



Retrofitting of Social Housing. Policy and Financing Options

OPENING SESSION

The status of Social Housing energy retrofitting in Greece

Ioannis Agapitidis President, Centre for Renewable Energy Sources

19th km Marathonos Ave, Pikermi GR-19009,

tel:+30 210 6603221, fax: +30 210 6603303, e-mail: pdg@cres.gr

Ladies and gentlemen,

It is my privilege to welcome you to Thessaloniki and the conference “Retrofitting of social housing – financing and policy options” organized by CRES with the cooperation of ZREU and SEC and the support of CECODHAS (European Liaison Committee for Social Housing). This conference is realized with the co-financing of the European Commission, under the Intelligent Energy Europe Programme, and comprises an excellent initiative to bring together the social housing companies, financing institutions, public authorities and other stakeholders across Europe for an exchange of experience on retrofitting of social housing and in particular on related financing mechanisms and incentives.

Energy retrofitting in Greece is coming forth as a practice slowly. To date, it is basically applied in tertiary sector buildings and rarely met in the housing sector, apart from the recent substitution of fuel oil by natural gas for space heating. Limited applicability of full scale energy retrofitting in the housing sector is due to several reasons such as the ownership status, the unavailability of many financing options, and the relatively low energy awareness of the public. Nevertheless, a few large scale energy retrofitting projects for social housing are under development. With the rising prices of conventional fuels and the upcoming implementation of the Energy Performance of Buildings Directive, energy retrofitting is expected to increase, while several actions need to be taken at national and local level.

CRES, seeing the significant potential for energy saving in the housing sector, and the economic and social benefits that shall arise from a large scale implementation of retrofitting measures, has been working for several years on this direction, cooperating with governmental authorities, local authorities and the private sector. In this direction, CRES has studied financial, legislative, organisational, technical, and social aspects, and has conducted energy design studies for the two ongoing social housing retrofitting projects that have been presented yesterday and are expected to act as benchmarks for boosting energy retrofitting of social housing in Greece.

Technical knowledge acquired within these studies, prior experience from several-mostly European-projects and the cooperation with the Workers Housing Organisation (OEK) and local authorities has been consolidated with CRES participation in two IEE projects: NIRSEPES “New Integrated Renovation Strategy to Improve Energy Performance of Social Housing” and the today’s conference.

The potential of energy saving in social housing in Greece is very high when it comes to energy retrofitting of buildings built before the 1980s, as has been demonstrated by existing applications. Furthermore, the energy analysis of the two case studies has showed that a total percentage of at

least 60% energy saving can be achieved by the technological measures proposed, while the indoor environmental conditions and the quality of life of the building occupants will be significantly ameliorated.

Energy retrofitting of low income housing is not without difficulties, especially in Greece where 95% of occupants own their homes and decision-making is very hard in the case of apartment building complexes -the most common building typology-, even more so, for whole settlements. We are, however, optimistic, as we foresee all individual, local, national and European efforts bringing added value and re-directing society priorities to a more sustainable energy future.

Ladies and gentlemen,

This conference should be a beginning to a long and fruitful collaboration. I thank you for your attention and wish you all fruitful discussions. Thank you.

MERCREDI 8 NOVEMBRE

Conférence "retrofitting of social housing: financing and policies options"

Lieu des réunions: Hotel Holiday Inn, 8 rue Monastiriou, 54629 Thessaloniki

9.15-10.30 : **Participation à la session d'ouverture** avec un représentant du Ministère de l'énergie, le président de l'OEK et deux représentants de la Commission européenne (DG REGIO et DG Energie)

Conférence organisée par un institut de recherche grecque pour la Commission européenne et qui présente des bons projets tous financés sous le programme SAVE (action pilot : logement social). Ce programme se termine l'année prochaine et ils réfléchissent donc à la suite. On pourrait proposer un dispositif de capitalisation des expériences et d'appui aux porteurs de projets qui serait un point de référence sur ces questions. CECODHAS est partenaire pour cette conférence dans le sens où nous avons informé tous nos membres et que la plupart des participants sont des membres du CECODHAS.

