EDITION 3 / JULY 2009

LoadDown

THE STANDBY POWER NEWSLETTER

4E Efficient Electrical End-Use Equipment International Energy Agency

ASIA-PACIFIC PARTNERSHIP
BUILDING AND APPLIANCE TASKFORCE

***Load Down* is published under the auspices of the Australian Equipment Energy Efficiency Committee. This newsletter is also supported by the International Energy Agency 4E Implementing Agreement and the Asia Pacific Partnership for Clean Development and Climate.**

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This edition of *Load Down* includes an update on the EU regulations, a report on the outcomes of the Washington Standby Workshop, a look at Australia's new mandatory program and a look at the latest data from Australia.

EU Regulations: How will it impact on your product?

Since the last edition, the details of the EU regulations regarding the Eco-design Directive (Directive 2005/32/EC) have been confirmed. The regulation for electronic household and office equipment was passed in December 2009 with the details set out in the Commission Regulation (EC) No. 1275/2008. This was followed in February by Commission Regulation (EC) No 107/2009 covering simple set top boxes and in April by Commission Regulation (EC) No 278/2009 for External power supplies. Details of these regulations can be found at http://ec.europa.eu/energy/efficiency/ecodesign/legislation_en.htm.

Last edition we incorrectly reported that these regulations would only apply to new products to market. However, the details regarding implementation indicate the standards in the directive must be met as part of the CE Marking process; therefore any product being sold in the EU will have to meet the new standards. More details relating to the CE mark can be found at http://ec.europa.eu/enterprise/faq/ce-mark.htm. Phase 1 of the regulations begins 7 January 2010 with phase 2 scheduled to commence in 2013.

EU

Latest Updates....

- Regulation is included in CE marking requirement thus all products for sale must meet the standards.

Phase 1 Begins:

- 7 Jan 2010 for electronic household and office equipment
- 25 Feb 2010 for Simple Set Top Boxes
- 27 April 2010 for External Power Supplies

In this Issue

Washington Workshop Outcomes

The USA hosted a standby power workshop in October 2008 which involved 21 participants from Asia, Australia, Europe and North America. The group included standby practitioners, industry representatives and government policy officers, all keen to investigate positive and effective policy options for reducing standby power. Participants learnt about the situation and issues unique to each participating country as well as the potential for common policy measures which could be implemented by all countries. As well as exchanging ideas, the group ventured out to experience first hand the collection of standby data in a retail store.

The workshop successfully gained broad agreement to facilitate further work in the standby power area. Importantly consensus agreement was reached on several key issues.

- The importance of holding annual workshops to further expert dialogue and continue the exchange of information:
- The initiation of an investigation into networked systems. This project would aim to assist stakeholders understand and define the nature of this development. Particularly to assist suppliers to introduce cost-effective power management solutions within networks, and ensure network architecture allows for products to power down when not in use.
- Launch a study into the impact sensing equipment will have on standby power and policy.
- Maintain up to date communication utilising the website www.energyrating.gov.au and by contributing to and aiding the distribution of “Load Down” the standby newsletter.

Store measurements on stereos at Best Buy in Washington

- Publish country and regional benchmark reports together with international comparisons at appropriate times (as has been done by the US based trade association, the Consumer Electronics Association).
- Work collaboratively on projects that may help align standby power practices: such as proposals and ideas for submission to the APP and 4E about measures to expand efforts to curb excessive standby power growth.
- Agitate to improve current data collection efforts to better understand the key drivers for standby power and to include all available data sources to inform debates (to report using not only in-store collected data from countries but also information supplied by manufacturers and data available to government agencies.
- Clarify recommendations about ownership of collected data and agree to the process and commitments required to allow data sharing arrangements to proceed.
- Investigate initiating a project that specifically compares and contrasts standby policies with impact assessments prepared by participating countries:

In summary the workshop called on all stakeholders to align policies and intervention measures so as to maximise consumer benefit, minimise industry compliance costs and otherwise support viable long term climate mitigation action.

Australia's Mandatory program

The Australia standby program is currently being reviewed with the various State and federal bodies' discussing possible future legislation. Currently up for debate is the introduction of mandatory levels for most electrical products beginning in 2013 in alignment with the new European regulations.

The key features of the proposal include that all products are covered unless given an exemption i.e. the proposed regulation does not list products that are to be covered by the regulation but rather lists those excluded from the process. Not only does this allow for a sweeping coverage of the vast majority of products it also takes into account the pace at which products come and go from the market; thereby making the regulation applicable to products not yet thought of but which may dominate the marketplace by 2013.

Under Australia's proposed standard the levels of power consumption allowed will be determined by the function a product is performing rather than by product type. Again this allows the flexibility that the proposal will cover any new products as well as providing equity across product ranges by taking into account the amenity provided to consumers by appliances with different features. The main distinction is an extra allowance for those products which are providing information or status display as distinct from those that only have a reactivation function. It is anticipated that Australia's proposed regulations would come into force in 2013 with reactivation mode required to consume no more than 0.5W and display mode to consume no more than 1.0W.

Australia's proposed standard is also likely to have a power management requirement. Many electronic products sit in a state awaiting instruction from the consumer both prior to beginning their function or at the completion of their task. In this state power consumption is often considerably more than when in standby or off mode. The length of time in this mode is mostly determined by consumer behaviour. To minimise the impact of this unnecessary consumption the regulations require all products to build in an auto power down feature which will place the product into either standby or off mode after a period of inactivity. It has been recommended that the power management mode must be activated as a factory default setting

Finally Australia's proposed standard would require that all products have a standby or off mode. This prevents manufacturers from bypassing the regulations by eliminating this function from a product.

