

Πανεπιστήμιο Δυτικής Μακεδονίας

Τμήμα Μηχανολόγων Μηχανικών



ΕΕ Πράσινη Βίβλος για την Ενεργειακή Αποδοτικότητα

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Why now?



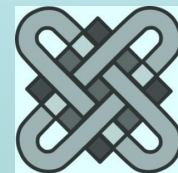
- **Competitiveness and the Lisbon Agenda:** improved energy efficiency should make a major contribution to EU competitiveness and employment
- **Energy Security:** “Today the European Union imports about 50% of its energy needs, which amounts to approximately 240 billion euros each year. If nothing is done, 70% of the EU energy needs could be covered by imports by 2030.”
- **Environment and Kyoto:** “Energy consumption is also the main reason for the growth of GHG emissions and climate change. By saving 20% of energy consumption, it would be possible to secure 50% of the necessary reductions of CO₂ emissions.”

Potential



- 20 % potential identified
- 10% savings could be carried out by fully implementing the measures already set out by Europe in the building, domestic appliances, heat production and transport sectors.
- To save the remaining 10%, new measures must be outlined in Green Paper using all levels of action.

Integration with other Community Policies



- Research & Development
- Promoting best practices and technology
- Establishing and promoting best practice at all levels through national Action Plans
- Better use of taxation
- Better targeted State aid
- Opening up public purchasing
- Finding European financing

Buildings Sector



- The Buildings Sector is a high priority for the Green Paper
- The main strategy is to get existing directives implemented properly and to update existing directives on appliances

Energy Performance of Buildings Directive



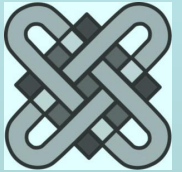
- The implementation of the Directive on the energy performance of buildings (2002/91/EC), as from 2006, will permit a gain estimated at some 40 Mtoe (Megatons of oil equivalent) between now and 2020 (13).
- **The Commission must therefore monitor the rigorous application of the directive.**

EPBD (continued)



- Green Paper raises possibility: “An option is to propose an extension of the directive in order to improve the energy performance of buildings when they are being renovated. The current directive only applies to buildings under renovation of more than 1000 m². A study (14) arrived at the conclusion that the technical potential of this directive could be enormous if its rules were applied to all renovations.”

EPBD (continued)



- Comment: EPBD has now come into force and it has started poorly. Monitoring is essential.

Domestic Appliances



- “Since 1992, a framework directive allows Member States to oblige the provision of information to consumers on the energy efficiency of a whole range of electrical appliances via labeling. During the last four years, the Commission has striven for an increase in the number of covered appliances. **The Commission has to continue in this direction while involving industry in the definition of these consumer information activities**”

Domestic Appliances



- “a new approach has been proposed by the newly adopted directive on eco-design, setting requirements for eco-design applicable to consumer electrical appliances. The Council and the European Parliament have recently reached an agreement on this objective. One of the aims of the directive is to apply the requirements for energy efficiency while, at the same time, avoiding negative consequences of other aspects of the environment or other stages in the life cycle of the appliances.”

Domestic Appliances



- “To the extent that energy consumption has a significant impact on the environment, which is often the case for household appliances, it should now be possible to establish energy efficiency requirements for a large range of appliances and applications.”

Information and Awareness



- “This Green Paper has identified the shortcomings in information and training of consumers and the general public. Many of the actions to remedy this situation have to be taken at national, regional and local levels.”

Other Areas . . .



- There are other areas in the Green paper that impact on buildings:
 - Cogeneration
 - Distributed generation
 - District heating
 - White Certificates
 - Energy End-use Efficiency and Energy Services Directive

Where is this leading?



- EC is to come out with a new Action Plan in 2006
- It is a result of the consultation process that is still underway

Consultation Process



- Green paper asks 25 questions and opens the discussion for all to provide responses
- All interested are welcome to put forward comments and suggestions in the following manner:
 - by internet, through the Commission's web-site at http://europa.eu.int/comm/energy/efficiency/index_en.htm;
 - by contacting Mr. Luc Werring of the Directorate-General for Energy and Transport of the European Commission (luc.werring@cec.eu.int);
 - the Commission will involve each of its Offices situated in EU cities. Information and possible events will be advertised on: http://europa.eu.int/comm/represent_en.htm;
 - the Commission has a network of Energy Agencies. These Agencies will be tasked with widely spreading information on the Green Paper and seeking comments.

Is the EC really committed?



- We have to believe that the Commission is fully behind energy efficiency
- Recent problems over natural gas from Russia, climate change strategies, etc. show that energy efficiency has a major role to play and the Commission is determined to have it do so

Problem areas



- The Green Paper stresses the need for greater monitoring of EPBD but so much of the momentum is gone and MS are not giving it the priority it needs. This Directive is key area and I have big concerns.
- The new MS need real help in setting policies and implementing them, with sufficient resources. It is not obvious how this will happen.

Problem areas (continued)



- Minimum Energy Performance Standards have to be a priority
- The Commission needs to do more on-going analysis of the buildings sector to have a better understanding of the potential and of the impact of delays in implementing EPBD (for example). Its capacity to do so is very limited.

Final Comments



- Better indication of the potential for increased energy savings is needed. It does not reflect current prices or the 10 new MS.
- There is no reference to the EU's existing *2000 Energy Efficiency Action Plan* or the *1998 Energy Efficiency Strategy*, both of which are still the foundations of the Community's policies on the subject. It has never been stated where they went wrong.
- The Green Paper fails to discuss the need for on-going monitoring and evaluation.
- There is an assumption that energy efficiency is a high priority in MS's energy policies; it is for some but not for all.



Ευχαριστώ