Proposition d'intervention

Sir Representative of the Ministry in charge of Energy, dear President of OEK, dear colleagues, it is with a great pleasure that I am participating to the opening session of this conference. AS Président of CECODHAS I have put energy consumption and more precisely the reduction of energy consumption as a priority area of work for the social housing sector in Europe. To start with I must first speak about our tenants.

For us, the reduction of energy consumption is not only a way to reduce European energy dependency and the emission of greenhouse gaz.

It is first a way to increase the quality of life of tenants, with better indoor air quality, better heating system, and healthier living space in general. Also the quality of life of inhabitants outside their house is important and the sustainable and integrated urban development is important.

Secondly it is a way to reduce tenant's and inhabitant's bills of energy and now that energy prices are constantly increasing it will very soon become our primary goal to act in the field of reducing energy consumption. And when I say soon, it means already tomorrow.

This is why I see today's conference as a starting point of intensive exchange of information, practices, projects.

In CECODHAS we always had insisted towards the European Institutions on legal and financial barriers to implement retrofitting project of old stock. It is not nowadays easy to find investors for a period of 40 years and housing market is a market which need a long-term perspective, and for which special financial instruments need to be further developed.

For us, the approach chosen by the Commission in its recently published **green paper on energy efficiency** is too narrow.

For the building industry, so, mostly the residential sector, this green paper is proposing to

- apply the energy performance directive,
- to extend it to renovation work,
- to develop integrated calculation methodology of this energy performance of buildings and
- to make new standards more constraining.

This is taken the problem without talking the key question: who will pay for that ? The certificate to apply the current directive on energy performance which will be implemented from January 2007 will cost 150 to 300€per dwellings, this certificate will present the energy consumption of the dwelling but not necessarily propose solutions to improve it, so the use of it is limited ? And then why to extend it to renovation of buildings ?

It can have an interest if some solutions are proposed. For us it is also important that social housing organization can propose their expertise in this field and deliver these certificates to their members so that the cost of certification is not added to the bill of the tenants.

Then about common European Standard, we have our doubts on the method. Standardization as it is organized so far is a process where only industrials have their say and for other stakeholders it is very difficult to take part to the standardization process.

For us, it would be more strategic to better capitalize good experiences, to work on concrete solutions, technically, legally financially and to disseminate these solutions. This requires a clear commitment of the European institutions, this requires to go beyond the current “sustainable energy Europe campaign”, which is good initiative to try to mobilize European network to communicate and commit to a better use of our common resources.

CECODHAS is an active partner of the campaign and we hope that the results of the projects financed under SAVE, projects that will be presented today during the conference, will be made more visible. This could consist into the future of the SAVE programme which I hope the representative of the Commission, Ms Waltraud Schmidt, will say few word about.

What is very important for the sector is to continue to exchange but also to capitalize these exchange and we would really need to create a tool for this capitalization, a reference point on energy efficiency solutions in the social housing sector which would provide expertise, organize access to the massive flow of information and use the knowledge of the sector to ease networking activities between projects and organizations.

A similar pool of expertise and networking as been created in the field of Urban affairs to ensure the continuity of actions and knowledge on the URBAN programme, this network is called URBACT. So, CECODHAS is now asking for a SAVACT. This would be a real tool for the social housing sector, a tool that may do a difference in the long-term for the reduction of energy consumption in Europe. A tool also to help capitalizing experiences on how to use Structural Funds in the forthcoming period and take advantage of what is done in other countries to reproduce good practices.

I see today's conference as one of the first step for it. I wish you fruitfull discussion and successful conference.

