



Implementation of European energy saving initiatives in Greece and national perspectives

by Thomas Filippou and Nikos Tourlis *, May 2009

Energy has been throughout history a necessary lever for development and evolution. Utilisation of various energy sources contributed in technological development and made the industrial revolution an actual reality. This process has had its price though, since the irrational use of natural resources and finite energy reserves by sole criteria the convenience in production and the maximisation of profit, have led to environmental degradation of local, regional and even global scale. The need to reduce energy consumption has been realised for the first time during the 1973 oil crisis and led gradually thereafter to the quest for and utilisation of alternative energy sources, such as Renewables (RES), as well as the development of methods for the reduction of energy consumption, in the frame of rational use of energy and energy saving (ES) initiatives.

The European Union (EU) has pioneered in this course in the latest decades, taking upon international initiatives for the mitigation of climate change impacts and the security of energy supply in Europe. The European Commission implements a uniform European energy policy through legislative acts and funding programmes; within this policy frame, particular tasks include the increase of energy efficiency in products and services, as well as the reduction of pollutants' emissions originating from human activities. EU quantitative goals comprise the reduction of greenhouse gases emissions by 20%, the improvement of energy efficiency also by 20%, and the increase of RES contribution to the total energy production mix to 20%; all to be completed by the year 2020.

EU has identified the potential of ES and RES of its member states and has therefore launched the "Intelligent Energy Europe" programme with an allocated total budget of 730 million € (2007-2013). The programme aims at becoming a fundamental funding instrument for projects that promote the aforementioned tasks and improve the conditions of the member states' local markets. In particular, eligibility presupposes participation of at least 3 member states and refers to 4 main sectors, these being energy efficiency, RES, transport and energy, and integrated initiatives (e.g. energy training, etc).

Within the "Intelligent Europe" frame, the ENER-in-TOWN project was recently completed by a joint venture of 10 public and private entities from 8 European countries, including Greece as well. ENER-in-TOWN addressed the need to establish greater control over energy consumption in municipal buildings, by providing a solution for the elimination of two existing barriers, these being the lack of detailed knowledge on consumption figures, and the lack of qualified local personnel with the capacity to promote improvement actions. The most common action up to now was a simple informative post of electricity and fuel invoices. The detailed monitoring of



almost real time energy consumption is often neglected, but it comprises a vital aspect of energy saving, since the end user becomes aware of the characteristics of one's consumption behaviour and the implementation of the respective energy and cost saving targeted actions is possible.

For the elaboration of the project, permanent monitoring equipment has been installed in municipal facilities and buildings within the Attiki region. Real time data collection and generation of statistics and graphic figures contribute to the identification of the major energy consumers and support the decision making processes. By the end of the project, energy saving measures have been proposed and special printed guide has been given to the municipal Energy managers aiming to be a tool for the selection of energy efficient equipment, suitable for the construction of future facilities or the renovation of existing ones.

The implementation of the pilot project "ENER-in-TOWN assisted in the identification of the respective needs of local administration, based on the Directive 2002/91/EC (Energy efficiency in buildings), the Joint Ministerial Decision (JMD) D6/B/14826/17-06-1008 (Measures for the improvement of energy efficiency and energy saving in the public and greater public sector), as well as the Building Energy Efficiency Regulation (KENAK), currently under formulation. The next step for an effective mass implementation in Greece can be foreseen under the national EXIKONOMO (SAVE) programme, which financially supports relevant initiatives for local authorities nationwide.

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