

ARTICLE 6

6.1 Any light-duty truck of a gross weight less than 2,500 kilograms, commercial vehicle and passenger car (not sedans or station wagons) with gasoline or diesel engine manufactured or imported by the entity shall comply with the following Subparagraph 6.1.1 or 6.1.2 regarding standards governing energy efficiency of vehicles:

6.1.1 Energy efficiency testing is conducted in accordance with the Federal Test Procedure (FTP-75) of the United States:

6.1.1.1 Energy Efficiency Standards

Class of Vehicle's Engine Displacement (cubic centimeters)	Energy Efficiency Standards (kilometers/liter)
Below 1200	10.9
Over 1200 to 1800	9.9
Over 1800 to 2400	8.9
Over 2400 to 3000	8.6
Over 3000 to 3600	7.6
Over 3600 to 4200	7.0
Over 4200 to 5400	6.7
Over 5400	6.1

6.1.1.2 The combined energy efficiency value for light-duty trucks of a gross weight less than 2,500 kilograms, commercial vehicles and passenger cars (not sedans or station wagons) is calculated by the following equation:

Combined energy efficiency value (kilometers/liter, km/L) =

$$\frac{1}{\frac{0.55}{\text{City energy efficiency (km/L)}} + \frac{0.45}{\text{Highway energy efficiency (km/L)}}$$

6.1.2 Energy Efficiency testing is conducted in accordance with Directive 1999/100/EC and subsequent amendments:

6.1.2.1 Energy Efficiency Standards

Class of Vehicle's Engine Displacement (cubic centimeters)	Energy Efficiency Standards (kilometers/liter)
Below 1200	9.5
Over 1200 to 1800	8.6
Over 1800 to 2400	7.7
Over 2400 to 3000	7.5
Over 3000 to 3600	6.6
Over 3600 to 4200	6.1
Over 4200 to 5400	5.8

Over 5400	5.3
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6.1.2.2 The combined energy efficiency value for light-duty trucks of a gross weight less than 2,500 kilograms, commercial vehicles and passenger cars (not sedans or station wagons) is calculated by the following equation:

For vehicles being tested under the New European Driving Cycle (NEDC):

$$\text{Combined energy efficiency value (kilometers/liter, km/L)} = \frac{\text{Urban test mileage (km)} + \text{Extra urban test mileage (km)}}{\text{Urban energy efficiency (km/L)} + \text{Extra urban energy efficiency (km/L)}}$$

For vehicles being tested under the Worldwide harmonized Light vehicles Test Cycle (WLTC):

$$\text{Combined energy efficiency value (kilometers/liter, km/L)} = \frac{\text{Low-speed mileage(km)} + \text{Medium-speed mileage(km)} + \text{High-speed mileage(km)} + \text{Extra High-speed mileage(km)}}{\text{Low-speed energy efficiency(km)} + \text{Medium-speed energy efficiency(km)} + \text{High-speed energy efficiency(km)} + \text{Extra High-speed energy efficiency(km)}}$$

6.2 Effective from Jan.1, 2016 for manufactured or imported light-duty truck of a gross weight less than 2,500 kilograms, commercial vehicle and passenger car (not sedans or station wagons) with gasoline or diesel engine by any entity to apply for vehicle type fuel economy certificates shall be tested in accordance with the test procedures prescribed in the European directive 1999/100/EC and its subsequent revisions; effective from Jan. 1, 2017, the previous mentioned vehicles shall comply with the following requirements:

- 6.2.1 The sales weighted average energy efficiency value of the manufacturer sold vehicles shall be higher than the required sales weighted average energy efficiency target value.
- 6.2.2 The Sales Weighted Average Energy Efficiency Limits corresponding to different vehicle types prescribed by the required sales weighted average energy efficiency target value are as follows.
 - 6.2.2.1 The Sales Weighted Average Energy Efficiency Limits effective from Jan. 1, 2017 till Dec. 31, 2021:

Class of vehicle's reference mass (kg)	Sales Weighted Average Energy Efficiency Limits (kilometers/liter)
Below 850	15.2
Over 850 to 965	14.4
Over 965 to 1080	13.7
Over 1080 to 1190	13.1
Over 1190 to 1305	12.4
Over 1305 to 1420	11.9
Over 1420 to 1530	11.1

Over 1530 to 1640	10.5
Over 1640 to 1760	9.9
Over 1760 to 1870	9.3
Over 1870 to 1980	8.8
Over 1980 to 2100	8.3
Over 2100 to 2210	7.7
Over 2210 to 2380	7.3
Over 2380 to 2610	6.6
Over 2610	5.7

