

## **Energy Saving Labeling Program**

Under the Energy Conservation Law, labeling of product name, model, energy consumption efficiency and power/fuel consumption of each designated product is mandatory. But that labeling does not require energy consumption performance of a product to be labeled in terms of a relative comparison with that of other products.

In order to provide consumers with information on energy consumption efficiency that is easier to understand, the voluntary Energy Saving Labeling Program was launched on August 21, 2000. That can lead consumers to compare energy efficiencies so that they can select products with higher energy efficiency when making a purchase. As of March 2015, the labeling is applied to 21 products.

### **Voluntary Energy Saving Labeling Program for Efficiency Improvement of Home Appliances**

- What is energy labeling?

Officially gazetted on August 21, 2000. Voluntary program based on JIS.

Generally shown in product catalogues and on actual product, etc.

- 21 products as of March 2015

air conditioners, electric refrigerators, TV sets, electric freezers, lighting equipment, electric toilet seats, electric rice cookers, microwave ovens, DVD recorders, gas cooking appliances, gas water heaters, oil water heaters, computers, magnetic disk units, space heaters, transformers, routers, switching units, AC motors, Self-ballasted LED lamps, Electric water heaters(heat pump type water supply systems).

- Information shown on the label

Symbol mark, Top Runner target fiscal year, Achievement rate relative to Top Runner target, Energy consumption efficiency

An energy saving label typically consists of the energy conservation logo in combination with information on target year, achievement rate of energy efficiency standards, and energy consumption efficiency.



The energy conservation logo is colored in orange for a product which doesn't achieve the target standards of energy efficiency, and while colored in green for a product achieves over 100% of the target standards. The "achievement rate of energy efficiency

standards" is given as a percentage indicating how far the product's energy efficiency is improved from the target value. The Minister of Economy, Trade and Industry (METI) designates and promulgates the criteria to serve as judgment guidelines for each product.

# Energy-Saving Labeling Program

- ◆ The energy-saving labeling System has been introduced to inform consumers of energy efficiency of home appliances and to promote energy-efficient products. It has been introduced since August 2000.

## Examples of energy-saving labeling

	Energy conservation standard achievement percentage	Annual Energy Consumption
	Target year FY2010 <b>108%</b>	<b>175kWh/year</b>
	Energy conservation standard achievement percentage	Annual Energy Consumption
	Target year FY2010 <b>91%</b>	<b>206kWh/year</b>



Label for the product's main unit

As of March 2015, this labeling program covers the following 21 Top Runner products: air conditioners/ electric refrigerators/ TV sets/ electric freezers/ lighting equipment/ electric toilet seats/ electric rice cookers/ microwave ovens/ DVD recorders/ gas cooking appliances/ gas water heaters/ oil water heaters/ computers/ magnetic disk units/ space heaters/ transformers/ routers/ switching units/ AC motors/ Self-ballasted LED lamps/ Electric water heaters(heat pump type water supply systems)

Furthermore, in order to provide easy-to-understand information to consumers, the uniform energy-saving label system for retailers was introduced in October 2006.

# Energy-Saving Labeling System for Retailers

- ◆ The Revised Law Concerning the Rational Use of Energy enforced in April 2006 stipulates that retailers shall make efforts to provide information. In light of this, a guideline was formulated, including providing information by using uniform energy saving The system started in October 2006.

## Uniform Energy-saving Label



### 【Multi-stage rating system】

- Energy-saving performance is indicated in 5 stages, from 1 to 5 stars, from low to high performance of products offered in the market.
- In order to clarify the compliance level with the Top Runner standard, arrows are placed under the stars, showing achievement and non-achievement.

### 【Energy-saving labeling system】

- Products which achieved the Top Runner standard carry a green "e" mark, while others carry an orange "e" mark.
- Achievement level and annual electricity consumption are also indicated.

### 【Expected annual electricity bill】

- The expected annual electricity bill is indicated to show the energy consumption efficiency (annual electricity consumption) clearly.

## Target Products Covered by the Labeling Program

Equipment	Energy Saving labeling system	Uniform Energy saving label(*)	Target Fiscal year	Energy Consumption Efficiency(Unit)	Notes
Air conditioners	●	●	2010	APF	Cooling & heating for home-use, wall-hung & non-ducted type
		—	2012		For home-use and other than above
TV sets	●	●	2003	Annual power consumption (kWh/year)	CRT
			2012		LCD/Plasma TV sets
Electric refrigerators	●	●	2010	Annual power consumption (kWh/year)	
Electric freezers	●	●	2010	Annual power consumption (kWh/year)	
Electric rice cookers	●	△	2008	Annual power consumption (kWh/year)	
Lighting equipment	●	● *for residential only	2008	Energy consumption efficiency (lm/W)	Lighting equipment fluorescent lamp(s)
		△			Self-ballasted fluorescent lamp(s)
		△			Self-ballasted LED lamps
Electric toilet seats	●	●	2012	Annual power consumption (kWh/year)	
DVD recorders	●	△	2008	Annual power consumption (kWh/year)	
			2010		
Video cassette recorders	—	△	2003	Energy consumption efficiency(W)	
Space heaters	●	—	2006	Energy consumption efficiency (%)	Space heaters using gas or oil for fuel
Gas cooking appliances	●	△ *Fuel usage	2006	Energy consumption efficiency (% or Wh)	Gas burner
			2008		Grill/ oven
Gas water heaters	●	△ *Fuel usage	2006	Energy consumption efficiency (%)	Gas instant water heaters/ bath tubs with hot water supply functions
			2008		Gas water heater for space heating
Oil water heaters	●	△ *Fuel usage	2006	Energy consumption efficiency (%)	
Electric water heaters (Heat pump water type supply systems)	●	—	2017	The annual water heating and retaining efficiency/ the annual water heating efficiency	Eco cute
Computers	●	—	2011	Energy consumption efficiency (W/GTOPS)	
Magnetic disk units	●	—	2011	Energy consumption efficiency (W/GB)	
Transformers	●	—	2014	Energy consumption efficiency (W)	Oil-filled transformers
			2014		Molded transformers
AC Motors	●	—	2015	Energy consumption efficiency (%)	Three-phase induction motors only

Routers	●	—	2010	Energy consumption efficiency (W)	
Switching units	●	—	2011	Energy consumption efficiency (W/Gbps)	
Copying machines	—	—	2017	Energy consumption efficiency (Wh)	
Multifunction devices	—	—	2017	Annual power consumption (kWh/year)	
Printers	—	—	2017	Annual power consumption (kWh/year)	
Vending machines	—	—	2012	Annual power consumption (kWh/year)	
Passenger vehicles	—	—	2020	Fuel efficiency values(km/L)	Gasoline, diesel, LP gas, small buses
			2015		Gasoline, diesel, route buses, ordinary buses
Freight vehicles	—	—	2014	Fuel efficiency values(km/L)	Diesel(2.5t or less)
			2014		Gasoline(2.5t or less)
			2015		Gasoline, diesel(3.5t or less), trucks, tractors
Insulation Materials	—	—	2022	Thermal conductivity(W/m.k)	Building materials with heat loss prevention
Sashes	—	—	2022	Thermal conductivity(W/m.k)	heat loss coefficient
Multi-paned glazing	—	—	2022	Thermal conductivity(W/m.k)	heat loss coefficient

●Multistage rating system is available    △Multistage rating system is NOT available

\*The uniform energy-saving label provides information on expected electricity bills, rating in the multi-stage rating system, and energy conservation information in an integrated manner.