

Title of the measure:	FIN19 Energy conservation education for inhabitants of buildings, 'the Energy Expert' -education
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General description

Apartment buildings and attached houses (terraced/row houses) are offered a possibility to educate one of the inhabitants for energy management in the building.

These 'energy experts' monitor the energy use and water consumption of the building, recognize possible problems and inform the maintenance personnel about them and, if necessary, prompt for action. Energy experts also distribute information on energy conservation and its cost effects to other inhabitants. They are link persons between inhabitants, janitors, house maintenance personnel and service companies. Everyone benefits from the voluntary work performed by the energy experts.

Motiva Oy (the Information Centre of Energy Efficiency and Renewable Energy Sources) started the education of energy experts as a demonstration project in 1996. By 2001, 3000 energy experts had been educated and are working for rational use of energy in their home buildings. New energy expert courses have been organised thereafter but not since 2005.

Education of energy experts can be seen as a form of energy auditing in the household sector. Main purpose is to get benefit from co-operation of energy expert and other actors in building maintenance. By following energy consumption of a building, the experts are able to find the possible problems without a delay and carry out energy conservation in practice. Because the experts 'live at their work places', they are able to guide the inhabitants for rational use of energy in their every day life.

Impact evaluation (methods and results)

Methods

In March 2000, a survey using interviews and questionnaires was conducted among the energy expert instructors. The aim of the survey was to evaluate the energy expert activity and to evaluate the needs for development.

Results

On average, experts have managed to reduce heat consumption by 5%, water consumption by 20-25% and electricity consumption by 10-20%. The average total energy savings by an active expert have been estimated at 5%.

Ex-post evaluation	1995	2000		
direct CO ₂ (kt)				
Energy (TJ) (Fuels/Electricity)				
Ex-ante evaluation	1995	2000	2010	2020
direct CO ₂ (kt)				
Energy (TJ) (Fuels/Electricity)				

No estimate of the energy and emission impact of the energy expert activity has been made. In the total building stock there were about 55 100 blocks of flats and 73 300 terraced houses (128 400 in total) in 2006. Energy experts typically operate in these building types. If the number of active energy experts is assumed at 2000 (two thirds of those educated), they operate roughly in 1.6% of the blocks of flats and terraced houses. If energy savings per an active energy expert are 5%, savings correspond to 0.08% of the energy consumption in blocks of flats and terraced houses. This corresponds to “low” impact level.

Measure Impact Level		
<input checked="" type="checkbox"/> low	<input type="checkbox"/> medium	<input type="checkbox"/> high

Interaction of measures

Historical data

References

www.motiva.fi (materials in Finnish)