

IEA DMS Task XXI

Standardisation of Energy Savings Calculations



Why a next step in energy savings calculation is needed

Many policies and measures for improving energy efficiency now exist and continue to improve. The continued development of this field of policy reflects growing acceptance of the importance of such measures in seeking to reduce carbon dioxide emissions, minimise the cost of energy services, enhance energy security and address wider environmental concerns. Estimations as to projected energy savings, emissions reductions or financial gains from energy efficiency measures are now common place. But these estimations are conducted in a broad range of approaches that hinder (international) comparison of calculated energy savings. Also the International Partnership for Energy Efficiency Cooperation – recently established by the G8 countries, China, India, South Korea and the European Community looks for improvements in among others methodologies of energy measurement, auditing and verification procedures, certification protocols and other tools to achieve optimal energy efficiency performance. With this Task the IEA DSM Agreement wants to make the next step into (international) standardisation of energy savings calculations.

Main Activities

The overall aim of Task XXI is to identify basic concepts, calculation rules and systems for Energy Savings Calculations (ESC) standards. Additionally a methodology should be developed to nominate and describe the several Demand Response products. Within this framework of basic concept and calculation rules also the relation to reduction of the environmental impacts in greenhouse gas emissions from energy savings should be incorporated. The Task will also explore how and by what type of organisations these standards could be used and improved to increase international comparable evaluation of policies and measures.

Subtasks

To conduct the work, Task XXI is divided into three subtasks.

Subtask 1: Standards, evaluation and monitoring knowledge and key elements

The first subtask concentrates on the identification of national and regional standards and standards under development, to identify and assess the most relevant evaluation and monitoring reports and to identify basic concepts, calculation rules and systems as well as key elements to nominate and describe Demand Response products.

This subtask will result in a report summarising the most relevant guidelines and standards – national and international - on ESC, with a focus on identifying common approaches for determining savings and terminology as well as key elements to nominate Demand Response products.

Subtask 2: Basic concepts, rules and systems for ESC standards

The work in subtask two deals with drafting the basic concepts, calculation rules and systems that are in use in ESC and how these are transformable to (draft) standards. The experts and the Operating Agent will also develop a methodology to nominate and describe the Demand

Response products, including 'general accepted' criteria. In this process attention will be given to standards (existing or under preparation) to identify how and why these standards are or could be used in impact evaluation for policies and measures.

The main product will be the report dealing with the basic concepts, calculation rules and systems for energy savings calculations. This report includes definitions and generally accepted evaluation criteria for DR product and should have the potential to serve as a reference manual for other IEA DSM Tasks. Additionally an overview will be generated on how existing guidelines could be utilised or modified to make results from energy savings calculation more comparable and more harmonised in the future.

Subtask 3: Potential use and continue development of energy savings calculation standards

During the third subtask the report on the basic concepts, calculation rules and systems will be finalised and greenhouse gas emissions reductions related to energy savings will be included in the framework. One or two regional workshops will be organised to increase the audience to discuss this framework and to explore to what extent these basic concepts, calculation rules and systems could be improved to ease the use by relevant (standardisation) organisations. Also the experts and the Operating Agent will explore how the methodology to nominate and describe the Demand Response products, including 'general accepted' criteria could be used by other IEA DSM Tasks and relevant (inter)national organisations

The final report on the basic concepts, calculation rules and systems including the related GHG emissions and Demand Response product will be the main product of this subtask. Additionally a report on roadmaps along which ESC standards could be further developed will be produced. This report will include sections on issues to improved use of the ESC standards in evaluation of policies and measures

Participation

Several countries are late 2008 in the process of participating in this Task XXI. Countries and organisations are welcome to join the Task.

Activities planned for 2009

In February 2009 a first experts meeting is foreseen. At the meeting the revised work plan will be discussed and finalised.

The work of subtask 1 will start and the products are expected to be available for discussion by the country experts in the second half of the year 2009. In that period also the preparation for the activities indicated for subtask 2 will start.

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