**Cohesion
policy**

ERDF for energy efficiency and social housing

Conference ‘Retrofitting of Social Housing: Financing and policy options’

Thessaloniki, November 7-8, 2006

Peter H. Ungar

European Commission

Directorate-General Regional Policy

Thematic development and impact



Structure

- **Cohesion policy and the revamped Lisbon agenda**
- **Cohesion policy 2007-13**
- **Prepare for future programmes**



**Part 1: Cohesion
policy and the
revamped Lisbon
agenda**



Kok report: Need for ...

- **suitable spending instrument at EU level**
- **increased ownership, including regions and social partners**
- **a more strategic approach**



EU summit March 2005

- **competitiveness, growth potential and productivity**
- **social cohesion**
- **knowledge, innovation and optimal human capital**



EU summit March 2005

(continued)

- **Union must mobilize all appropriate resources**
- **national and Community**
- **including cohesion policy**



Time to **move up a gear**

- **investing in education and research**
- **freeing up SME and unlock potential**
- **getting people into work**
- **efficient, secure and sustainable energy**



Cohesion policy and the Treaty

- **economic and social cohesion**
- **regional disparities**
- **backwardness (incl. islands and rural areas)**



Strategic guidelines for cohesion policy

- **the major hinge
between cohesion
policy and Lisbon**
- **growth and jobs**
- **RTD, innovation and
competitiveness**



Part 2

EU cohesion policy 2007-13







Three objectives (ca. €347 bn)

- **Convergence (82 %)**
- **Regional competitiveness and employment (16 %)**
 - **national level**
 - **regional level**
- **Territorial co-operation (2 %)**



