

Summary of the Technical Regulation

1. Name of the technical regulation

Revisions of the Notification of the Ministry of Economy, Trade and Industry (METI) under the Act on the Rational Use of Energy

2. Detailed objective and rationale

Under the Act on the Rational Use of Energy (Law No. 49 of 1979; hereinafter referred to as the “Energy Efficiency Law”), the Minister of Economy, Trade and Industry shall establish and publicize standards for manufacturers/importers (hereinafter referred to as the “manufacturers, etc.”), with regard to the improvement of the energy efficiency performance for the respective equipment which is specified in the Cabinet Order under the Energy Efficiency Law, including gas or oil water heaters.

The Minister also shall specify the matters to be labeled by manufacturers, etc., with regard to the energy efficiency of the specified equipment, including gas or oil water heaters.

In addition, the energy consumption efficiency standards shall be established taking into consideration the highest level of energy consumption performance of the respective specified equipment and other related factors (referred to as the “Top Runner Program”).

Since the water heating accounts for around 30% of energy consumption in residential sector, it is the largest energy source in this sector. To further promote energy efficiency in this sector, the Minister proposes new energy consumption efficiency standards for gas water heaters.

3. Mandatory product characteristics, mandatory production methods, etc.

Gas water heaters, except for the following:

1. Storage-type water heaters
2. Those not covered by JIS S 2109 (2019) or JIS S 2112 (2019)
3. Those manufactured for commercial use
4. Those that use gases other than the 13A gas group of city gas as fuel
5. Gas instantaneous water heaters with natural ventilation, in which the air intake and exhaust system are not open type
6. Gas bath heaters that fall into any of the following categories:
 - (a) Those without a hot water supply function
 - (b) Those with natural ventilation
 - (c) Those with a natural circulation system
 - (d) Those designed for indoor installation
7. Those used exclusively for heating purposes

4. Outline of the amendment

(1) Energy Consumption Efficiency and Measurement Method

For gas water heating appliances, excluding those with heating functions, energy consumption efficiency will be evaluated based on the Mode Thermal Efficiency (%). The measurement method will follow the Method for the Measuring Mode Efficiency of Household Gas and Oil Water Heating Appliances (JIS S 2075:2011).

For gas water heating appliances with heating functions, the energy consumption efficiency will be evaluated by calculating the weighted average of the Rated Thermal Efficiency (%) of the heating section and the Rated Thermal Efficiency (%) of the hot water supply section, using a ratio of 1:3. The measurement method for the rated thermal efficiency of the heating section will follow the Method for Measuring Household Gas Water Heating Sources (JIS S 2112:2019), and the method for measuring the rated thermal efficiency of the hot water supply section will follow the Method for Measuring Household Gas Water Heating Appliances (JIS S 2109:2019).

(2) Target fiscal Year

The target fiscal year is fiscal year 2028.

(3) Category and targeted standard values

The categories and target standard values are as follows:

Table 1: Target Standard Values for Gas Water Heating Appliances

Category			Targeted standard value
Category name	Purpose	Ventilation type	
I	Gas instantaneous water heaters	Natural ventilation	77.6%
II		Forced ventilation	$85.6\% \times \alpha_{II}$
III	Gas bath heater		$89.8\% \times \alpha_{III}$
IV	Gas heating appliance		91.3%

Table 2: Structural Coefficients α_{II} and α_{III} (Categories II and III)

	Structure	Structural coefficient value
α_{II}	Through-the-wall type	0.9981
	Wall-embedded type	0.9928
	Forced-ventilation type	0.9814
	Forced-exhaust type (traditional)	0.9802
	Integrated range hood (traditional)	0.8307
	Other	1.0000
α_{III}	Through-the-wall type	0.9921

	Wall-embedded type (traditional)	0.9189
	Other	1.0000

(4) Achievement Determination Method

Manufacturers are required to ensure that, in each fiscal year after the target year, the weighted harmonic average of the energy consumption efficiency does not fall below the weighted harmonic average of the target standard energy consumption efficiency, based on the number of units shipped in each category.

(5) Labeling Information

Manufacturers must include performance-related information in catalogs and on the appliances themselves, ensuring that it is clearly visible.

5. Proposed date of entry into force

1st April 2026* (except for the labeling requirement**)

*The target fiscal year for achieving the new standard is fiscal year 2028.

**The proposed date of entry into force of the labeling requirement is April 1, 2027.