

Republic of Korea

4. e-Standby Program

Office equipment and home appliances are often turned on all day with much shorter time of actual use, thus consuming much electricity in standby mode. Since April 1 1999, 17 products that are widely used in Korea such as computers, monitors, printers, facsimiles, photocopiers, televisions, VCRs are subject to the Energy Saving Label Program which recommends them to be switched to energy-saving mode during standby status.

The Energy Saving Label Program was initiated to popularize energy-saving products that can save standby power under the Article 13 of the Rational Energy Utilization Act and MOCIE Notification "Regulation on Energy-saving Office Equipment & Home Electronics Program" since April 1, 1999. The program intends to save electricity from the source through voluntary production and supply of energy saving products that meet government standards by the manufacturers. In particular, this program is based on Voluntary Agreement between manufacturers and government in which scheme the government recognizes the manufacturers' self test result and manufacturers guarantee the

energy saving of their products. The Energy-saving Label is used as a guarantee to show that the labeled product saves energy. The number of subjected items is 18 including computers, monitors, printers, facsimiles, photocopiers, scanners, multifunction devices, energy-saving and control devices, televisions, audios, DVD players, microwave ovens, mobile phone battery chargers, set top boxes, DC power supply, cordless and fixed-line telephones.

Products with the Energy-Saving Label can save energy up to 30-50% compared to other products. The Korean government is facilitating its widespread use through incentives for energy-saving products such as preferential purchase by the PPS and mandatory use in public institutions.

As of 2003, 92 businesses including Samsung Electronics and LG Electronics have participated in the Energy-Saving Label Program, with 2,973 models registered as energy-saving products and awarded the Label. Details on such products can be found on the Energy Efficiency Program Internet network (<http://www.kemco.or.kr/efficiency>) operated by the KEMCO.

<Status of energy-saving office equipment/home appliance registered items>

As of 2003

Items		Total	
		No. Companies	No. Models
Office Equipment	Computers	22	339
	Monitors	36	786
	Printers	26	437
	Facsimiles	9	56
	Photocopiers	6	63
	Scanners	3	35
	Multifunction devices	11	107
	Energy-saving and Control Devices	9	13
Home Appliances	TV	6	655
	Videos	4	214
	Audios	1	2
	DVD Players	3	10
	Microwave Ovens	3	205
	Mobile Phone Rechargers	8	37
	Set Top Boxes	4	14
Total			2,973

During the first five years of the Energy-Saving Label Program (1999~2003), a total of 59 million units of energy-saving office equipment and home appliances were supplied, contributing to energy savings of 3,891GWh (430 billion Korean Won) and power demand reduction of 1.5 million kW and CO2 emissions

reduction of 510,000 TC. The market share of the products was also very high, reaching 50%.

< Supply Status of the Energy Saving Label Products>

1999	2000	2001	2002	2003	Total (1999~2003)
4.15 million (43%)	8.28 million (66%)	12.53 million (65%)	15.78 million (56%)	18.11 million (56%)	58.8 million

Moreover, with the implementation of the program, standby power consumption was greatly reduced. For example, standby power consumption of TV and videos dropped to 2-3W level in 2003 from 7~10W level in 1999).

< Results of the Energy Saving Label Program (1999~ 2003) >

Unit: Korean Won

Category	Energy		2003				Aggregate Energy Saving (1999~2003)		
	Saving/unit		Energy Saving (C=A×B)				Aggregate Market Supply	Aggregate Savings	Aggregate Savings (Won)
	Saving (A)	%	Market Supply (B)	Market Share	Annual Savings	Annual Savings (Won)			
Computer	81kWh	47%	774,855	30%	62GWh	6.9 billion	5,595,893	453GWh	49.9 billion
Monitor	163kWh	64%	1,503,246	50%	245GWh	27 billion	9,424,439	1,536GWh	169 billion
Printer	113kWh	30%	752,828	40%	85GWh	9.4 billion	4,791,444	541GWh	59.6 billion
Facsimile	181kWh	50%	164,784	40%	30GWh	3.3 billion	670,060	121GWh	13.3 billion
Photo-copier	484kWh	61%	20,382	25%	10GWh	1.1 billion	159,016	77GWh	8.5 billion
Scanner	30kWh	54%	26,072	21%	1GWh	0.1 billion	98,611	3GWh	0.3 billion
Multi-function Devices	1424kWh	60%	301,335	35%	429GWh	47.2 billion	365,271	520GWh	57.2 billion
Energy-saving and Control Device	195kWh	23%	24,316	-	5GWh	0.5 billion	1,097,551	214GWh	23.5 billion
TV	25kWh	10%	2,313,603	85%	57GWh	6.3 billion	8,836,987	221GWh	24.3 billion
Video	37kWh	60%	352,945	87%	13GWh	1.4 billion	2,691,432	100GWh	11 billion
Audio	36kWh	17%	-	-	-	-	-	-	-
DVD Player	37kWh	57%	50,061	10%	2GWh	0.2 billion	55,061	2GWh	0.2 billion

Microwave Oven	15kWh	24%	830,244	93%	12GWh	1.3 billion	2,238,507	34GWh	3.7 billion
Mobile Phone Battery Charger	3kWh	24%	10,948,856	61%	28GWh	3 billion	22,742,357	68GWh	7.5 billion
Set-top Box	63kWh	22%	42,350	6%	3GWh	0.3 billion	42,350	3GWh	0.3 billion
Total			18,105,877	56%	982GWh	108 billion	58,808,979	3,891GWh	428 billion

N.B. power rate : 110 Korean Won/kWh

5. The Energy-Saving Label

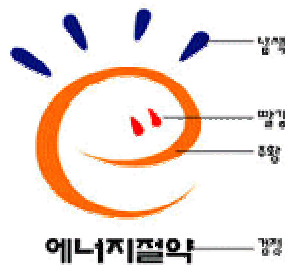
The Energy-Saving Label was proposed by ? The National Energy-Saving Promotion Committee? on May 27, 1998 and the design was finalized through a contest to promote the widespread use of energy saving products and to publicize the rational use of energy project. The Energy-Saving Label can be used by certified products, companies or organizations, and its use is limited to those with authority in energy saving.

< Explanation of the Energy-Saving Label >



The Energy Saving Label is nicknamed as 'Energy Boy' with which all the people, from children to seniors are familiar and can be aware of the necessity of the energy saving. It is a graphic depiction of the letter 'e' for energy and expression of realization, delivering the idea of 'Ah! Energy Saving!' A product bearing the label demonstrates that it is an 'energy saving product' and workplace with it means 'the site makes efforts to save energy'.

< Label Colors >



Category	Korea Standard Colors	Munsell Signal	4 Primary Colors
Orange	KS 0187	2.5YR 6/14	Magenta 50%, Yellow 100%
Red	KS 0106	7.5R 5/16	Magenta 90%, Yellow 100%
Deep Blue	KS 1102	5PB 3/10	Cyan 100%, Magenta 70%
Black		N1	Black 100%