6.2.2.2 The Sales Weighted Average Energy Efficiency Limits effective from Jan. 1, 2022:

Class of vehicle's reference mass (kg)	Sales Weighted Average Energy Efficiency Limits (kilometers/liter)
Below 850	18.6
Over 850 to 965	18.6
Over 965 to 1080	18.6
Over 1080 to 1190	17.8
Over 1190 to 1305	17.0
Over 1305 to 1420	16.3
Over 1420 to 1530	15.7
Over 1530 to 1640	15.1
Over 1640 to 1760	14.6
Over 1760 to 1870	14.0
Over 1870 to 1980	13.5
Over 1980 to 2100	12.9
Over 2100 to 2210	12.5
Over 2210 to 2380	12.2
Over 2380 to 2610	11.4
Over 2610	11.0

6.2.2.3 For vehicles that comply with the truck standards stipulated in the "Vehicular Air Pollutant Emission Standards" by Taiwan EPA, effective from Jan.1, 2022 shall comply with the Sales Weighted Average Energy Efficiency Limits as follows:

Class of vehicle's reference mass (kg)	Sales Weighted Average Energy Efficiency Limits (kilometers/liter)
Below 850	15.8
Over 850 to 965	15.8
Over 965 to 1080	15.8
Over 1080 to 1190	15.1

Over 1190 to 1305	14.5
Over 1305 to 1420	13.9
Over 1420 to 1530	13.3
Over 1530 to 1640	12.8
Over 1640 to 1760	12.4
Over 1760 to 1870	11.9
Over 1870 to 1980	11.5
Over 1980 to 2100	11.0
Over 2100 to 2210	10.6
Over 2210 to 2380	10.4
Over 2380 to 2610	9.7
Over 2610	9.4

6.2.3 The sales weighted average energy efficiency value and sales weighted average energy efficiency target value prescribed in Subparagraph 6.2.1 shall be calculated by using the following equation:

6.2.3.1 Sales weighted average energy efficiency value:

$$\text{Sales weighted average energy efficiency value(km/L)} = \frac{\sum_{i=1}^N V_i \times W_i}{\sum_{i=1}^N \frac{V_i}{FC_i}}$$

i: manufactured or imported vehicle type's sequence number.

FC_i: energy efficiency test value (km/liter) for manufactured or imported vehicle type i.

V_i: sales number (units) of manufactured or imported vehicle type i.

W_i : Correspond Credit Multiplier for Vehicle Type i.

6.2.3.2 Sales weighted average energy efficiency target value:

$$\text{Sales weighted average energy efficiency target value(km/L)} = \frac{\sum_{i=1}^N V_i}{\sum_{i=1}^N \frac{V_i}{T_i}}$$

i: manufactured or imported vehicle type's sequence number.

T_i: Sales Weighted Average Energy Efficiency Limits (km/liter) of the manufactured or imported vehicle type i in accordance with Subparagraph 6.2.2 of this Article.

V_i: sales number (units) of manufactured or imported vehicle type i.

6.2.4 The calculation of sales weighted average energy efficiency value and sales weighted average energy efficiency target value for vehicle entity with combined reporting or end of their combined reporting, the calculation of sales weighted average energy efficiency value for different brands under the same vehicle entity, the qualification for using annual sales weighted average energy efficiency value calculation and credit accumulation, and the handling process for vehicle entities failed to comply with their required annual sales weighted average energy efficiency target value shall be in accordance with stipulations in Article 4.

- 6.2.5 For Electric or Fuel Cell light-duty trucks, commercial vehicles and passenger cars (not sedans or station wagons) that being sold by the vehicle entity, its sales may be multiplied by 10 as the correspond sales and being used in the calculation of sales weighted average energy efficiency value; for Plug-In Hybrid Electric light-duty truck, commercial vehicle and passenger car (not sedans or station wagons) with pure electric travel mileage over 50 kilometers, the correspond sales multiplier may be set as 5; and the previous mentioned provisions are also applicable and the energy efficiency test values shall be rated by the competent authority in other provisions.
- 6.2.6 Effective from Jan. 1, 2022, for light-duty trucks, commercial vehicles and passenger cars (not sedans or station wagons) that being sold by the vehicle entity, if its energy efficiency value is higher than the correspond Sales Weighted Average Energy Efficiency Limits as listed in Item 4.2.2.2 of Article 4, the multipliers for the calculation of sales weighted average energy efficiency value are set as follows :
- 6.2.6.1 Over by 10%, set as 1.5;
 - 6.2.6.2 Over by 20%, set as 2;
 - 6.2.6.3 Over by 30%, set as 2.5;
 - 6.2.6.4 Over by 40%, set as 3;
 - 6.2.6.5 Over by 50%, set as 3.5.