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No. S 776

# ROAD TRAFFIC ACT (CHAPTER 276)

## ROAD TRAFFIC (VEHICULAR EMISSIONS TAX) RULES 2017

### ARRANGEMENT OF RULES

#### Rule

- 1. Citation and commencement
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- 4. Method of determining emission level for carbon dioxide
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The Benedules

In exercise of the powers conferred by section 11AA of the Road Traffic Act, the Minister for Transport makes the following Rules:

### Citation and commencement

**1.** These Rules are the Road Traffic (Vehicular Emissions Tax) Rules 2017 and come into operation on 1 January 2018.

### **Definitions**

- 2. In these Rules, unless the context otherwise requires
  - "Band C", in relation to any prescribed vehicular emission, means the range of emission levels that is specified under Band C for such emission in Part 2 of the Second Schedule;

[S 210/2021 wef 01/04/2021]

"Band C1", in relation to any prescribed vehicular emission, means the range of emission levels that is specified under Band C1 for such emission in Part 1 of the Second Schedule;

[S 210/2021 wef 01/04/2021]

"Band C2", in relation to any prescribed vehicular emission, means the range of emission levels that is specified under Band C2 for such emission in Part 1 of the Second Schedule;

[S 210/2021 wef 01/04/2021]

"Commission Regulation (EU) No. 2017/1151" means the Commission Regulation (EU) 2017/1151 of 1 June 2017 supplementing Regulation (EC) No. 715/2007 of the European Parliament and of the Council on type-approval of motor vehicles with respect to emissions from light passenger and commercial vehicles (Euro 5 and Euro 6) and on access to vehicle repair and maintenance information, amending Directive 2007/46/EC of the European Parliament and of the Council, Commission Regulation (EC) No. 692/2008 and Commission Regulation (EU) No. 1230/2012 and repealing Commission Regulation (EC) No. 692/2008;

[S 881/2018 wef 01/01/2019]

[Deleted by S 167/2023 wef 01/04/2023]

"Commission Regulation (EU) No. 2017/1153" means the Commission Implementing Regulation (EU) 2017/1153 of 2 June 2017 setting out a methodology for determining the correlation parameters necessary for reflecting the change in the regulatory test procedure and amending Regulation (EU) No. 1014/2010;

[S 881/2018 wef 01/01/2019]

- "EC Directive" means the most current version of a directive of the European Parliament and the Council of the European Union or a directive of the Council of the European Communities, as the case may be;
- "emission level", in relation to any prescribed vehicular emission, means the quantity of that prescribed vehicular

emission expressed in the unit of measurement specified in the Second Schedule for that prescribed vehicular emission;

[Deleted by S 881/2018 wef 01/01/2019]

"Euro 6" means —

- (a) the test requirements as specified for Type I tailpipe emission tests in Commission Regulation (EC) No. 692/2008 as amended by Commission Regulation (EC) No. 459/2012; or
- (b) the test requirements as specified in Sub-Annex I of Commission Regulation (EU) No. 2017/1151,

but excluding the requirement to apply deterioration factors on the emission results;

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[S 881/2018 wef 01/01/2019]
[S 210/2021 wef 01/04/2021]
[S 167/2023 wef 01/04/2023]
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"Euro 6 (WLTP)" means the standard for exhaust emissions in Regulation (EC) No. 715/2007, Annex I, Table 2, as amended by Commission Regulation (EU) No. 459/2012 and read with Commission Regulation (EU) No. 2017/1151, but excluding the requirement to apply deterioration factors on the emission results;

[S 167/2023 wef 01/04/2023]

- "HC +  $NO_x$ " means the combined mass of hydrocarbons and oxides of nitrogen in grams per kilometre;
- "JPN2009", in relation to any passenger car or light commercial vehicle, means the test requirements for exhaust emission standard specified in paragraph 1(1), 1(3) and 1(7) of Article 41 of the Japanese Ministry of Land, Infrastructure and Transport Announcement No. 619 dated 15 July 2002 (ANNOUNCEMENT THAT PRESCRIBES DETAILS OF SAFETY REGULATIONS FOR ROAD VEHICLES), as amended by the Japanese Ministry of Land, Infrastructure,

Transport and Tourism Announcement No. 348 dated 25 March 2008;

[S 881/2018 wef 01/01/2019] [S 210/2021 wef 01/04/2021]

