniform test reports comparable throughout Europe.

Social Factors:

The increased public awareness on environmental aspects is favourable for the development of standards, which will insure the quality level for the consumer and will give him more confidence in the new solar heating technology and the products available. At least in the first stages of any large market opening, consumers have to be given some means of protecting themselves from useless investments in low-quality/low-performance products.

Technical Factors:

On-going R&D projects provide technical information to the TC312 work.

Legal factors:

Although mandated, the current Work Programme of TC312 is not linked to the Construction Product Directive (CPD) or to any other EC Directive. At the current stage it is not considered purposive that the TC takes account of the CPD, something that might take place at a later stage. The TC and especially the solar industry expressed their strong interest to proceed with the elaboration and implementation of a European certification scheme (Keymark) once the standards published.

International trade and standardization aspects:

The International Standards Organization has initiated a revision procedure for the ISO standards covering solar collectors, aiming at harmonizing the international standards by also considering the European ones under elaboration.

Objectives of the CEN/TC and Strategies for their Achievement

Objectives of the CEN/TC

Objectives of TC 312 is the finalization of the 8 European standards, currently under elaboration (see Work Programme) as well as the elaboration of standards on new work items, possibly proposed to the TC.

Strategies adopted to reach the Objectives

The standard CEN procedures are being followed in order to achieve the above mentioned objectives. The elaboration of the 8 European standards is covered by an EC mandate, thus all of them shall be finalized on an equal priority basis, and in accordance to the Work Programme. This will be achieved through TC meetings and correspondence.

Moreover, CEN/TC312 has established a liaison with ESIF, the parent ISO/TC180 and several CEN/TC committees (TC110, 130, 164, 228).

The present structure of TC 312 (3 WGs) reflects the 3 categories of standards to be elaborated: solar collectors, factory made systems, custom-built systems.

Risk analysis

Currently, the eight draft European standards under elaboration have reached stage 46. The timely execution of the Work Programme depends on the adoption (or not) of the standards during the Formal Vote procedure. The available funding for the development of solar energy standards is limited, especially from the solar industry, which concentrates its financial means into items with early return on investment. Therefore, government and EU support is needed in this field, as an indirect support for a sustainable market development, in the general interest.