Annex 2: Product Fact Sheets

This Annex contains fact sheets on each of the product types covered in this report:

Household appliances
- Refrigerators and freezers
- Clothes washers
- Clothes dryers
- Dishwashers

Lighting products
- Compact fluorescent lamps (CFLs)
- Lamp / Filament directional lamps
- Lamp / Filament non-directional lamps
- Ballast/ HID
- Lamp / HID
- Ballast / Linear fluorescent
- Lamp / Linear fluorescent

Consumer electronics (CE) & Information and Communications Technology (ICT) equipment
- CE: Televisions
- CE: Displays
- CE: Digital television decoders (Set top boxes)
- CE: Audio
- ICT: Computers, games consoles and servers
- ICT: Imaging equipment
- ICT: Power supplies

Air conditioning
- Central (ducted) air conditioning
- Room air conditioners
- Chillers

Space and water heating
- Central heating boiler
- Central heating furnaces
- Other space heaters
- Industrial boilers
- Water heaters and storage tanks

Commercial refrigeration equipment

- Reach-in coolers
- Refrigerated vending machines
- Walk-in cold rooms

Cooking products

- Residential cooking appliances
- Commercial cooking appliances
- Coffee makers

Motors, pumps and fans

- Motors
- Pumps
- Fans

Transformers

- Distribution transformers

Miscellaneous products

- Commercial laundry appliances
- Medical imaging equipment

Contents of the product fact sheets

The product fact sheets in this annex differ in length and level of detail given the diversity of the products, the MEPS, labels and test procedures supporting them and the information available for each product area. They each, however, include the following sections:

- An overview table by country including MEPS, high label, S&L metric, test procedure, reference procedure and metric, test procedure conversion factors, energy performance metric conversion factors and notes;

- A description of the products covered;

- An overview of the global situation with regards to S&L for the product category;

- A general description of conversion for test procedures and metrics/ efficiency metrics and standards;

- Notes and assumptions; and

- A list of sources.

Conversion factors and reliability

Two types of conversion factors are listed in the tables in each Product Fact Sheet: test procedure conversion factors and energy performance metric conversion factors. The former (test procedures conversion factors) are the numbers by which the result from the test procedure (the regional test

procedure) should be multiplied in order to convert it to the reference test procedure (which is often an international standard but not always). The latter (energy performance metric conversion factors) is often the same as the former (test procedure conversion factors). It is the number by which the result from the national energy performance metric should be multiplied in order to convert it to the reference test procedure. The test procedures that the conversion factors refer to are identified in bold in the tables.

As mentioned in the report, these conversion factors are not intended to be used for conversions on an individual product (model by model) basis but rather for representative conversions between product types at a national level. Some product types have significantly different requirements for sub-types, in which conversions need to be derived for representative sub-types. Although this approach is a fair approximation of an average conversion for the product type overall, as intended with this study, it does not necessarily mean that this also provides an accurate conversion for individual models or all sub-types of products.

Given the possibility of widely diverging levels of reliability for conversion factors, the expert team evaluated the reliability of the conversion factors developed. As well as documenting potential issues with conversion factors, a traffic light system was used to clearly indicate how reliable the factors were for high-level comparisons of high volumes of products (not for individual products). Conversion factors were coded as follows:

- Green indicates a high level of confidence in the conversion factor. Converted results would be in the right ballpark, with expert assumption that results are within 10% of the indicated value.
- Amber indicates a medium level of confidence in the conversion factor. Converted results would broadly be in the right ballpark, with the potential for substantial outliers and the margin of error is larger. Expert assumption is that results are within 25% of the indicated value.
- Red indicates unreliable conversion factors. Converted results would be better than nothing, but may be substantially off. Expert assumption that results could be more than 25% from the indicated value.
- In several cases, conversion factors are listed as not applicable (N/A), indicating there is insufficient information even for unreliable conversion factors.