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# **Standby Power Projects in the Asia-Pacific Region**

and the

## **Asia-Pacific Partnership on Clean Development and Climate**

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**April 2008, New Delhi, India**



## World Context

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- Standby was first identified over 20 years ago (although it has been around for longer)
- Meier was one of the first to bring this up in the international arena
- IEA developed 1 Watt plan – started collaboration
- Several countries measured residential standby, although data is far from comprehensive
- Values per household range from 35W to 110W (differences in what is included)
- Standby could be as much as 10% of residential electricity in IEA countries
- Data for the commercial sector is very poor



## Introduction - Overview

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- Standby has been on the international energy policy agenda for over 10 years, yet the problem has continued to grow despite the efforts of policy makers
- There has been much discussion – it is time now for substantive action
- IEA call for a 1 Watt limit on standby in 1999 has generated positive program measures in a number of countries
- Standby is now an important element of programs in the IEA, APP, APEC and also in Europe through the EuP studies and actions have been endorsed by the G8 and CSD



## Introduction - Overview

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- A 1 Watt approach has been adopted by countries including Korea, Australia and Taiwan
- The range of policy approaches is currently diverse - these include mandatory limits, voluntary targets and codes of conduct, information, declaration of standby energy with on mode energy consumption (to give total product energy – vertical approach), warning labels for products with poor standby, Energy Star for products with low (good) standby (some products only), databases and government procurement on low standby (USA, Korea and China)



## Introduction - Overview

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- We need to build on this groundswell
- BUT, given the global nature of the problem, it is critical that we work together to avoid duplication, overlap and the dissipation of scarce resources through disparate action
- There is a danger of a proliferation of approaches – this could create confusion in the market, dilute effectiveness and make compliance difficult
- International cooperation on measures to address standby is critical
- This presentation outlines the key elements of growing international cooperation



## Key Elements

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The main elements of international cooperation are:

- **DATA:** understanding what is happening:
  - Functions and features of new products
  - Tracking standby trends over time
  - International comparisons, brand comparisons
  - Understanding consumer interaction issues
  - Investigate technical options to reduce standby, best practice technology and designs
- **POLICIES:** measures to reduce standby
  - Technical basis for accurately measuring standby
  - Development and implementation of effective policy measures



## Data Issues

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- Surprisingly, information on standby around the globe is very patchy
- Most countries have some data on product ownership trends, but many products with standby are not covered
- Few countries measure the standby attributes of new products
- Information on duration of different modes is very hard to find – this is required to calculate total energy consumption, which is the most important thing
- Product definitions are constantly changing, as are modes and functions: makes tracking trends over time difficult - home entertainment and ICT are especially hard
- Good data is preferable for good policy decisions - however we need to be pragmatic and act now



## What is APP doing on standby?

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- Under the Buildings and Appliances Task Force (BATF) of APP, the project called ***Alignment of National Standby Power Approaches*** is being lead by Australia (Korea as co-leader)
- Project objectives include:
  - Promote 1 Watt aspirational target
  - Develop common policies to address standby – move towards global alignment
  - Improve information through improved data collection: basket of products project
  - Contribute to the development of the international test method IEC62301, promote its widespread use





## Basket of Products

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- Through APP, Australia is pushing an international standby data collection project titled “basket of products”
- Objective is to get a representative set of standby measurements on a common set of products in different regions and countries around the world
- This will facilitate international comparisons and allow trends in standby to be tracked over time
- All countries are invited to participate



## Basket of Products

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- Standardised data collection instrument provided
- Detailed instructions on information to record and likely modes encountered is provided – technical support available
- Data will be pooled and will be available for download by registered users
- International comparisons are available online
- Core products include: clothes washers, microwaves, televisions, DVDs, integrated and portable stereos, computer monitors, printers, MFDs
- See [www.energyrating.gov.au/standbydata](http://www.energyrating.gov.au/standbydata) for details



## An Accurate Test Method

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- An accurate test procedure is a key foundation to any energy program (voluntary or mandatory)
- Australia has been actively participating in and supporting the development of IEC62301
- All countries are strongly encouraged to use this test method as the primary basis for their standby programs
- We will hear more about the latest developments later in the conference



# IEA Implementation Agreement

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- Arising out of earlier G8 initiatives, the IEA has offered to form a dedicated Energy Efficiency Implementing Agreement
- Standby is proposed as one of the already agreed 5 Annexes (projects)
- Australia is leading the standby project
- Project budget is planned to be 1 m Euros
- Project duration is 5 years to 2013
- Aim is to coordinate activities in support of reduced standby, collection and dissemination of information



# IEA Implementation Agreement

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The implementing agreement has 2 main streams

- Stream 1: Support for policies to tackle standby power
  - Identify key generic functions and track trends
  - Examine horizontal approaches to standby
  - Identify acceptable power consumption levels by function
  - Differentiate between horizontal measures and where vertical measures may be more relevant
  - Communicate with policy makes
  - Support test method development
  - Promote power management features
  - Investigate options for networked appliances



# IEA Implementation Agreement

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- Stream 2: Information collection and dissemination
  - Encourage countries to collect data for an agreed core group of globally traded products
  - Hold regional workshops, promote the collection of data, offer training as required
  - Collate and publish national, regional and global information, including standby trends
  - Maintaining information on national assessment studies, provide guidance on how to conduct such studies
  - Research and publish guidelines on methodologies for assessment of standby power consumption



## A coherent international approach

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- A policy approach for standby needs to be developed that overcomes the following shortfalls:
- continual changes in product definitions, splitting and merging of traditional product types, new products types appearing;
  - changes in product features and functionality;
  - covers all relevant modes of interest (rarely a single mode, or the lowest mode only, is of interest);
  - setting technically advanced but achievable targets at a product or even model level



## Conclusions

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- Standby power is significant and is probably growing
- Information is poor but we need policies to redress this issue now
- International “Basket of Products” approach will help fill many of the data gaps
- There is a need for a policy approach that is effective, pragmatic but low risk – there are currently a diverse range of policy approaches, this may dilute efforts
- Work under way through APP and the IEA Energy Efficiency Implementing Agreement has the potential to foster international cooperation and the facilitate the development of common approaches to address standby





# The end

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Thank you