

# Standby Power Policy in Korea

- Standby Korea 2010 -

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## Why Standby Power should be reduced?

• Standby power is "leaking electricity"

• Number of products consuming standby power is increasing

• Home networking devices are supposed to be a big enemy to standby (always waiting for network signal, i.e. ever-standby-mode)



### Standby Power Loss in Korea

(Residential Sector Only, KERI, 2003)

Number of household(HH)	15 Million HH	
Number of standby appliances per HH	15.6	
Standby power loss per HH	306 kWh/year	
Total nationwide standby loss	4,600 GWh/year	
Residential standby portion of nationwide electricity use	1.7%	
Nationwide average standby power by total home appliances	520 MW	



## e-Standby Program of Korea

- Core program to reduce standby power
- Implemented since 1999
- Voluntary
- Energy saving mark(Energy Boy)
- Government procurement
- Target products: new product profiles yearly
   (18 products up to 2005)



# Standby Korea 2010

- National Road Map toward 1 Watt or under -

#### Established and declared in 2005

Stage 1 (2005-2007)

**Voluntary 1W Policy** 



Stage 2 (2008-2009)

**Preparation for transition to Mandatory Policy** 



Stage 3 (from 2010)

Mandatory 1W Policy

Mandatory 1W Policy Instrument: MEPS & Warning label or warning word



# **Products Subject to 1W Policy**

#### **♦** Standby Power Consuming Products

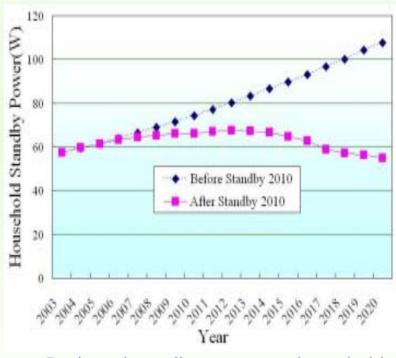
- Consumer Electronics
- : TVs, VCRs, Audios, DVD Players, Set top boxes, Microwave Ovens, Cord/cordless phones
- Office Equipments
- : Computers, Monitors, Printers, Fax machines, Copiers, Scanners, Multifunction devices, Modems, External power supplies(EPS)
- White Goods
- : Washing machines, Dish washers, Fans
- **◆** Products under the focused survey

Home servers, xDSL modems, set top boxes, EPS

## Effect of 1W Policy per Household

### Standby power reduction effect per household

Category	2003	2010	2020
Numbers - Off line product - Network product	15.6 (15.0) (0.6)	21.9 (20.0) (1.9)	35.7 (25.7) (10.0)
Rate of <1W products	22%	40%	80%
Standby power per product	3.7W	3.0W	1.5W
Standby power per household	57W	66W	55W



<Projected standby power per household>

# Nationwide Energy Saving Effect

### **2010**

- Saving 1,100GWh/year
- Accumulated saving: 2,550GWh by 2010
- 530 thousand ton of CO<sub>2</sub>/year

### **2020**

- Saving 6,800GWh/year
- Accumulated saving: 42,000GWh by 2020
- 3.29 million ton of CO<sub>2</sub>/year



### **Comments on the Proposal**

- Necessity of Cooperation in Energy Efficiency and Energy Conservation among East Asian Countries (Japan, Korea, China....)
  - Lacking in information, different implementation system, different economic status
  - Some systematic approach is needed to promote mutual understandings in East Asia as a first step
  - EE Policy development Fund can be a probable solution to promote understandings and even further cooperation in EE between countries
- For the Successful cooperation
  - Build up counterparts in each countries
  - International partnership with Policy + Technical together
  - Concentrate in a field of easier consensus at the beginning