

BUSINESS PLAN

CEN/TC 171

HEAT COST ALLOCATORS

EXECUTIVE SUMMARY

Business Environment

Europe is the most important market for heat cost billing. The consumption-based heat cost billing with heat cost allocators has a long tradition and contributes substantially to the saving of heat cost energy and with that to the reduction of CO₂ (Kyoto protocol respectively the Paris Agreement).

European key markets for heat cost billing are Austria, Belgium, Czech Republic, Denmark, France, Germany, Greece, Italy, Luxembourg, The Netherlands, Poland, Slovenia, Slovakia, Switzerland, etc.

The consumption-based billing with heat cost allocators (HCA) covers the complete building sector (residential buildings, administration buildings, industrial buildings). All buildings with central heating systems or supplied with district heat and rooms heated with heating elements (e.g. radiators) may be equipped with registering devices.

The overall goal of the committee is to support the innovative technology market by revision of the standards for heat cost allocators.

Parties involved

- Residential trade and industry
- Billing companies
- Science
- Manufacturers of measuring devices
- Public authorities
- Consumers

Benefits

The consumption-based billing with heat cost allocators is an important market in Europe. More than 24 million flats are already billed on the basis of consumption. This equipment degree could be doubled and there would be a greater reduction in CO₂.

Since 1994/1995 the billing service companies have relied with their technologies on the product standards EN 834 and EN 835. The standards and their adaption to technical innovations are a prerequisite for the further success of the companies and the preservation of the jobs.

Priorities

To make European standards available related to:

- Technical innovation;
- Technical acceptance;
- Confidence of consumers; etc.

1 BUSINESS ENVIRONMENT OF THE CEN/TC 171

1.1 Description of the Business Environment

The following political, economic, technical, regulatory, legal, societal and/or international dynamics describe the business environment of the industry sector, products, materials, disciplines or practices related to the scope of this CEN/TC 171, and they may significantly influence how the relevant standards development processes are conducted and the content of the resulting standards:

The consumption of energy in the building sector is decisively determined by the production of heat, hot water and air-conditioning. The production of heat has a great importance. Combined with the depletion of natural resources, this has caused dramatic increase in energy costs. Thus we must make an even greater effort to solve these problems. The further development of the consumption-based billing may achieve important contributions. However, this will only be realized if the recognized rules of technology are adapted to the regular innovation progress of products.

The progress in the area of radio transmission with the consumption-based billing of heat costs will contribute to more safety of data transmission and data processing.

1.2 Quantitative Indicators of the Business Environment

The following list of quantitative indicators describes the business environment in order to provide adequate information to support actions of the CEN /TC 171:

– **Political factors**

The major benefit of standardization in this field is a continuing improvement in the quality of measuring heat consumption (radio systems). The revision of the standards helps to satisfy the ever increasing demand for excellence. But they must respond to the market needs.

– **Economic factors**

Economic benefit shall arise through harmonization of technical requirements and more clear definitions.

– **Technical factors**

Changes or alterations in the course of technical progress may require additions and refinements:

- New findings, i.e. also concerning new EN standards imply new frame conditions.
- Innovations in the metering and heating techniques have been introduced to the market.
- In the meantime additional experiences were gained, especially in consideration of the varying requirements due to climatic circumstances.

– **Legal factors**

Global use of heat cost allocators require standardized technical rules for these products.

Many European countries already installed legislation on energy cost allocation, i.e. heat cost allocation like Austria, Denmark, Germany, France, Slovenia and so on. Others will follow. Legislation concerns: not only the energy cost allocation itself but also requirements on the billing information about the individually energy consumption (EED 2012/27/EU)¹

– **Health and environment**

To save energy is a global problem. Heat cost allocation can give an important contribution to improve energy efficiency.

2 BENEFITS EXPECTED FROM THE WORK OF THE CEN/TC 171

As the aim of standardization work is to facilitate the exchange of goods and services leading to the elimination of technical barriers to trade. In this regard the major benefit of a revision of the standards for **heat cost allocators (HCA)** is

- to market them as broadly as possible, to improve measuring heat costs,
- to improve the importance of heat cost allocation,
- to boost the confidence in HCA technology and
- to enhance the significance of HCA.
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3 PARTICIPATION IN THE CEN/TC 171

All the CEN national members are entitled to nominate delegates to CEN Technical Committees and experts to Working Groups, ensuring a balance of all interested parties. Participation as observers of recognized European or international organizations is also possible under certain conditions. To participate in the activities of this CEN/TC, please contact the national standards organization in your country.

4 OBJECTIVES OF THE CEN/TC 171 AND STRATEGIES FOR THEIR ACHIEVEMENT

4.1 Defined objectives of the CEN/TC 171

Standards for heat cost allocators are basic standards. In other words they summarize the requirements regarding the technology of heat cost allocators. The standards define heat cost allocators which serve to establish the consumption value of a room radiator.

On the other hand the standards are necessary because many countries do not have legislation in the field of heat cost allocation. In those cases these standards are an important basis for all parties involved: billing companies, consumers, building owners. Standards in these countries give a contribution to enhance the confidence in heat cost allocation service.

4.2 Identified strategies to achieve the CEN/TC.s defined objectives.

CEN/TC 171 has published the two standards:

¹ Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC (Text with EEA relevance)

- **EN 834**, *Heat cost allocators for the determination of the consumption of room heating radiators - Appliances with electrical energy supply and*
- **EN 835**, *Heat cost allocators for the determination of the consumption of room heating radiators - Appliances without electrical energy supply based on the evaporation principle.*

The European Standard EN 834 was revised and published in 2013. The Systematic Review ² for this European Standard is scheduled for 2018. Until then CEN/TC 171 will continue to observe the market regarding relevant technical innovations that may possibly affect EN 834.

The European Standard EN 835 was confirmed during Systematic Review in 2015 for a further period of five years. The market is however continuously decreasing regarding new installations of heat cost allocator based on the evaporation principle (according to EN 835).

In general, this CEN/TC 171 will remain active to respond to

- Queries from standard users,
 - Potential new work item proposal,
- etc.

4.3 Environmental aspects

Heat cost allocators are since decades approved devices for a consumption-based allocation of the heating costs in apartment buildings. The use of heat cost allocators is a basis for conscious and economical treatment of energy. Compared with the achieved energy savings the environmental impact of the production and use of heat cost allocators is insignificant. In this way heat cost allocators make a large contribution to save primary energy and thus to reduce CO₂ emissions.

5 FACTORS AFFECTING COMPLETION AND IMPLEMENTATION OF THE CEN/TC 171 WORK PROGRAMME

The continuity and the drafting of standards in an appropriate time schedule by voluntary work of experts for standards is achieved only by sufficient participation of experts from TC member countries with great experience in this field.

² Systematic Review is a requirement of the CEN/CENELEC Internal Regulations that European Standards are reviewed at intervals not exceeding 5 years after their publication in order to determine whether they should be confirmed, revised/amended, converted to another form of deliverable, or withdrawn.