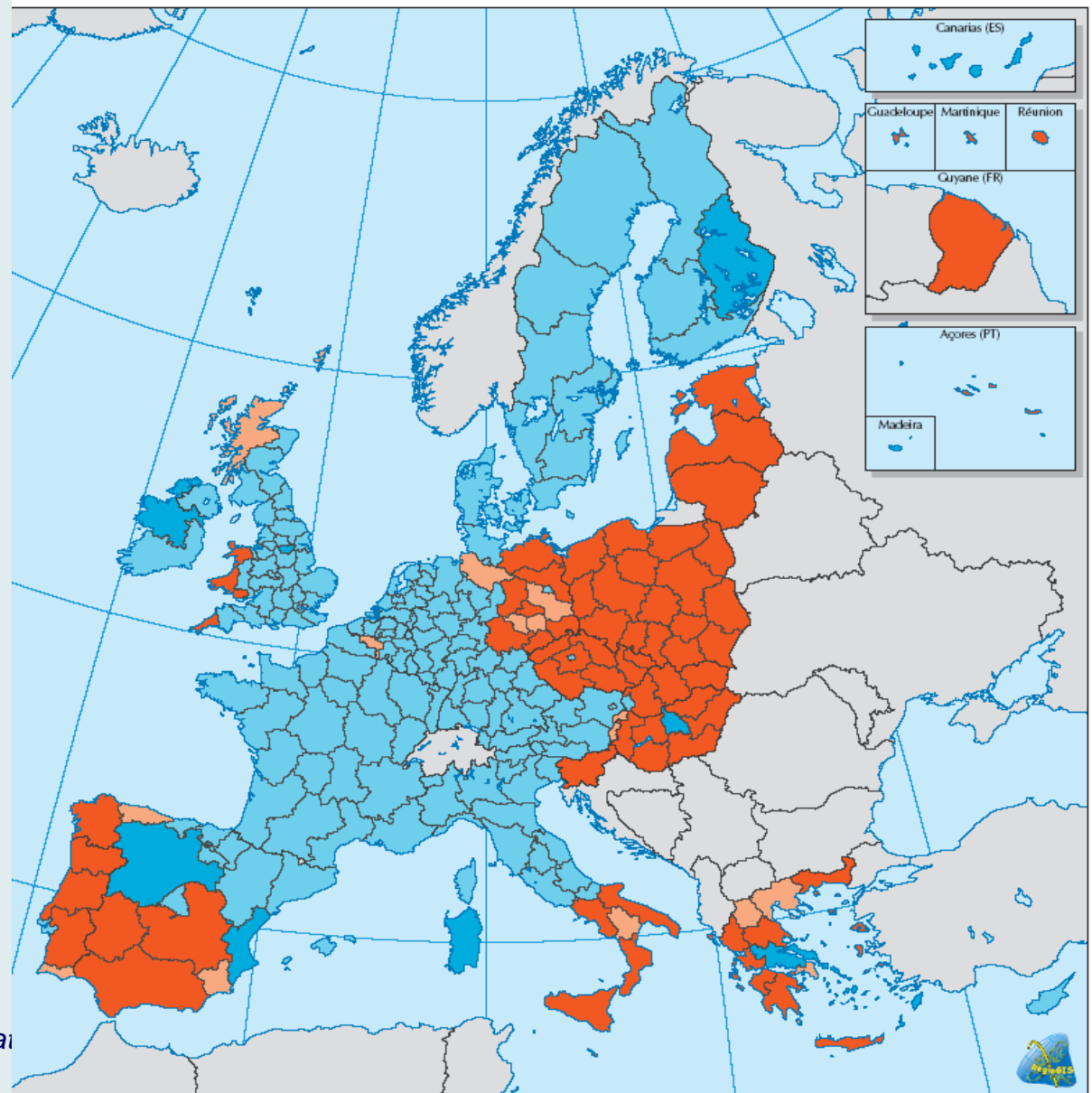
Cohesion policy

Geographical Eligibility 2007-2013

-  **Convergence objective**
(Regions below 75% of EU average)
-  **Convergence objective statistically affected: phasing-out regions**
-  **Objective Regional Competitiveness and Employment**
Phasing-in regions, "naturally" above 75%
-  **Objective Regional Competitiveness and Employment**

Index EU 25
= 100

Quelle: Eurostat



Energy and the ERDF: Convergence objective

- **security of supply**
- **internal market**
- **environmental considerations**
- **energy efficiency**
- **renewable energies**



Energy and ERDF: Objective Competitiveness

- **stimulating energy efficiency**
- **more renewable energy production**
- **development of efficient energy management systems**



Energy and the ERDF: Territorial cooperation

**reducing isolation through
cross border energy
systems and facilities**



Energy and the Cohesion Fund

**areas to be developed on
a sustainable basis and
with clear environmental
benefit in the fields of
energy efficiency and
renewable energy**



European Summit December 2005



**ERDF may also contribute to
the financing of **housing**
projects in EU10, Bulgaria
and Romania**

ERDF and **housing**, eligible if...

- **in an integrated urban development operation**
- **or priority axis for areas with physical deterioration and social exclusion**



...and...

- **maximum 3 % of ERDF allocation to OPs concerned**
- **or 2 % of the total ERDF allocation**



...and...

- **multi-family housing**
- **or buildings owned by public authorities or non-profit operators for housing of low income households or people with special needs**



Part 3

Prepare for future programmes



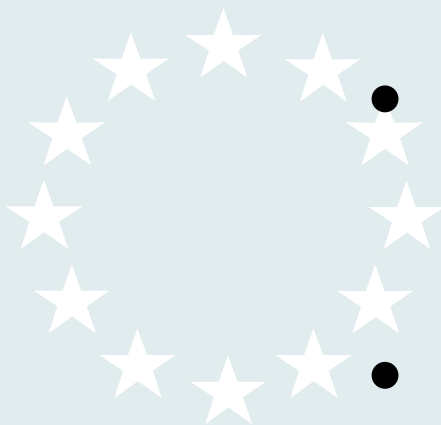
New programming and implementation cycle

- **Community's strategic guidelines**
- **National strategic reference frameworks**
- **Operational programmes**
 - Program management and project selection
 - Strategic follow up



Community strategic guidelines Strategic elements for energy

- **energy efficiency and low energy intensity development models**
- **renewable and alternative technologies**
- **networks where market fails, mainly in convergence regions**



