



# Standby Power and the IEA

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# Why consider Standby

- Standby globally power consumes up to 480 TWh each year
  - ◆ = *more than total electricity used in France*
- Most of this provides no useful function!
- Savings potential  $\approx$  300 TWh
  - ◆ = *total electricity consumption in Italy*



# 1-Watt target

**All countries harmonise energy policies to reduce standby power use to 1-Watt or less per device by 2010:**

*G8 2005 committed to:*

*“promoting the application of the IEA’s 1 Watt Initiative”*



# What policies have been implemented?

		1-Watt target	Voluntary Agreement	Label	Database	Government Procurement	Regulation	Other
IEA: Asia-Pacific	Japan		■	■			■	
	Korea	■		■		■	□	■
	Taiwan	■	■	■				
	Aus/NZ	■	■	■	■		□	
IEA: North America	USA	■		■	■	■	□	
	California				■		■	
	Canada			■	■		□	
IEA: Europe	EU		■	■	■		□	
	GEEA			■	■			
	Germany			■	■			
	Nordic Countries			■	■			
	Denmark		■		■			
Plus 5	Brazil							
	China			■		□	□	
	India							
	Mexico							
	South Africa							

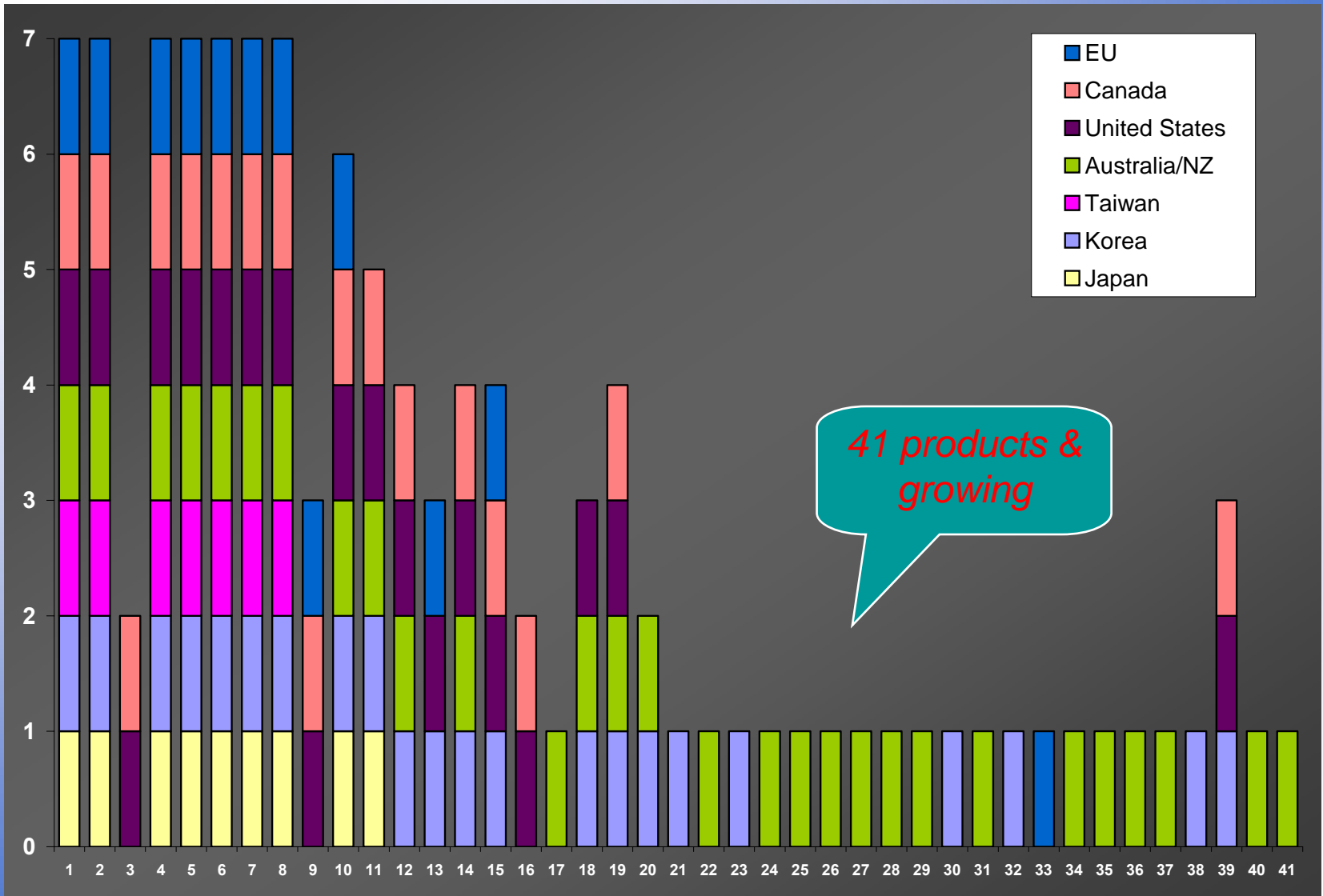
## Legend

■ Current

□ Under consideration



# The third dimension





# Where have we got in 2007?

- High policy profile for Standby
- Widescale use of IEC 62301 (test method)
- Experience with a range of policy tools
- Policies in most developed countries
  - ◆ Mostly voluntary labels
  - ◆ Prospect of more regulations, currently few examples
  - ◆ Standby requirements part of wider energy efficiency regulations – increasing
- Many products not covered
  - ◆ Problems with emerging products
  - ◆ Poor coverage in developing countries

