



Europe's Approach to Building Performance

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www.resnet.us



EU Energy Performance of Buildings Directive (EPBD)

Requirements

- + Establish Common Methodology for Calculating Building Energy Performance**
- + Ratings of All Buildings at the Time of Sale/Change of Occupancy**
- + Annual Inspections of Boilers, Heating and Air Conditioning Systems**

EU EPBD

Why?

- + Assist Member States in Meeting Kyoto Accord on Carbon Reduction (330 Million Tons by 2010)**
- + European Consensus on Energy Efficiency as Priority**
- + Buildings Represents 40% of EU's Energy Consumption and Carbon Production**

EU Priority on Energy Efficiency

European Building Performance Directive Legislation:

“Energy saving is without doubt the quickest, most effective, and most cost-effective manner for reducing greenhouse gas emissions.”

EU EPBD

Goals

- + Reduce European Building Energy Consumption by 20% by 2020**
- + Ratings of 2 Million Existing Buildings by 2012**
- + Reduction of 45 Million Tons of Carbon by 2012 (14% of Total Kyoto Target)**

Concerted Action Group

24 Countries Voluntarily Working To:

- + Developing European Philosophy for Energy Efficiency in Buildings**
- + Create Common Methodology for Calculating Building Energy Performance**
- + Promote Common Practices in Implementing Directive**
- + Developing Common Implementation Strategies**

Concerted Action Group

Efforts Focused On:

- + Uniform Labeling of the Building Performance of Buildings**
- + Developing Europe CEN Standards for Directive**
- + Training and Certification of Raters**

Labeling of Energy Performance of Buildings

Issues Being Worked On:

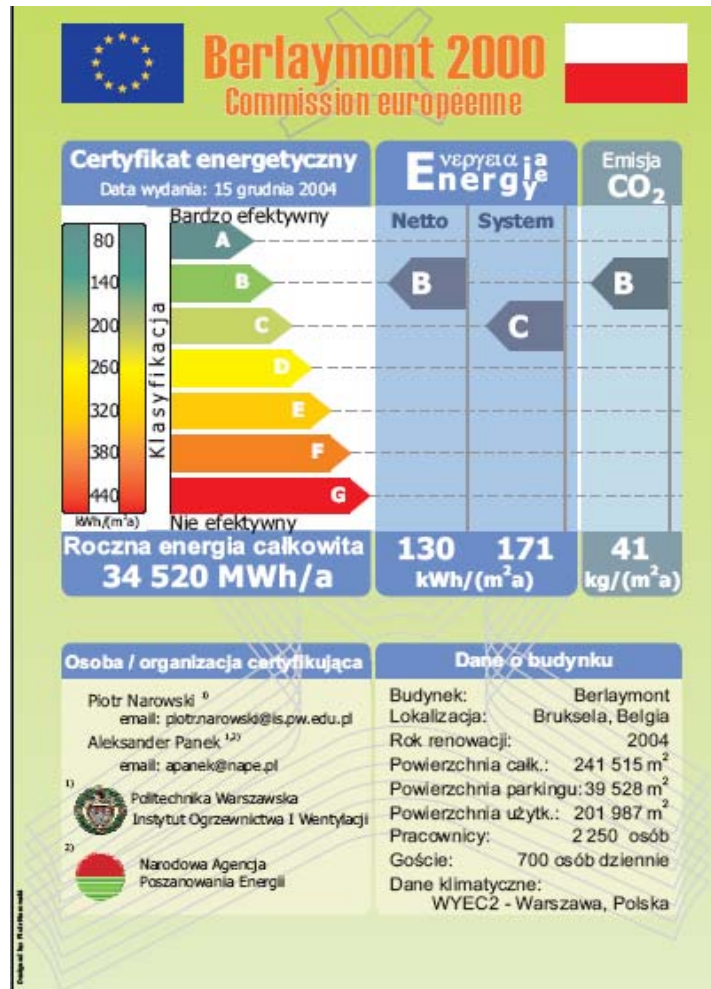
- + Organization of Certification Programs**
- + Differences Between New and Existing Buildings**
- + On Large Buildings – Should the Building or Individual Units be Labeled?**
- + Standards for Software and Calculation Methods**
- + Identification of Recommended Energy Improvements and Calculating Their Cost Effectiveness**

Training and Certification of Raters

Issues Being Worked On:

- + How Many Raters Required in Each Nation?**
- + Qualifications of Raters**
- + Development of Code of Standards for Raters**
- + Quality Assurance Oversight of Raters**
- + Insurance Necessary to Cover Rater Liability**

Example of Rating Report (Poland)



