



Capacity-Building Programme for the Removal of Barriers to the Cost-Effective Development and Implementation of Energy Efficiency Standards and Labelling in EU Candidate Countries

S&L-EUCC

Data Collection Issues

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Introduction

This list of topics and preliminary questions are intended to solicit an initial sense of the information that is readily available in the market or that can be assembled with a minimum effort (meetings with stakeholders and collection of information available) between this inception mission and the first workshop that will be held in January 2006.

For each major topic area, the experts that should take the lead on the information collection are identified in blue.

There is inevitably an overlap between some of the information suggested in the different categories. To avoid duplication of efforts, it is important that local experts meet regularly to exchange the information gathered. In planning the meeting with different stakeholders, the national experts may prefer to reorganize the following list by stakeholders rather than by major topic area.

Suggested methods and data sources are provided but it is expected that the local experts will complete add to this list of sources from their own knowledge of local stakeholders.

The international consultancy team is available for feedback and further suggestions regarding data collection techniques, upon request. Contact: pbaillar@econolerint.com

Market Distribution Chain

Expert(s): Stakeholders Assessment & Market Study Experts

Suggested approach: Meetings with manufacturers and importers, Interviews with Directors of some distribution outlets, Secondary data research with statistical agencies, discussions with the Ministry of Industry and/or Ministry of Commerce, etc.

- End Goal: Understand what is sold to whom. How does the product flow from manufacturers to end-users? Directly, through many intermediaries (wholesalers, retailers, large buyers, organized at national or European levels)? In which context (EU, national policy, environmental NGO and consumer associations)? What are the motivations (positive and negative) for each operator?
- The flow of product through this distribution chain (and percentage of sales for each channel) should be known for all targeted appliance product groups (and sub-groups of products).
- Are there leading operators able to influence and introduce market shifts (leading manufacturers, retailers, large buyers, institutions)?
- Degree of Market Competitiveness (at manufacturer, wholesaler and retailer levels): low, high, on prices, on quality, on a given image...
- Number and size of market operators (more on that later).
- Second-hand market: importance, organization (workshops to fix old appliances?), difference in prices, services.

Products

Expert(s): Stakeholders Assessment & Market Study Experts

Suggested method: Interviews with manufacturers, importers, wholesalers, or distributors. Meetings with the Ministry of Industry for local manufacturers. Trade Data and statistics on imported products.

- Market data:
 - number of products sold, differentiating:
 - Sales per sub-group (one-door / two-door fridges etc), according to the categories identified in the EU label directives*
 - Sales per Energy label classes
 - Sales per brand / manufacturer
 - type of products: national feature preferences and product trends (e.g. cold appliances with a top or bottom freezer, typical sizes or capacities, market moving towards bigger volumes, frost free, etc.)
 - free standing versus built-in models
 - energy efficiency
 - price, price compared to consumer salaries, price differences between energy class
 - typical product lifetimes
 - unique national specificities (e.g. special plug, special habits)

Most important product categories differentiated in the EU label directives:

- Refrigerators:
 - Small one-door refrigerators, no freezer compartment
 - Small one-door refrigerators, with freezer compartment
 - Two-door refrigerators / freezers, with 4-star freezer compartment
 - Two-door refrigerator / freezers, with other 0 to 3-star freezer compartment
 - Upright freezer
 - Chest freezer
 - Other
- Washing machines:
 - Capacity 3 kg or lower, and spin speed max 600 rpm
 - Washer-dryers
 - Other ('normal machines')
- Dish washers:
 - Capacity max 9 standard place settings (typically 45 cm wide)
 - Capacity 10 standard place settings or more (typically 60 cm wide)
- Air conditioners
 - Air-cooled packaged units, cooling only
 - Air-cooled split or multi-split units, cooling only
 - Water-cooled packaged units, cooling only
 - Water-cooled split or multi-split units, cooling only
 - Air-conditioners with resistance heating mode
 - Air-conditioners with reverse cycle heating mode
- Ovens (NB electric ovens only):
 - Small (volume 12 to 35 l)
 - Medium (volume 35 to 65 l)
 - Large (volume above 65 l)

NB. Some categories have been adapted to reflect typical product markets

Manufacturers

Expert(s): Stakeholders Assessment & Market Study Experts

Suggested method: Interviews with manufacturers (obtain brochures of products and marketing material used). Data from the Ministry of Industry.