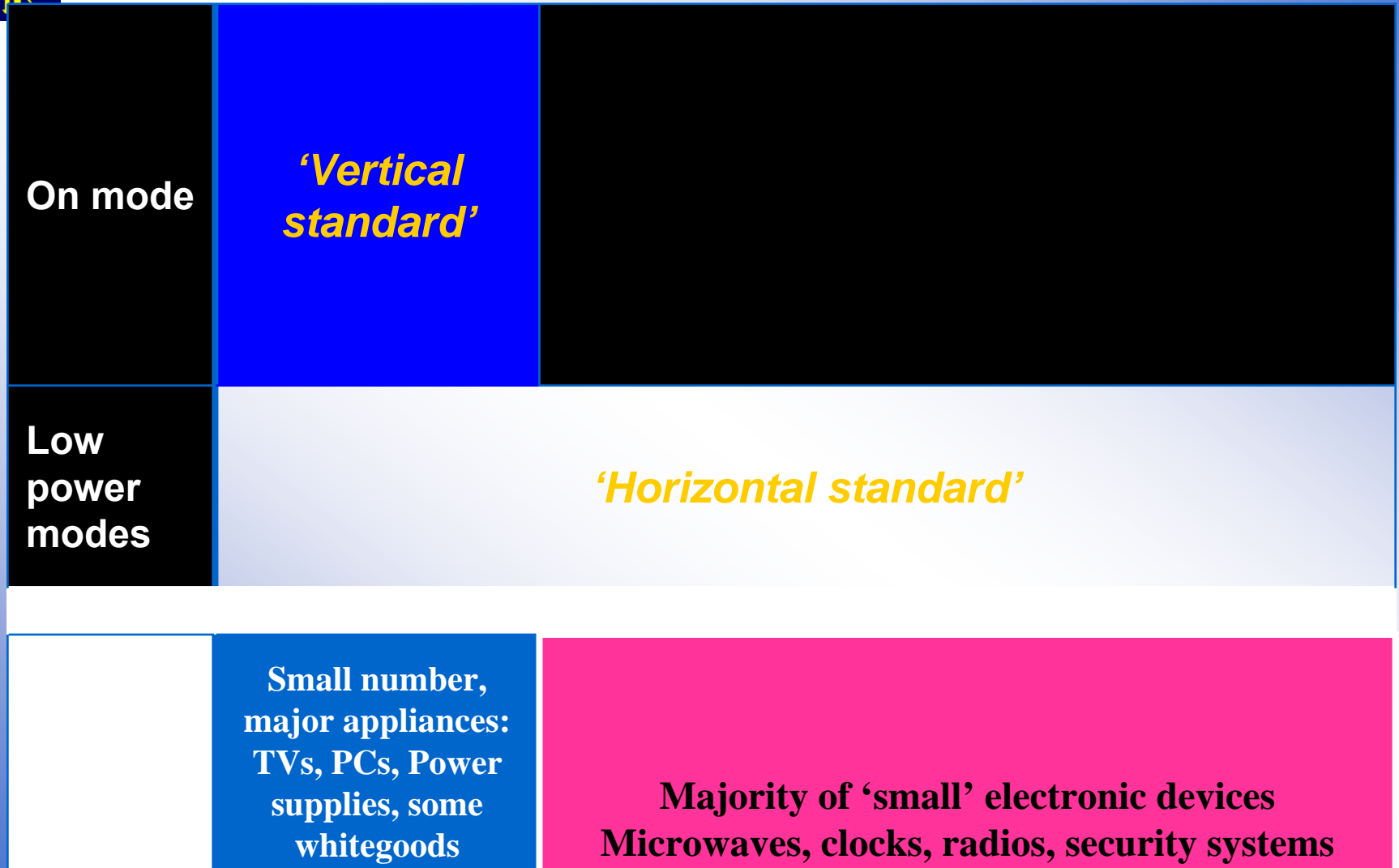


# What have we learnt?

- Large no. of devices have standby power
- Standby falling for many products
- Need auto-power down function
- Growth in low-power modes (incl. standby)
- Significant energy consumption due to *proliferation of products*, NOT individual consumption
- Electronic devices have quick development time, and are changing frequently
- Difficult/expensive to focus on single devices (except where other modes included)



# Dual Approach Emerging





# Horizontal approach to Standby

- Covers to all products, except those covered by other specifications
  - ◆ *Administratively simpler*
  - ◆ *Allows innovation*
- Australia:
  - ◆ horizontal standby MEPS for entertainment equipment by 2010
  - ◆ All electronic devices by 2012
- EU: eco-design standby
  - ◆ Possible horizontal approach
- Others considering