Elements to consider

- **Solvability and liquidity** issues
- **Loans** could be an option
(**JESSICA**)
- **Avoid public funds being used
for speculation**
- **Avoid crowding out**



Specific implementation rules for housing

- **Part of the Commission regulation on implementing the general regulation of the Funds**
- **Currently prepared**
- **Specific criteria for intervention**
- **Specific types of intervention**



**Thank you very much
for your attention!**



<http://ec.europa.eu/inforegio>

Intelligent Energy



Europe

THE EUROPEAN DIRECTIVES FOR BUILDINGS AND ENERGY SERVICES



Paula CADIMA
Project Officer

Intelligent Energy Executive Agency (IEEA)
European Commission

Conference “Retrofitting of Social Housing: Financing and Policy Options”
Thessaloniki, Wednesday 8th Nov. 2006



PRESENTATION'S STRUCTURE

- **EU context and EC priorities**
- **Green Papers on Energy Efficiency**
- **Action Plan for Energy Efficiency**
- **Community Support Programmes**
- **EU Directives on Energy Savings**

- The consumption of energy in Europe is substantial, while the demand growth of transport and electricity represent the most worrying trend.
- Buildings alone uses 40% of the energy consumed in the European Union. Too much energy continues to be wasted in buildings because of inefficient heating and cooling systems and lighting.
- The demand for electricity also experienced considerable growth in recent years. 2/3 of the primary energy needed to generate electricity is lost in production, transmission and distribution.



- There is a relevant energy savings potential in the

Key EC energy priorities



M. Piebalgs, Commissioner for Energy

- Increasing **energy savings** has moved up in the agenda of the new Commission headed by José Manuel Barroso;
- It has been identified as the chief political objective of Energy Commissioner Andris Piebalgs, who launched a wide-ranging policy debate on **energy efficiency** in Jun. 2005;
- Achieving a **properly functioning internal market** for gas and electricity for the benefit of all our citizens;
- Promoting **renewable energy**;
- Strengthening **nuclear safety and security**;
- Security of Europe's energy supplies and further developing **external energy policy relations**;
- Improving the **links between energy policies and env**

CALL FOR MORE ENERGY EFFICIENCY

- **Green paper “Doing more with less”** issued July 2005
 - ▶ Prioritise energy efficiency with goal of overall saving 20% of energy by 2020 via concrete measure
- The European Commission has published in Mar. 2006 the **Green Paper** on a “**European Strategy for Sustainable, Competitive and Secure Energy**”
 - ▶ Help the EU lay the foundations for security of supply, competitiveness and environmental sustainability
- **Action plan on Energy Efficiency**, including actions in buildings was recently published



ACTION PLAN FOR ENERGY EFFICIENCY

- **Overall objective: to outline a coherent framework of policies and measures with a view to saving a substantial part of the 20% of EU annual primary energy consumption by 2020. It proposes a selection of cost-effective energy efficiency improvement initiatives to be put in place and implemented in the coming six years. The ambition is to mobilise market actors and to transform the internal energy market, with the objective of providing EU citizens with the **globally most energy-efficient buildings, appliances, processes, cars and energy systems.****
- **Improve the EU's competitiveness, the living standards of its citizens, boost employment and increase exports of new, energy-efficient technology**
- **The building sector offers a great saving potential (Residential and Tertiary = 57% by 2020)**
- **On an individual level, small changes in our energy consumption patterns will mean saving money, helping the environment and doing our bit for a common European goal.**
- 6 ■ **The time to start is now!**

■ Framework Programme for Research, Technology Development and Demonstration

- ▶ FP6 (2002-2006)
- ▶ FP7 (2007-2013) EUR 50 521 million



■ Intelligent Energy Europe Programme

- ▶ Complementary to R&D projects
- ▶ Aims to overcome legal, economic, cultural, social and administrative barriers.
- ▶ IEE 2003-2006



- The Commission has proposed an ambitious Intelligent Energy - Europe II programme, which will form part of the new 'Competitiveness and Innovation' Programme 2007-13



- The priorities for the start of **IEE II (total budget: €730 million)** will be defined in the annual programme 2007

WHAT IS the IEE-Programme and the IE EA ?