- What is the list of local manufacturers?
 - Are they associated with any international group?
 - Are they fully integrated manufacturers or just assemblers?
 - What do they manufacture, and where do they sell it?
 - How many local manufacturers export at least some of their products to other countries?
 - For the ones that export their product. Do they comply with standards in the importing country?
 - What is their current annual production?
 - Do they have a future plan for expansion or reduction of their production level?
 - Is there some industry that is known to manufacture low efficiency equipment and where jobs could be at risk if they cannot adapt to the new regulation? (Could be linked later with a project component or counterpart support to avoid negative backlash in the market from the new regulation)
 - Supported by state aid?
- Assessment of the manufacturers' future market relevance by the Ministry of Commerce
- What is the list of foreign manufacturers present in the market?
- Brands available at national level, grouped by manufacturers
- Share of imported products and from where are these imports coming?
- Marketing policy for the manufacturers in general and for each brand (crucial: what are the criteria put forward?), through which communication channels
- What is the market share of local manufacturer and importers in the total appliances sold in the market?
- Relationship between importers and manufacturers (freedom of the importer to choose products they want to import in the manufacturer product range or restriction imposed by manufacturers on the type of product they can import).
- Who produces retailers' brands, what are these appliances' characteristics?
- Existing contacts with national union or individual manufacturers and importers (what is their position towards efficient appliances, governmental programs). Quality of these contacts
- Within a manufacturing group, do R&D and marketing departments collaborate to introduce new products or is one of the group more prominent in the discussion? (Note: this point could be assessed later while we understand better the inner working of each manufacturer organization)

Specific questions for the Ministry of Commerce

- What is the financial strength of the various manufacturers?
- Do they have modern plants or old facilities?

- Will manufacturers have difficulties producing higher efficiency equipment? Which ones are most likely to be affected by the introduction of a labeling and MEPS program?
- Is there a projection on how the EU accession may affect their operations? Can the reduction in custom duties cause some of the assembly plants to disappear?

Expert: Verification and enforcement capacities assessments

- Do manufacturers have their own testing facility (see the separate list of questions about the laboratory)?
- What is their reaction to the future introduction of labeling and standard programs?

Retailers

Expert(s): Stakeholders Assessment & Market Study Experts

Suggested approach: Meetings with Ministry of Commerce, Custom and Excise, interviews with large retailers, secondary data from the statistics agency.

- Type of retailers and share of products sold by each type: retailers chain (how many stores), group of independent retailers, independent retailers, general hypermarkets, mail order companies, department stores, kitchen specialists, state shops, utility shops, furniture shops, SME working on electrical installations, others.
- For each type of retailer: main focus, position regarding energy efficiency, influence on the market
- Size of shops (wide or narrow choice presented)
- Identify a short list of five to ten largest retailers
- Relationship between retailers: Do they have a union (if yes, what does it do?) What do they primarily compete on (price, image differentiation, etc.)?
- Relationship with government and institutions (seeking information, pushing for rebates)
- What is the importance of internet sales?
- What is their knowledge about the energy label (have they been consulted, do they need general information on regulations?)
- Rate of compliance in shops (both parts, only manufacturers' part, nothing)
- Are shops more "red" (meaning they have on display mostly inefficient equipment) or "green" (meaning they offer a good choice of efficient product)? Is there a risk that retailers choosing to comply with regulations have a negative reaction to the introduction of label because their stock is low efficiency only?
- Range of products proposed in shops
 - who decides on the range proposed in shops (centralized)?
 - how many ranges introduced by year?
 - routine or tight negotiations with suppliers (chances to introduce changes)
 - bargaining practices

- Salesmen:
 - role
 - typical profile (age, education)
 - turnover
 - how are they paid?
 - how are they trained?
- Publicity: how is it organized?
 - at the retail shops and/or at manufacturers' level?
 - commercials: TV, newspapers, radio? On what themes?
- After-sales services' organization (through retailers or manufacturers)
- Stock management

Questions for Custom and Excise agency:

- Duties on imports by class of products
- Trans-border shopping to avoid taxes, duties, regulations?
- Controls over smuggling of restricted or taxable goods?

