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Newsletter No. 2 November 2011

Editorial

The SAVE AGE project steps into the next project phase. By now, preliminary energy audits of 100 European care homes have been carried out and they resulted in thorough baseline analyses, which brought an important insight into energy consumption in residential and care homes. All knowledge now has to be transferred into useful cooperation activities with care homes, their roof organizations and other stakeholders of the care sector.

In our second newsletter you can find some interesting abstracts from the analyses dealing with energy consumption in care homes and a short report on the international workshop on efficient use of energy. All analyses, press releases, and interesting news from our partners are located on our website (www.saveage.eu) – feel free to visit it and learn more on energy efficiency in care homes!

Content

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Total Energy Consumption in 100 Care Homes

The Energy Performance of Buildings Directive (EPBD) has been the driver for the establishment of energy performance ratings and certification. The development of benchmarks to enable the comparison of the energy performance of similar buildings, across different countries, is therefore an urgent matter. Benchmarking energy efficiency is an important tool to promote the efficient use of energy in buildings.

As far as it was possible to investigate, no energy benchmarks have been studied for Residential Care Homes for Elderly People (RCHEP), so far. Moreover, RCHEP lacks knowledge and awareness on energy efficiency and they are generally quite reluctant to new technologies. Their main concern is to provide the best quality care they are able to, and neglect technical energy issues. The development of cross country comparisons of energy efficiency within RCHEP will raise their awareness and drive their decisions towards energy efficiency.

The data that was collected within the project was compiled in a simple benchmarking tool that enables the estimation of energy consumption of a RCHEP, based on simple criteria such as size, location, number of residents, number of employees and year of construction. There is a great need to complete the missing information and, eventually, to carry out more detailed analysis in the future.

EUI1		**Estimated with the benchmark** kWh/m^2/yr	**Real**	**Difference (Real-Estimated)** %	
	CZ	349	435	+24,8	
	DE	263	224	-15,1	
	FR	255	176	-30,9	
	GR	235	234	-0,5	

Example from the Analysis of Total Energy Consumption in 100 Health Care Homes

If you want to check the average energy consumption in care homes for each participating country and compare it to the estimated numbers, then visit our website: www.saveage.eu

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Energy (In)Efficient Behaviour in Care Homes

Energy efficiency is a key instrument to address four major challenges of the global energy sector: climate change, quality and security of supply, market trends and availability of energy sources. Reducing energy consumption in RCHEPs is important because of the aging of European population and because these centres operate 24 hours a day, 365 days a year, with full occupancy.

Energy behaviour is either investment or habitual behaviour. The former typically involves the adoption of a new technology, perhaps the purchase of a new appliance. Habitual behaviour is routine behaviour, such as turning the lights off when leaving a room. Changes in this consumer behaviour can lead to important savings in energy use. A literature review made clear that the changing of energy-related behaviour can potentially save about 19% (±5%) of our energy consumption. These savings are due to changes in lifestyle, awareness, low-cost actions and small investments.

The behavioural analysis included 100 pilot residential homes in 10 countries. For the purpose of data collecting, an ad hoc questionnaire was developed, which was divided into eight different sections: management, maintenance, office, kitchen, laundry, cleaning, assistance staff and autonomous residents.

Inefficient behaviour	Country	Topic
Lights are always on even when nobody is in the room		Lights
Elevator is used always		Use of elevator

Example from the Analysis of Energy (In)Efficient Behaviour of Residents and Employees in RCHEPs

The analysis concludes that there is an important lack of information and knowledge on energy efficiency among personnel (including managers and staff) and residents in the RCHEPs. This can also lead to a lack of awareness related to energy efficiency and savings. Awareness at all levels of the organization (management, maintenance, staff, residents, etc.) is the most effective measure in achieving the savings targets. The study also shows that the energy expenditure of the RCHEPs could be optimized just by changing some habits, mainly those of employees. We can conclude from the data gathered that there is a margin to improve energy related behaviour in every aspect.

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International Workshop – Prague, 28. September 2011

First Pan European Workshop Shows Impressive Energy Saving Potentials

SAVE AGE project partners from 10 European countries gathered in Prague to present the first findings of their work. Only 15 months after the project has started, the audience was informed about the results of measurements and analyses. The main message of the workshop is: Every care home should check their energy saving potentials.

At the opening of the workshop, **Prof. Dr. Wilfried Schlüter**, President of the E.D.E. (European Association for Directors and Providers of Long-Term Care Services for the Elderly) emphasized the importance and potentials which result from the work of the SAVE AGE project team. Technological advancements and changes of behaviour can open the way to energy and cost saving measures.

Prof. Dr. Schlüter

Darko Ferčej, SAVE AGE leading project partner, underlined the importance of energy efficiency in care homes because of their increasingly significant role in view of increasing energy needs and the rising number of elderly people requiring nursing care. Mr Ferčej pointed out that funds for investments are low and, therefore, change of behaviour is even more important. The strategic goal of the SAVE AGE project is to achieve 5 % of energy savings and reductions of CO_2 emissions in the participating care homes during the period May 2010 – May 2013. 540 employees will also be trained during the project.

Pedro Esteves, project partner in Portugal, presented the results of energy performance measurements. An adapted computer-based benchmark tool was created to measure different energy consumptions, with the result that heating is the biggest energy consumer. The importance of energy efficiency and legal conditions also differ in individual countries.

