INOGATE New ITS Project – Sustainable Energy

BUILDING PARTNERSHIPS FOR ENERGY SECURITY

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Content

1. Energy labelling objectives
2. Development of energy labelling in the EU
3. Appliances mandatory for EU energy labelling
4. Energy labelling in Moldova and the EU
Why do we need energy labelling?

Households & business

• To make long term savings
• To incentivise manufacturers to enhance EE
• To make our planet cleaner

European Union

• To contribute to the “20-20-20” target
• To make our planet cleaner
EU experience in labelling

- Energy labels have been in place for more than 20 years (1st Directive adopted in 1992)
- Energy labels are adopted on a product by product basis (9 appliances)
- Expert Group “EDCO” includes representatives of 31 countries (since July 2011)
- From 800-1500 compliance tests are conducted in the EU annually
EU experience in labelling

• Products are ranked according to their energy efficiency/consumption on A to G scale.
• Today, 90% of these appliances in EU market comply with class A requirements and higher.
• Technology improvement resulted in review of labelling.
List of appliances mandatory for EU energy labelling

1. Refrigerators & freezers
2. Washing machines
3. Electric tumble dryers
4. Combined washer-dryers
5. Dishwashers
6. Lamps (bulbs & luminaries)
7. Electric ovens
8. Air conditioners
9. TV sets
1. Refrigerators and freezers

- The energy efficient refrigerator uses 30% of the energy to perform the same work as a 10-year-old model.
- In the EU the number of A-class refrigerators grew from less than 10% in 2000 to 75% in 2005.
- The annual energy consumption in kWh is based on standard test results for 24 hours a day.
- Actual consumption depends on how and where appliance is used.
2. Washing machines

- Weighted annual energy/water consumption based on 220 standard washing cycles (standard 60 °C cotton at full / partial load & standard 40 °C cotton at partial load)

- Other indicators:
  - Capacity (cotton), kg
  - Spin-drying efficiency class
  - Noise
3. Electric tumble dryers

• Weighted energy consumption is calculated according to 160 cycles of drying (full-load and partial-load cycles.)

• Other indicators:
  – Drying type
  – Duration of a cycle
  – Capacity (cotton), kg
  – Efficiency of condensing
  – Noise
4. Combined washer-dryers

• Energy consumption is calculated in kWh per cycle according to the harmonized EU standards (washing, spinning and drying).

• Other indicators (washing & drying):
  – Capacity (cotton), kg
  – Water consumption
  – Noise
5. Dishwashers

- Annual electricity and water consumption are calculated based on 280 standard cycles

- Other indicators:
  - Drying efficiency class
  - Capacity of standard place settings
  - Noise
6. Lamps (bulbs & luminaries)

- Luminous flux of bulb in lumens
- Input power (wattage) of the lamp
- Average lamp life length in hours
7. Electric ovens

• Electricity consumption is calculated based on standard load, determined by harmonized EU standards.

• Other indicators:
  – Usable volume
  – Size
  – Noise
8. Air conditioners

- Annual electricity consumption based on standard test results
- Other indicators:
  - Design load,
  - Seasonal energy efficiency ratio (SEER) - *cooling*
  - Seasonal coefficient of performance (SCOP) - *heating*
  - Map of Europe (3 indicative heating seasons)
  - Noise
9. TV sets

- Annual on-mode electricity consumption based on on-mode power consumption of a TV set operating 4 hours per day, 365 days per year

- Other indicators:
  - the on-mode power consumption in Watts
  - Easily visible switch on/off (0.01 Watts)
  - Visible screen diagonal in inches and centimetres
Advantage or need?

- Legislation on Labelling is a part of the EnC.
- Labelling: 10 out of 12 EnC Acquis on energy efficiency
- Draft Law of Moldova « On energy labelling» - Directive 2010/30/EU
Labelling in Moldova (perspective)

- All suppliers and dealers have to fulfil the obligations on labelling.
- Any labels, signs, symbols or inscriptions which do not comply with the requirements are prohibited for adopted appliances.
- Suppliers need to develop technical documentation to provide accurate information on the label.
Labelling in Moldova (perspective)

• Dealers shall display labels properly, in a visible and legible manner.

• If products are sold by mail, catalogue or through the internet, customers should be provided with the information specified on the label before buying the product.

• Governmental organisations must purchase only products that meet the highest standards of energy efficiency class.
Labelling in the Czech Republic

- Legislation: *Energy law*
- Surveillance authority: *State energy Inspectorate*
- Shop visits: *2010-4, 2011-18, 2012-300*
  - Results: **64 % match**
  - Penalties: **only in individual cases**
- Tests: *6 Refrigerators in 2011 (only electric consumption)*
  - Result: **Compliance with labelling**

*Source: Come On Labels, 2013*
Labelling in Latvia

- Legislation: Regulation of the Cabinet of Ministers
- Surveillance authority: Consumer Rights Protection Centre
- Shop visits:
  - Result:
  - Penalties:
- Testing:
  - Result:

Source: Come On Labels, 2013
Labeling in Belgium

- Legislation: **Energy law**
- Surveillance authority: **State Inspectorate**
- Shop visits: **2011 - 202**
  - Result: **83% compliance**
  - Penalties: **only in individual cases**
- Testing: **25 lamps in 2010; 12 refrigerators in 2010-2011; 5 dishwashers in 2012.**
  - Result: **Non-compliance: 22 lamps; 1 fridge**
  - Penalties: **No**

*Source: Come On Labels, 2013*
Other useful labels

**European Ecolabel**
- Voluntary label promoting environmental excellence
- Reduced environmental impact throughout life cycle (from extraction of raw material to disposal)

http://ec.europa.eu/environment/ecolabel/

**Energy Star**
- Only used on office equipment
- Shows that a product meets energy efficiency standards set by the EU

Thank you for your attention

More information:

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