Buyers

Expert(s): Stakeholders Assessment & Market Study Experts

Suggested approach: Meetings with large buyers, retailers

Note: Distinguish between individual end-users and large buyers, if any

- Presence of institutional and/or large buyers (bulk-buying for themselves or their clients, influencing the market). Who are they? What are their motivations? Do they have routines? Do they want specific appliances (collective washing rooms)?
- What is the importance to buyers of information before buying?
 - on what issues?
 - using which means?
- When do people buy (new equipment, retrofitting, emergency replacement after the old one has broken, as a sign of wealth or status, etc.)?
- When buying, what is the rank ordering of selection criteria: price, brand, energy efficiency, technology, quality, country of origin, after sales services, etc.
- How is consumption perceived in general, relating to white goods (Better life? Would prefer to buy a brown good? etc.)

Utility & GHG emissions factors

Expert: Market Study and Stakeholders Assessments

Suggested approach: Meetings with the Ministry in charge of the electricity sector. Meetings with utility(ies). Meetings with the designated national authority (DNA) for the CDM mechanism of Kyoto protocol.

- Utility: Market fully open? Unbundled?
- Are there one or several utilities that produce electricity in the country?
- Existence of a strong State company?
- Utilities interested in energy efficiency (DSM)?
- Existence of showrooms with appliances?
- Electricity prices
- Electricity pricing philosophy
- History of energy price evolution in the last three years
- Forecast for energy increase in the short or medium term?
- Is electricity price subsidized for residential? Commercial?
- Obtain the utility annual reports for the last three years
- Obtain the utility production reports for the last three years
- Obtain the long-term production equipment addition plan
- Obtain the projected Long Run Marginal Cost (LRMC) for electricity produced in the future
- If not in the annual production report, identify the following information:
 - List of plants and their capacities
 - Annual output and fuel input with types of fuel
 - Or: Efficiency and input or Efficiency with output
 - Distribution losses
 - Non-technical losses (theft of power)
- Forecast
 - Forecast study for future production including quantity of energy produced by plant.

Test appliances' Laboratory

Expert: Verification and Enforcement Capacities Assessments

Suggested approach: This set of questions can be addressed to independent laboratories or to manufacturers of appliances that have their own testing facility.

- Government activities (incl. cooperation with other governments)
- Existence of an internationally accredited Standardization Body
- Membership level in ISO/IEC/CEN/CENELEC?
- Existence of a compliance-checking program for EE products
- Existence of accredited and non-accredited testing laboratories (at regional level)
- Existence of a procedure regarding manufacturers' self-declaration?
- Are there laboratories in the country that can perform appliance testing?
- If yes, what are the types of equipment that can be tested?
- Existence of a compliance-checking program for EE products
- Are they using ISO or EN test standards or national adaptation of ISO test standards to test the equipment?
- Are they familiar with the test codes of conduct (for refrigerators/freezers, washing machines) that have been agreed between EU appliance manufacturers and the European Commission?
- What is the cost for testing each category of appliance?
- Does your test facility have some type of internationally recognized accreditation?

Questions for manufacturers only:

- If you don't have testing facilities? How do you perform appliance testing if any?
- Do you provide services to other organizations to test equipment? Are you interested to do so?

Question for the electrical and gas safety organization:

- safety requirements for electrical and gas fired products
- national or international safety standards that are accepted or followed
- which authority checks for compliance or deals with fatalities due to electrical or fuel-fired equipment
- is there a safety testing authority?