"JPN2018", in relation to any passenger car or light commercial vehicle, means the test requirements for exhaust emission standard specified in paragraph 1(1), 1(3)B and 1(7)B of Article 41 of the Japanese Ministry of Land, Infrastructure and Transport Announcement No. 619 dated 15 July 2002 (ANNOUNCEMENT THAT PRESCRIBES DETAILS OF SAFETY REGULATIONS FOR ROAD VEHICLES), as amended by the Japanese Ministry of Land, Infrastructure, Transport and Tourism Announcement No. 528 dated 30 March 2018;

[S 881/2018 wef 01/01/2019]
[S 210/2021 wef 01/04/2021]

- "light commercial vehicle" means a specified goods vehicle or a bus
  - (a) the maximum laden weight of which does not exceed 3,500 kilograms; and
  - (b) that is subject to the additional registration fee under rule 7 of the Road Traffic (Motor Vehicles, Registration and Licensing) Rules (R 5);

[S 210/2021 wef 01/04/2021]

- "NMHC" means any non-methane hydrocarbon;
- "prescribed vehicular emission" means any of the vehicular emissions specified in the First Schedule;
- "reference mass", in relation to a vehicle, means the mass of the vehicle in running order
  - (a) less the uniform mass of the driver of 75 kilograms; and
  - (b) increased by a uniform mass of 100 kilograms;

[S 210/2021 wef 01/04/2021]

"special light commercial vehicle" means a light commercial vehicle that —

- (a) has a reference mass exceeding 2,610 kilograms; and
- (b) is approved under the European Union's Whole Vehicle Type Approval scheme established under
  - (i) Regulation (EU) 2018/858 of the European Parliament and of the Council of 30 May 2018 on the approval and market surveillance of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles, amending Regulations (EC) No. 715/2007 and (EC) No. 595/2009 and repealing Directive 2007/46/EC;
  - (ii) Regulation (EC) No. 595/2009 of the European Parliament and of the Council of 18 June 2009 on type-approval of motor vehicles and engines with respect to emissions from heavy duty vehicles (Euro VI) and on access to vehicle repair and maintenance information and amendment Regulation (EC) No. 715 /2007 and Directive 2007/46/EC and repealing Directives 80/1269/EEC, 2005/55/EC and 2005/78/EC; and
  - (iii) Commission Regulation (EU) No. 582/2011 of 25 May 2011 implementing and amending Regulation (EC) No. 595/2009 of the European Parliament and of the Council with respect to emission from heavy duty vehicles (Euro VI) and amending Annexes I and III to Directive 2007/46/EC of the European Parliament and of the Council;

[S 210/2021 wef 01/04/2021]

"specified goods vehicle" means a goods vehicle that is not a vehicle specified in the Fourth Schedule;

[S 210/2021 wef 01/04/2021]

- "tax" means the vehicular emissions tax chargeable under section 11AA of the Act;
- "UNECE Regulation No. 101" means the most current version of Regulation No. 101, a Vehicle Regulation of the United Nations Economic Commission for Europe, available on the official website of the United Nations Economic Commission for Europe at https://www.unece.org;

[S 648/2020 wef 01/08/2020]
[S 167/2023 wef 01/04/2023]

"UNECE Regulation No. 154" means Regulation No. 154 published on 4 February 2021 by the United Nations Economic Commission for Europe, available on the official website of the United Nations Economic Commission for Europe at https://www.unece.org;

[S 167/2023 wef 01/04/2023]

"WLTP Japan" means the provisions set out in TRIAS 08-002-02 and the provisions in "WLTC-MODE METHOD" of the attachment of "Measurement Procedure for Exhaust Emission of Light- and Medium-Duty Motor Vehicles, II. WLTC-mode Method" (otherwise known as Part II of Attachment 42) of the Japanese Ministry of Land, Infrastructure and Transport Announcement No. 619 dated 15 July 2002 (ANNOUNCEMENT THAT PRESCRIBES DETAILS OF SAFETY REGULATIONS FOR ROAD VEHICLES).

[S 648/2020 wef 01/08/2020]

### Vehicular emissions tax

- **3.**—(1) The vehicular emissions tax is chargeable in respect of the first registration on or after 1 January 2018 of any vehicle (called in this rule a taxable passenger vehicle) that
  - (a) whether new or secondhand, is a motor car or taxi; and

(b) has an emission level for any of its prescribed vehicular emissions that falls within Band C1 or Band C2 for that emission.