Mr Koprivnikar

Boris Koprivnikar, project partner in Slovenia, reported on an energy management information system in senior homes in Slovenia, supported by an external expert. An industrial tool for measuring heat, water, and energy consumption was adapted to analyse and compare care homes' energy consumption and to reduce costs. The results show great differences between care homes' costs, for example differences in costs for electricity amount to 30 % and for heating even up to 100 %.

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Miren Iturburu, project partner in Spain, reported on behavioural analysis regarding energy efficiency in 100 participating care homes. As a result, the commitment to energy efficiency shows extension potential. There is a lack of information and training on energy efficiency in care homes; apart from that, there is also a great need to make energy wasting more transparent.

Mrs Iturburu

Kent Anderson from Sweden summed up a study on 3,000 employees in care homes. He stated that a concept to motivate and increase awareness of the employees, with clear roles and responsibilities, can achieve measurable results and even secure more jobs.


Mrs Langer

Sandra Langer, department for energy management in Stuttgart, presented the approach of internal contracting, regarding for example new controls for heating, ventilation or lighting, insulation of walls or top floors. This model results in a revolving fund. The payback time for the thermal insulation of top floors was only 4.4 years.

Kostas Zapounidis, project partner in Greece, gave practical recommendations by reporting on a strategy and action plan for energy efficiency in care homes. He pointed out the opportunities and the potential of changes in behaviour and investments, based on measurements and analyses of all participating care homes. Even minor changes of behaviour result in 5 % savings, low investments in 10 %, and high investments in 25 % savings. These savings can start immediately; experiences from the audited buildings show that there is great potential for saving.

170 participants of the workshop gained experience in multiple aspects of energy efficiency and their positive feedback was the acknowledgment that the project work is a valuable contribution to the reduction of energy consumption.


During the workshop

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Memorandum of Understanding

At the Workshop in Prague, our partners presented a general document, called Memorandum of Understanding, which is a short voluntary commitment. The adoption of Memorandum by an individual care home represents an informal partnership with our project; every signatory will be included in our project as an active observer and invited for further cooperation in our future European projects.

The signing of the Memorandum means that your care home commits itself to energy and ecology-optimized building and retrofitting, promotes energy saving behaviour and offers to your residents the best possible quality of living.

We kindly invite you to download the Memorandum from our website (www.saveage.eu) or to print it from the following page, sign it and send it to the e-mail address contact@saveage.eu or by post to the following address:

Skupnost socialnih zavodov Slovenije
Letališka cesta 3 c
1000 Ljubljana
Slovenia

If you want to reduce energy costs of your care home and at the same time provide your residents with the best living standard, then feel free to sign the Memorandum and show your support to our project by sending it to us.

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Residential Care Homes for Elderly People (RCHEPs)
commit themselves to the following

Memorandum of understanding

1. We understand the significance of increased energy consumption both for our organisations' operation and for the wider European and national sustainability targets and we agree on the potentiality of energy savings, without compromising the comfort levels provided to residents.

2. We commit ourselves to energy and ecology-optimized building and retrofitting and to the implementation of renewable energy sources and systems, when possible.

3. We promote environmental conscious and energy saving behaviour and motivate our employees and residents towards these targets.

4. We follow, in the level of possible, the state of the art in the fields of efficient energy use, renewable energies, environmental issues and ecology by means of basic and continuous update.

5. We offer to our residents the best possible quality of living and apply in our organisations all the quality assurance measures oriented to energy efficiency, as co-decided in the context of this informal partnership.

6. We commit to use the strategy and action plan, proposed by SAVE AGE project, applying it to the pragmatic situation of each organisation.

7. We promote energy efficiency as an important focus sector for a RCHEP through E.D.E. membership and organised actions and events.

Name/Address :

Name of Director :

Date of signature :

Sign & stamp of RCHEP :

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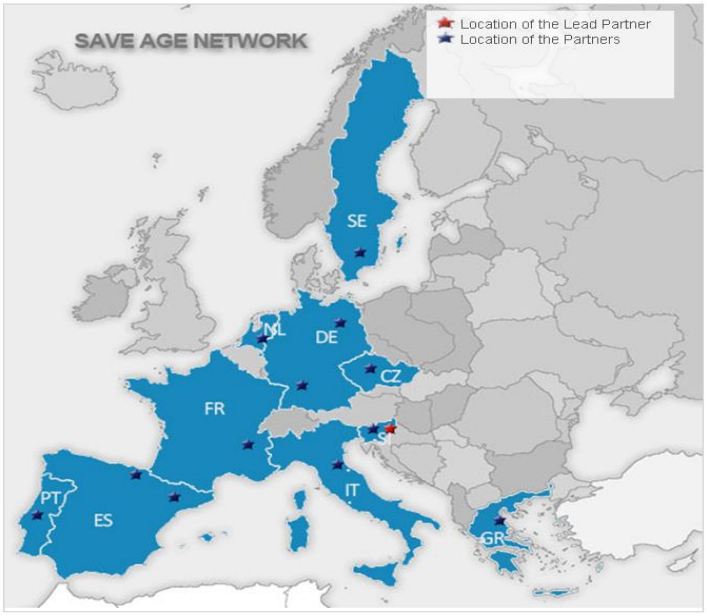
Participating Partners in 10 European Countries



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