Monetizing of Energy Savings

Article Seven of Directive

Requires Member States to Facilitate Financing of Energy Improvements Recommended by the Rating

Monetizing of Energy Savings

EU “White” Certificates

- + Utility Required Energy Saving Goals – Government Certifies Amount and Life of Savings**
- + White Certificates Can be Sold or Traded**
- + Italy and United Kingdom Implementing and Under Preparation in France and Netherlands**

RESNET/EU Dialog

- + September 2005 - Steve Baden and Philip Fairey Presented at the EU Conference on the Energy Performance of Building Directive**
- + February 2007 – Concerted Action Group (CAG) Chair Eduardo Maldonado Addressed RESNET Conference**
- + December 2007 – Steve Baden and Philip Fairey Participated in CAG Meeting in Warsaw (First non-EU government representatives to attend CAG meeting)**

Benefits of RESNET - EU Dialog

- + Common Methodology for Calculating Building Energy Performance**
- + Establish International Protocol for Verification of Building Energy Savings for Carbon Trading**
- + Gain Knowledge of Rolling Out Comprehensive Building Performance Initiative**

Results of RESNET - EU Dialog

"I am sure that this is not the end, nor the beginning, of course, simply one more step, although a very important step, towards an increased cooperation. We will surely see developments in the future.

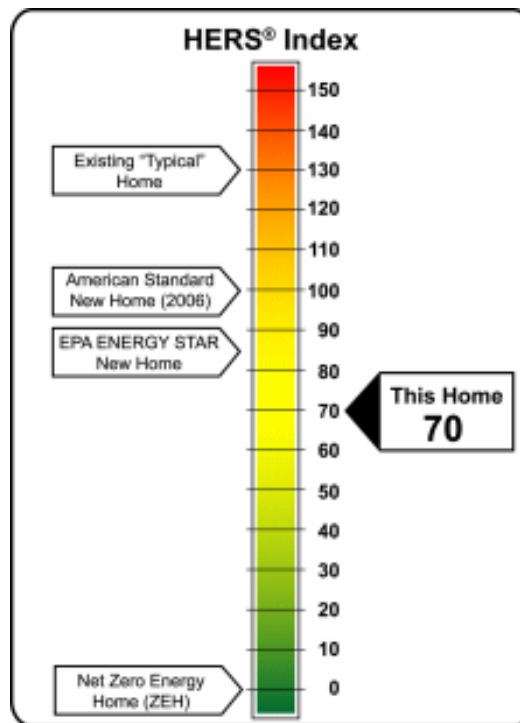
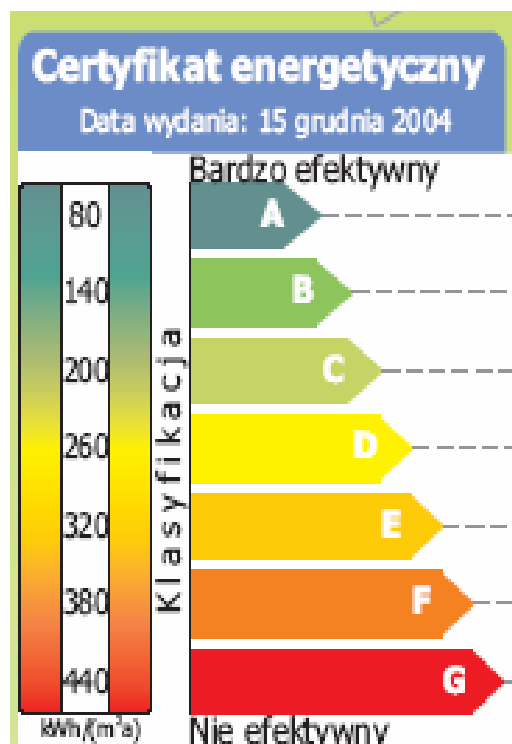
RESNET's system would qualify under the EU's EPBD."

Results of RESNET - EU Dialog

RESNET Invited by EU to Participate in
Development of ISO Standard for Labeling
Building Performance – Philip Fairey Named as
Official U.S. ANSI Representative

Goal is to Embody EU CEN and RESNET
Standards into ISO Standard

Comparison of Poland & US Labels



Lessons From EU

**Example What Can Happen if Governments
Place a Priority on Action and Agree to
Cooperate**

Policy Commitment Leading to Market Transformation

German Photovoltaic Example

German Government Pays \$.45 KWH for Power Produced by System (Consumer pays cost for installation of system)















ES Eugen Schneider

Holzung - Sanitär - Blechnerei - Solaranlagen

HOLMES

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Join the Parade