[S 210/2021 wef 01/04/2021]

- (2) The amount of tax chargeable for a taxable passenger vehicle is as follows:
  - (a) if the emission level of any of the prescribed vehicular emissions from the taxable passenger vehicle falls within Band C2 for that emission
    - (i) for a taxable passenger vehicle other than a taxi
      - (A) where the first registration is between 1 January 2018 and 30 June 2021 (both dates inclusive) \$20,000; or
      - (B) where the first registration is between 1 July 2021 and 31 December 2025 (both dates inclusive) \$25,000; and

[S 1042/2022 wef 01/01/2023]

- (ii) for a taxable passenger vehicle that is a taxi
  - (A) where the first registration is between 1 January 2018 and 30 June 2021 (both dates inclusive) \$30,000; or
  - (B) where the first registration is between 1 July 2021 and 31 December 2025 (both dates inclusive) \$37,500;

[S 1042/2022 wef 01/01/2023]

[S 210/2021 wef 01/04/2021]

- (b) if none of the emission levels of any of the prescribed vehicular emissions from the taxable passenger vehicle fall within Band C2 for that emission
  - (i) for a taxable passenger vehicle other than a taxi
    - (A) where the first registration is between 1 January 2018 and 30 June 2021 (both dates inclusive) \$10,000; or

(B) where the first registration is between 1 July 2021 and 31 December 2025 (both dates inclusive) — \$15,000; and

[S 1042/2022 wef 01/01/2023]

- (ii) for a taxable passenger vehicle that is a taxi
  - (A) where the first registration is between 1 January 2018 and 30 June 2021 (both dates inclusive) \$15,000; or
  - (B) where the first registration is between 1 July 2021 and 31 December 2025 (both dates inclusive) \$22,500.

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[S 1042/2022 wef 01/01/2023]

[S 210/2021 wef 01/04/2021]

[S 1091/2020 wef 30/12/2020]

[S 210/2021 wef 01/04/2021]
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- (3) The vehicular emissions tax is chargeable in respect of the first registration between 1 April 2023 and 31 March 2025 (both dates inclusive) of a vehicle
  - (a) whether new or secondhand, that is a light commercial vehicle; and
  - (b) that has an emission level for any of its prescribed vehicular emissions that falls within Band C for that emission.

[S 167/2023 wef 01/04/2023]

(4) The amount of tax chargeable for a taxable vehicle mentioned in paragraph (3) is \$15,000.

[S 167/2023 wef 01/04/2023]

# Method of determining emission level for carbon dioxide

- **4.**—(1) The emission level from a vehicle for carbon dioxide is determined in accordance with this rule.
- (2) Subject to paragraph (2A), for any vehicle excluding an electric vehicle or a plug-in hybrid electric vehicle, but including a conventional hybrid electric vehicle, the emission level is the amount —

- (a) measured in accordance with
  - (i) for a motor car or taxi the provisions of Commission Regulation (EU) No. 2017/1151, Annex I of Commission Regulation (EU) No. 2017/1153, EC Directive 80/1268/EEC, UNECE Regulation No. 101, UNECE Regulation No. 154 or WLTP Japan; or
  - (ii) for a light commercial vehicle the provisions of Commission Regulation (EU) No. 2017/1151, UNECE Regulation No. 154 or WLTP Japan; and

[S 167/2023 wef 01/04/2023]

(b) submitted to the Registrar under section 41(a)(ii) of the Energy Conservation Act (Cap. 92C).

[S 210/2021 wef 01/04/2021]

- (2A) For a special light commercial vehicle
  - (a) that is not an electric vehicle; and
  - (b) the emission level for carbon dioxide of which has not been measured in accordance with paragraph (2),

the emission level is deemed to be more than 280 g/km.

[S 210/2021 wef 01/04/2021]

- (3) For an electric vehicle or a plug-in hybrid electric vehicle (excluding a conventional hybrid electric vehicle) the emission level is  $A + (B \times C)$  where
  - (a) A is the weighted carbon dioxide emission data for the vehicle
    - (i) that is
      - (A) for an electric vehicle, zero;

[S 210/2021 wef 01/04/2021]

[S 167/2023 wef 01/04/2023]

(B) for a plug-in hybrid electric vehicle that is a motor car or taxi — measured in accordance with the provisions of Commission Regulation (EU) No. 2017/1151, Annex I of Commission Regulation (EU) No. 2017/1153, EC Directive 80/1268/EEC, UNECE Regulation No. 101, UNECE Regulation No. 154 or WLTP Japan; and

[S 167/2023 wef 01/04/2023]

(C) for a plug-in hybrid electric vehicle that is a light commercial vehicle — measured in accordance with the provisions of Commission Regulation (EU) No. 2017/1151, UNECE Regulation No. 154 or WLTP Japan; and

[S 167/2023 wef 01/04/2023]