*Needs a forum for international co-operation and co-ordination*



# IEA Implementing Agreement

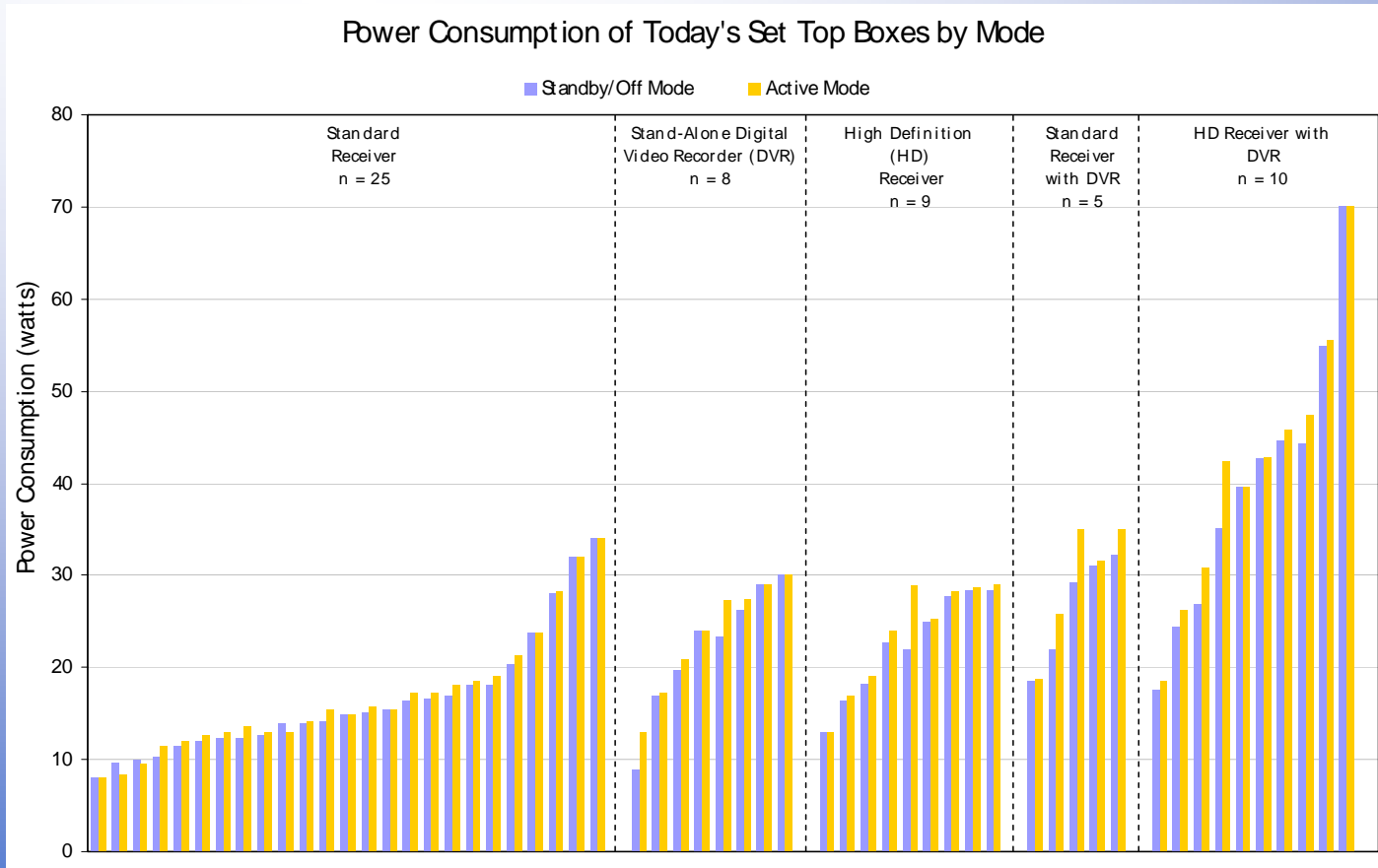
## ● Efficient Electrical End-use Equipment

### ◆ Annex for Standby:

- Track product performance
- Help countries implement horizontal approach:
  - ◆ Define modes by product
  - ◆ Agree exclusions
  - ◆ Deal with new products
  - ◆ Agree interim requirements

# Other Big Issues

- Networked devices
  - ◆ *May never enter Standby mode!*





# Set-top Boxes & Digital Networks

- Networked devices offer:
  - ◆ Increased connectivity
  - ◆ Increased functionality
  - ◆ *But devices always on!*
- *Will power management be forgotten?*
- IEA international workshop
- STB & Digital Networks
  - ◆ 4-6 July 2007, Paris



# Government activities

## ● Procurement:

- ◆ Governments can and should lead by example
- ◆ Computers and peripherals: Govt purchases account for a large % of national sales
- ◆ *Experience suggests that unless mandatory, energy efficient procurement doesn't happen!*



## ● Digital TV:

- ◆ Many govts subsidising STBs to assist digital TV roll-out
- ◆ *Subsidies should be linked to efficient STBs technologies*
- ◆ See US NTIA