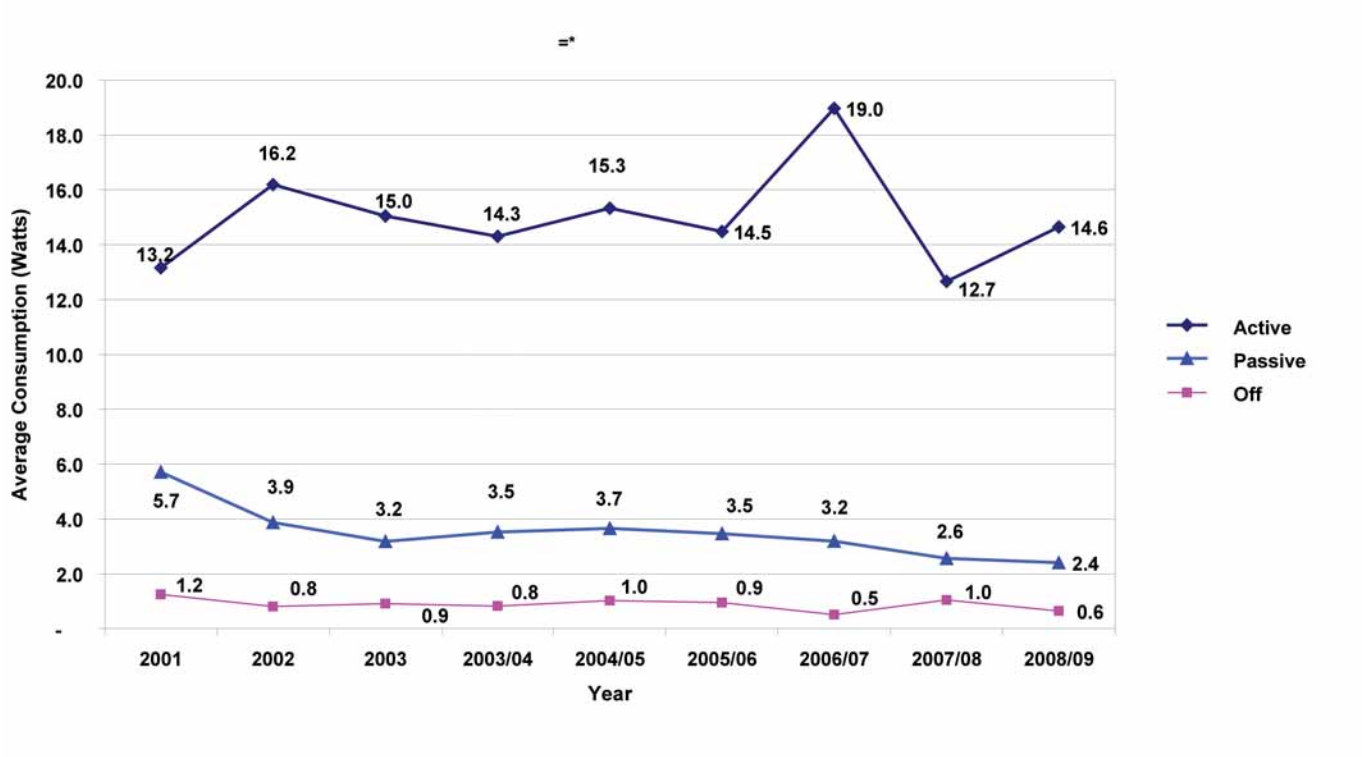
Results from Australia's latest Store Survey

The latest Australian store survey measured 523 new household appliances at retail outlets between July 2008 and May 2009. The results indicate a downward trend for average passive standby mode, with consumption across all products below 3 watts for a second year. The 2008/09 result for average passive standby was 2.4 watts substantiating the previous year's result of 2.6 watts. Figure 1 demonstrates that prior to 2007/08 average passive standby had always been greater than 3 watts. Additionally seven product groups are showing indications that average consumption in this mode is decreasing. Six product groups achieved average passive consumption below one watt.

LCD and Plasma televisions consolidated the downward trend in passive standby with products in both categories recording an average passive standby result below 0.5 watts. Microwave Ovens also continued to show a movement downwards however average passive standby is still at 2.4 watts. Likewise integrated stereos had a 3.1 watts average passive standby which is an improvement on previous results but still a long way from 1 watt.

Active (idle) mode and off mode results remained stable with no significant changes from the results of previous surveys. In off mode 17 product types had average consumption less than one watt. In active mode 28% of products tested consume

Figure 1 – Summary of average consumption across all products



more than 20 watts while sitting idle. In addition to this over 54% of appliances with passive standby consume more than 1 watt, however most of this consumption is less than 5 watts. In off mode 25% of appliances consumed more than 1 watt however less than 2% was greater than 5 watts.

For the products measured, there was generally a wide variance in power consumption in off mode and passive standby mode without any difference in performance or functionality between these products. This suggests that there are still substantial opportunities for manufacturers to reduce standby power consumption, probably at low marginal cost.

A copy of the survey report, *Appliance Standby Power Consumption: Store Survey 2008/2009 Overview of Results* will be posted on the website www.energyrating.gov.au

Next Edition.....

- **Canadian Update**
- **IEC Test Method**
- **Problems with a Horizontal Approach**

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