- (ii) submitted to the Registrar under section 41(*a*)(ii) of the Energy Conservation Act;
- (b) B is the weighted electric energy consumption data
  - (i) that is
    - (A) for a plug-in hybrid electric vehicle that is a motor car or taxi measured in accordance with the provisions of EC Directive 80/1268/EEC, Commission Regulation (EU) No. 2017/1151, Annex I of Commission Regulation (EU) No. 2017/1153, UNECE Regulation No. 101, UNECE Regulation No. 154 or WLTP Japan; and
    - (B) for a plug-in hybrid electric vehicle that is a light commercial vehicle measured in accordance with the provisions of Commission Regulation (EU) No. 2017/1151, UNECE Regulation No. 154 or WLTP Japan; and

[S 167/2023 wef 01/04/2023]

- (ii) submitted to the Registrar under section 41(a)(ii) of the Energy Conservation Act; and
- (c) C is an emission factor of 0.4 grams of carbon dioxide per watt-hour.

# Method of determining emission level other than for carbon dioxide

- **5.**—(1) The emission level from a vehicle for a prescribed vehicular emission other than carbon dioxide, is determined in accordance with this rule
- (2) For an electric vehicle, the amount is zero for each such prescribed vehicular emission.
- (3) For any vehicle other than an electric vehicle, the emission level for each such prescribed vehicular emission from a vehicle specified in the first column of the Third Schedule, is the amount
  - (a) measured for the emission using such test method specified in the second column of that Schedule against that vehicle, as is permitted under that column and subject to the additional requirements (if applicable) specified in the third column of that Schedule; and
  - (b) submitted to the Registrar under section 41(a)(ii) of the Energy Conservation Act (Cap. 92C).
- (4) For the purpose of paragraph (3), the emission levels being measured must be of the prescribed vehicular emissions from the same test cycle.

[S 881/2018 wef 01/01/2019]

- (4A) The measurement of the emission level of particulate matter need not be from the same test cycle as the other prescribed vehicular emissions if
  - (a) the emission level of particulate matter may, in accordance with the second column of the Third Schedule, be tested using a different test method from the other prescribed vehicular emissions; and
  - (b) that different test method is so used.

[S 881/2018 wef 01/01/2019]

(5) For the purposes of these Rules, for a vehicle with an engine that does not employ Gasoline Direct Injection technology, and if the emission level of particulate matter for the vehicle is not measured, then the emission level for particulate matter is taken to be —

- (a) in the case of a petrol passenger car more than 2.0 mg/km; and
- (b) in the case of a petrol light commercial vehicle more than 0.9 mg/km.

[S 210/2021 wef 01/04/2021]

### FIRST SCHEDULE

Rule 2

### PRESCRIBED VEHICULAR EMISSIONS

- 1. Carbon dioxide (CO<sub>2</sub>).
- 2. Carbon monoxide (CO).
- 3. Hydrocarbons (HC).
- 4. Oxides of nitrogen (NO<sub>x</sub>).
- 5. Particulate matter (PM).

[S 425/2018 wef 01/07/2018]

### SECOND SCHEDULE

Rule 2

### PART 1

# EMISSION BANDS FOR PRESCRIBED VEHICULAR EMISSIONS FOR TAXABLE PASSENGER VEHICLES

First column	Second column	Third column	Fourth column	Fifth column
Prescribed vehicular emission	Unit of measurement of emission level	Band B (neutral emission band)	Band C1	Band C2
CO <sub>2</sub>	g/km	125 < B ≤ 160	160 < C1 ≤ 185	C2 > 185
СО	g/km	$0.190 < B \le 0.270$	$0.270 < C1 \le 0.350$	C2 > 0.350
НС	g/km	$0.036 < B \le 0.052$	$0.052 < C1 \le 0.075$	C2 > 0.075
NO <sub>x</sub>	g/km	$0.013 < B \le 0.024$	$0.024 < C1 \le 0.030$	C2 > 0.030
PM	mg/km	$0.3 < B \le 0.5$	0.5 < C1 ≤ 2	C2 > 2

# SECOND SCHEDULE — continued PART 2

# EMISSION BANDS FOR PRESCRIBED VEHICULAR EMISSIONS FOR LIGHT COMMERCIAL VEHICLES

First column	Second column	Third column
Prescribed vehicular emission	Unit of measurement of emission level	Band C
CO <sub>2</sub>	g/km	C > 216
СО	g/km	C > 0.270
НС	g/km	C > 0.025
$NO_x$	g/km	C > 0.015
PM	mg/km	C > 0.85

[S 167/2023 wef 01/04/2023] [S 210/2021 wef 01/04/2021]