- IEE is an EU support programme promoting increased **energy efficiency** and the use of **renewable energy sources** by overcoming the non-technological barriers (legal, financial, institutional, cultural, social barriers)
- IEE is implemented by the IE EA, the first of a number of new Executive Agencies created by the European Commission to put policies into action more efficiently and with improved results

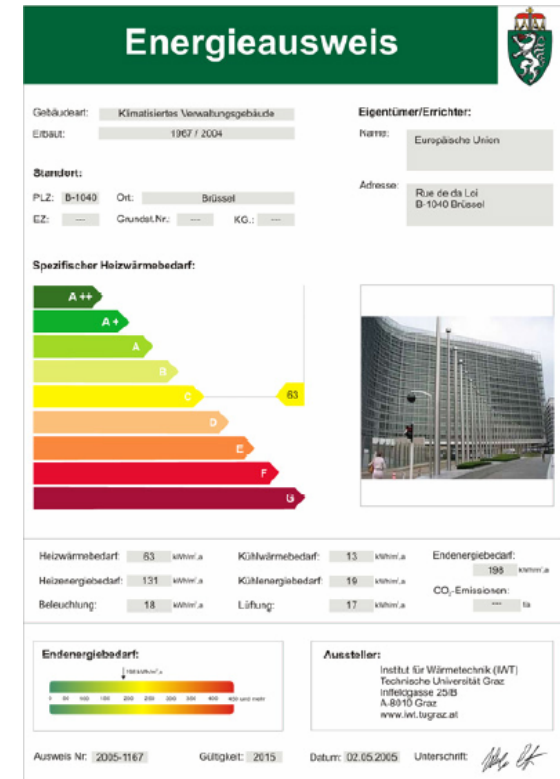


European legislation on energy savings

- **Directive on energy performance of buildings**
- Directive on the promotion of cogeneration
- Directive for the taxation of energy products & electricity
- Renewable Electricity Directive
- Biofuels Directive
- CPH Directive
- Directives on energy efficiency requirements for boilers, refrigerators and ballasts for fluorescent lighting
- Directives for labelling of electric ovens, air-conditioners and refrigerators and other appliances
- Regulation on Energy Star labelling for office equipment
- Directive on Eco-design requirements for energy using products
- **Directive on energy end-use efficiency and energy services**

ENERGY PERFORMANCE OF BUILDINGS DIRECTIVE

- Calculation of the integrated energy performance with a methodology at national or regional level under a common framework
- Minimum requirements on the energy performance of new buildings and large refurbishments
- Energy certification of buildings making energy consumption visible to owners, tenants and users
- Inspection of boilers and air-conditioning systems
- Independent experts for assessment and inspection



Example:
Certificate of the main Commission
Building “BERLAYMONT”

ENERGY END-USE EFFICIENCY AND ENERGY SERVICES DIRECTIVE

- **The Directive will require Member States to save at least an additional 1% of their final energy consumption each year for the next 9 years (retail, supply and distribution of electricity, natural gas, urban heating, and other energy products including transport fuels).**
- **=> Member States must adopt targets, impose obligations on their energy suppliers and prepare national Energy Efficiency Action Plans.**
- **Savings will be achieved in both the private and public sectors, using a framework of measures to:**
 - ▶ **expand the use of energy services,**
 - ▶ **improve the market uptake of energy-efficient technology**
 - ▶ **and integrate energy efficiency criteria into public procurement practices.**

Thank you for your attention!

paula.cadima@ec.europa.eu

**More Information on
<http://ec.europa.eu/comm/energy/intelligent/index.en.html>**