

## Energy Efficiency Promotion in RCHEP in Portugal

On June 22, integrated in the EUSEW - EU Sustainable Energy Week, the University of Coimbra organized the SAVE Age workshop, held in parallel with the second edition of the Portuguese Conference for an Energy Efficient Economy. The objectives of this conference are to allow the information exchange between the several national promoters of energy efficiency, namely researchers, central and local authorities,



NGO's, energy agencies and companies among other. Several RCHEP's managers attended both events where the SAVE AGE project results were presented. Some case studies and pilot actions regarding Energy Efficiency in care Homes in Portugal have been presented by the RCHEP's managers, during the SAVE AGE workshop. The National Association for Home Support of RCHEP ALI was represented by a consultant of the



Association and its director. The consultant is an architect used to give advice to ALI Members when they are doing renovations in their Houses, and has prepared a detail overview about the management of building's energetic resources. She presented several architectural elements that influence the energetic consumption of the RCHEP, not forgetting the lifetime of the buildings, the maintenance costs of the construction options, and also the dismantling of the buildings. Her perspective was that a building is a living organism that is born and dies. Her

advice was not only to carry economic cost effectiveness analysis, but life cycle analysis including the balance of all costs: ecologic, social, human and energetic resources.



### Energy Efficiency Improvements: case studies

A very interesting case study concerns the installation in the Arganil Misericórdia care home of a combination of measures aiming several objectives, in particular: reduction of the energy consumption, promotion of endogenous resources use and contribution to the national objectives of decreasing the energetic dependency and CO<sub>2</sub> emissions. The main improvement carried out was the installation of a new heating system which decreased the energy costs by about 30%, with a return on investment of less than one year. This system is based on a biomass boiler which is fueled by pellets and wood from the surrounding forests. Forestry residues are collected in the surrounding forests by the RCHEP institution itself. This improvement project got the financial support from national incentive programs and could also account with money collected through solidarity campaigns.



Also, the Social and Parochial Centre of Ervedal da Beira have already installed PV panels for energy production, solar panels for hot water and a biomass boiler for space and water heating. Additionally, they are on the verge of installing an efficient absorption chiller for acclimatization. The impact on the energy bill was very positive, and this has been the result of an active RCHEP management towards possible existing funding or other energy efficiency opportunities in Portugal. Ervedal da

Beira RCHEP is a good example of the importance of an active and informed manager in order to provide total comfort to the residents with the best technology and techniques of energy efficiency.

### **Concluding remarks:**

Generally speaking, the RCHEP managers in Portugal are very active in what concerns looking for financial incentives from the government or other financing programs. They are also very interested in Energy Efficiency and very keen on improving their installations, both the building itself and the equipment within the installations. There is political will to help these institutions improving their installations, mainly local power, since they get visibility and popularity in return to their interest and involvement. However there is a lack of a larger consolidated program specifically dedicated to solidarity institutions, in Portugal. RCHEPs are an interesting target for ESCO business, which is also starting to boost in Portugal, but there is a need for interesting financing instrument and mechanisms (either public or private).

The main needs identified include:

- Building retrofitting and a clear focus on the qualification of the human resources, in order to improve their skills for building retrofitting works;
- There is room for application of smart windows;
- Lighting retrofit (In Portugal there is already a lighting industrial cluster that should be supported);
- Biomass promotion, since this natural resource is largely available in Portugal and is not being used as a natural energy source;
- To promote users behavior change in relation the way they use energy.

There is a huge potential for energy efficiency in Portugal in RCHEPs. There is a need for more and better information and to increase awareness so that users' and managers behavior changes towards a more rational use of energy. The examples presented show that significant savings are possible if management staff is committed to energy efficiency.