### THIRD SCHEDULE

Rule 5

### DETERMINATION OF EMISSION LEVELS FOR PRESCRIBED VEHICULAR EMISSIONS OTHER THAN CARBON DIOXIDE

First column	Second column	Third column
Type of vehicle	Test method for prescribed vehicular emissions other than CO <sub>2</sub>	Additional requirements
Petrol vehicle with engine employing Gasoline Direct Injection technology and equipped with NO <sub>x</sub> storage reduction catalyst	(1) For a motor car or taxi —  (a) Euro 6 or Euro 6 (WLTP) for all such emissions; or  (b) JPN2009 or JPN2018 for all such emissions	For JPN2009 or JPN2018, if NMHC rather than HC is tested, HC to be obtained by dividing the emission result of NMHC by 0.8.

## THIRD SCHEDULE — continued

First column	Second column	Third column
Type of vehicle	Test method for prescribed vehicular emissions other than CO <sub>2</sub>	Additional requirements
	(2) For a light commercial vehicle —	
	(a) Euro 6 (WLTP) for all such emissions; or	
	(b) JPN2018 for all such emissions	
2. Petrol vehicle with engine employing Gasoline Direct Injection technology and not equipped with NO <sub>x</sub> storage reduction catalyst	(1) For a motor car or taxi —  (a) Euro 6 or Euro 6 (WLTP) for all such emissions;  (b) JPN2009 or JPN2018 for all such emissions; or  (c) JPN2009 or JPN2018 for CO, HC and NOx and Euro 6 or Euro 6 (WLTP) for PM  (2) For a light	For JPN2009 or JPN2018, if NMHC rather than HC is tested, HC to be obtained by dividing the emission result of NMHC by 0.8.
	commercial vehicle —  (a) Euro 6 (WLTP) for all such emissions;	

## THIRD SCHEDULE — continued

First column	Second column	Third column
Type of vehicle	Test method for prescribed vehicular emissions other than CO <sub>2</sub>	Additional requirements
	(b) JPN2018 for all such emissions; or	
	(c) JPN2018 for CO, HC and NOx and Euro 6 (WLTP) for PM	
3. Petrol vehicle with engine that does not	(1) For a motor car or taxi —	For JPN2009 of JPN2018, if NMH0
employ Gasoline Direct Injection technology	(a) Euro 6 or Euro 6 (WLTP) for all such emissions; or	rather than HC is tested, HC to be obtained by dividing the emission result of NMHC by 0.8.
	(b) JPN2009 or JPN2018 for all such emissions	
	(2) For a light commercial vehicle —	
	(a) Euro 6 (WLTP) for all such emissions; or	
	(b) JPN2018 for all such emissions	
4. Diesel vehicles	<ul><li>(1) Euro 6 for all such emissions; or</li><li>(2) JPN2009 or JPN2018 for all such emissions</li></ul>	For Euro 6, if "HC + $NO_x$ " rather than HC is tested, HC to be obtained by subtracting the emission result of NOx from "HC + $NO_x$ ".

### THIRD SCHEDULE — continued

First column	Second column	Third column
Type of vehicle	Test method for prescribed vehicular emissions other than CO <sub>2</sub>	Additional requirements
		For JPN2009 or JPN2018, if NMHC rather than HC is tested, HC to be obtained by dividing the emission result of NMHC by 0.98.

[S 167/2023 wef 01/04/2023] [S 210/2021 wef 01/04/2021] [S 881/2018 wef 01/01/2019] [S 425/2018 wef 01/07/2018]

### FOURTH SCHEDULE

Rule 2

### **EXCLUDED GOODS VEHICLES**

- 1. A vehicle that is equipped, constructed or adapted primarily for use in an aerodrome within the meaning of section 2(1) of the Air Navigation Act (Cap. 6)
- 2. [Deleted by S 1062/2021 wef 03/01/2022]
- 3. An engineering plant within the meaning of paragraph 2 of the Road Traffic (Motor Vehicles, Authorisation of Special Types) Notification (N 1)
- 4. A concrete or cement mixer
- 5. A fire-fighting vehicle
- 6. A motor vehicle or battery-operated cart constructed or adapted for use for transporting refuse
- 7. A motor cycle with a side-car attached to it
- 8. A vehicle with a mechanically movable platform at the rear to enable goods to be loaded onto the vehicle
- 9. A drawing vehicle for a trailer
- 10. A recovery vehicle

### FOURTH SCHEDULE — continued

- 11. A tanker
- 12. A tipper or dumper truck

[S 210/2021 wef 01/04/2021]

Made on 27 December 2017.

LOH NGAI SENG Permanent Secretary, Ministry of Transport, Singapore.

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