Testing procedures

Expert: [Verification and Enforcement Capacities Assessments](#)

- Who is responsible for the transposition of international testing procedures of equipment in the country?
- Have some of the ISO or EN test standards for appliances already been translated into national standards? If yes, which ones?

Baseline establishment

Expert: [Market Study & Stakeholders Assessments](#)

- What type of information is available from the statistical agency about the current stock of equipment? Number of dwellings? Type of appliances owned?
- What type of information is available from the Utility planning department; information about the number of customers residential and commercial, saturation rate for appliances, market study for residential energy usage and equipment, evaluation of end usage by type of equipment, forecast for the evolution of equipment penetration and the number of dwellings, etc.
- What information is available from the Ministry of Energy or from the energy efficiency agency (check for the same type of information mentioned in the two previous questions)?
- Availability of aggregated data on energy consumption and energy cost data for residential and (small) commercial customers, from the utility (energy distribution company).

Policy makers

Expert: [Policy, Legal and Institutional Assessments](#)

Transposition of directives

Suggested approach: Questions for the Ministry in charge of product policies, and for the national energy agency

- What is the legal basis for the transposition of the energy labeling legislation in the European countries and its main provisions? (laws, other acts or regulations)
- Are the EU labeling directives mentioned in national legislation? Is there any obligation for the compliance with them?
- Are there any obstacles/limitations for the full transposition of framework directive and all implementing directives?
- In which legal form is or will be the framework directive 92/75/EEC transposed? (separate act, ordinance, other legislation)
- In which legal form the implementing directives were or will be transposed?
- How are national regulations for transposing framework directive and implementing directives connected?
- In which legal form is or will be the Energy Star regulation 2422/2001/EC transposed? (separate act, ordinance, other legislation)
- Are the norms for performance measurement procedures adopted by the countries? (EN 153, EN 60456 etc.).

Policy measures to foster implementation of directives

Expert: Policy, Legal and Institutional Assessments and Verification and Enforcement Capacities Assessments

Suggested approach: Questions for the Ministry in charge of product policies, and for the national energy agency.

- Which institutions (Ministries, etc.) are involved in implementation of the labeling scheme and how? (Which Ministry has the main responsibilities, which institutions shall be in charge of inspecting, etc.?)
- Which legal instruments for the enforcement of labeling are expected? (penalties, etc.)
- What if any financial instruments have been considered for the endorsement of products complying with standards or label classes? Which ones have been introduced?
- What if any financial instruments have been considered to support (national) manufacturers or retailers of products complying with standards or label classes? Which ones have been introduced?
- What is the present status of the implementation? Which appliances are targeted first? What can you say about the time frame for the completion of the adoption, including plans for adoption of test standards (if needed) and the assignment of institutions for verification and enforcement duties?
- Other types of appliance testing (security, electrical code compliance):
 - Who is responsible for these tests?
 - How many human resources are involved in this task?
 - How many days per year are allocated to this specific task?
 - Is there any budget for appliance testing that has been approved?
 - What is the total budget for equipment testing in the Ministry of Commerce? What is the current usage of this budget? Is there a part of this budget envelope that can be used in the future for the verification of conformity of appliances?

Background

Expert: Stakeholders Assessment

- Quick history of energy efficiency (theme known or not, appreciated or linked to past 50 years, any changes since 1990s, etc.)
Regulations: compliance, supposed compliance (labelling, Eco-label, Energy Star, WEEE...)
- Existing schemes and programmes supporting energy efficiency, GHG reduction or the appliance sector as a whole
- What issues could motivate all stakeholders to participate in a Market Transformation program (compliance with regulations, cost reduction, image differentiation, environment, training, etc.)
- Program carrier:
- Existence of a famous institution to act as a potential MT guarantee?
- Existence of potential supporters (e.g., consumer groups?)
- Flexibility and timing (different approaches between market operators and administrations).