

## Ecodesign preparatory study

### DG ENER Lot 22: Domestic and Commercial ovens

#### First stakeholder meeting on commercial appliances

Friday 5<sup>th</sup> November, 2010

10.00 am to 1.00 pm

#### Minutes

- Welcome and tour de table
- B. Tinetti (BIO): Presentation of the Ecodesign Directive and of the MEEuP methodology.
- G. Audard (BIO): Task 1 : Main findings on commercial ovens
  - D. Wanaverbecq (Bongard): The picture used to illustrate the rack oven is a deck oven, another type of oven used for baking (slide 34). A clearer definition of bakery ovens should be included in Task 1. Deck ovens and rack ovens should be differentiated.
  - E. Menosso (Electrolux Professional): The definition of commercial combi-steamers should be included.
    - Combi-steamers are included in the current working version of Task 1. The report available on the website was published before meetings with stakeholder of the commercial sector, and thus contains little information on commercial appliances. An updated version will be published taking into account all the comments.
  - P.A. Augagneur (Charvet): On slide 32, this is a static oven, and not a convection oven. Re-thermalisation ovens should also be included in Task 1.
  - K. Warren (EFCEM): A proposition of European standard for commercial ovens is being developed by EFCEM. A draft version will be sent to the Lot 22 team after December 2nd 2010. There is Energy Star for ovens in US but these are way behind EU practice in opinion of industry.
- G. Audard (BIO): Task 2 : Main findings on commercial ovens
  - H. Rabe (Rational AG): In the last 30 years, Rational which represents about 50% of the European market, produced 300,000 combi-steamers. The estimation of the number of ovens based on the Eurostat's statistics on the number of foodservice outlets is too high (slide 44). Rational's estimation for the stock in EU is around 400,000 combi-steamers (both gas and electric).

- K. Warren (EFCEM): Estimating the stock of ovens from the number of foodservice outlets is not a good approach. Defining the average number of ovens per outlet is too difficult. Sales should be estimated from the production of the most relevant manufacturers.
- S. Edwards (ECOS): What is the impact of imports and exports for commercial appliances covered by Lot 22?
  - H. Rabe (Rational AG): Sales figures (previously mentioned) should be a good indicator for the assessment of the stock at EU level as imports/exports of commercial ovens are not perceived as relevant compared to the EU internal market.
- D. Wanaverbecq (Bongard): Bongard sells around 2,000 bakery ovens in France each year. At the EU level, there could be 10,000 bakery ovens sold each year (rack and deck ovens), and 15,000 convection ovens.
- All participants : The distribution shares according to the type of oven has been further refined as below (Slide 45):

<b>20 GN 2/1</b>	<b>8%</b>
<b>20 GN 1/1</b>	<b>12%</b>
<b>10 GN 1/1</b>	<b>40%</b>
<b>6 GN 1/1</b>	<b>40%</b>

- E. Menosso (Electrolux Professional) agrees with the share in energy source (Slide 46). However, D. Wanaverbecq (Bongard) and K. Gerhard (Wiesheu) suggest that the share for electric ovens is higher than 55% as bakery ovens are mainly electric (80% for Bongard and 100% for Wiesheu).
- All participants: The price ranges have been further refined as below (Slide 50).

Type of oven	6 GN 1/1	10 GN 1/1	20 GN 1/1	20 GN 2/1	Average
Electric combi-steamer	7,400 €	8,400 €	15,000 €	25,000 €	
Gas combi-steamer	8,500 €	9,500 €	17,000 €	28,000 €	
Electric cooking convection oven	3,500 €	4,000 €			
Electric baking convection oven					
Electric deck oven					

- E. Menosso (Electrolux Professional) and K. Warren (EFCEM) agreed to send respectively more info and a link to a comparative website to complement the table so as to save time during the meeting.
- Link from K. Warren (EFCEM) :

<http://www.nisbets.co.uk/products/AdvancedSearch.asp?keyword=convection+ovens>

- V. Lelkes (European Commission) underlines the need for reliable sales / stocks figures and invites the industry to cooperate.
- E.Hoa (BIO): Task 3: Main findings on commercial ovens
  - K. Gerhard (Wiesheu): The lifetime of an electric bakery oven should be around 10 years (Slide 56).
  - D. Wanaverbecq (Bongard): The power-on time of the heating of a deck-oven is rather 60% than 70% (Slide 56).
  - E. Menosso (Electrolux Professional): CECED Italia usually considers that gas ovens have a lifetime between 10 and 12 years (Slide 56). Also, the 80% share of HKI data for the EU market is seen as over-estimated, although Rational AG's 50 % are acknowledged (Slide 55).
  - K. Warren (EFCEM): With regard to end-of-life behaviour, there is an important second-hand market for commercial ovens within the EU. It tends to be a state-by-state market given local oven requirements. Therefore, the average lifetime might need to be extended (Slides 56-57).
  - D. Wanaverbecq (Bongard): Estimations of the energy consumption at EU level for deck-oven is really low. The energy consumption related to Bongard's sales of deck ovens (only) in France is already higher than 10 GWh (as read in Slide 55).
    - Some further clarification with HKI will be made.
  - K. Warren (EFCEM): The conclusion related to the potential shift from the domestic to the commercial sector should be announced with more caution as the commercial sector presents a higher energy efficiency per meal served.
    - K. Völker (HKI) disagrees with the apparent increase of eating-out habits based on the German situation.
- P. Goodman (Cobham): Task 4: Main conclusions on the technical analysis of commercial ovens which considered performance and energy consumption measurement standards.
  - K. Warren (EFCEM) recalls the need of implementing a commercial-sector specific approach when investigating the technical issues, which differ from the domestic sector. An extrapolation from the domestic sector is not perceived as valid.
  - H. Rabe (Rational AG) questions the 50% energy saving potential presented in Slide 65.
    - Cobham can only refer to the US DoE study without further specifications.
    - Unidentified: But this figure is representative of the US stock and can not be easily adapted to the EU market.
- G. Audard (BIO): Task 5 : Main conclusions on commercial ovens
  - L. Weber (Eloma): The definition of a cycle used in Task 5 is strange (Slide 79). A typical cycle is 1h heating up (at full power), 1h maintaining the temperature in the cavity (half-power). The standby consumption (oven turned off) is not relevant. However, it is common that an oven is left on without anything inside, to be ready to cook instantaneously.

- The inputs regarding the use phase used in Task 5 come from a single manufacturer who uses its own test standard. The Lot 22 team did not have access to the specifications of this standard, however the manufacturer estimates that this is representative of a real use of the appliances, as it was developed using a survey among their clients. Any input concerning the average consumption of combi-steamers will be appreciated.
- H. Rabe (Rational AG): Rational estimates that there are 500 cycles per year. The consumption per cycle should be around 8.4 kWh for electric combi-steamers, and 10.9 kWh for gas combi-steamers. These figures will vary depending on the definition of a cycle. (Slide 79).
- C. Robertson (Cobham) suggests calling the main manufacturers to have direct inputs on the phone. (K. Warren (EFCEM) offered to provide some contact details)
- All participants: No specific comments were made on the overall improvement ratio which is set as 1 in the Ecoreport.
- P. Goodman (Cobham): Task 6: Preliminary findings on the BAT and BNAT of commercial ovens which considered several technical issues and the potential for reducing energy consumption
  - L. Weber (Eloma): Gas combi-steamers using blower burners are more efficient. These have used heat exchangers for many years
  - P. Helm (MKN): What is the current estimation of the potential savings relevant to legislate?
    - More than 1 TWh of savings per year is an important amount of energy. However, the decision of whether this is relevant to legislate is up to the European Commission.
  - E. Senechal (Cetim) is doing comparative work between wet brick test and real food for ovens. He has found very comparable results for conventional electric/gas ovens but not at all for steam-combi ovens.
- B. Tinetti (BIO): Next steps and conclusion. The study should be completed by end of March 2011. Therefore, the final stakeholder meeting will probably take place end of February or beginning of March 2011.

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