

**Proposal to Tighten Emission Standards
of First Registered Light Bus
with Design Weight More Than 3.5
Tonnes and Bus with
Design Weight Not More Than 9 Tonnes**
**建議收緊首次登記小巴
(設計重量逾3.5公噸)
及巴士(設計重量不逾9公噸)
廢氣排放標準**

November 2018

2018年11月



Standing Policy 一貫政策

- It is a standing policy to introduce the most stringent motor fuel and vehicle emission standards whenever they are technologically practicable and available to Hong Kong.
- 現行的政策是在技術上可行和可提供香港使用的情況下，實施最嚴謹的車輛的燃料及廢氣排放標準。

Current Statutory Emission Standards and Euro 6/VI Commencement Schedule

現行的法定排放標準和歐盟六期實施時間表

Design Weight 設計重量	Vehicle Class 車輛種類	Euro 6/VI Commencement Date (dd/mm/yy) 歐盟六期實施時間(日/月/年)	
≤3.5 tonnes (公噸)	Private Car (petrol) and Taxi 私家車(汽油)及的士	1/7/2017	Euro 6b, OBD Euro 6-1
		1/9/2019	Euro 6c, OBD Euro 6-2
	Diesel Private Car 柴油私家車	1/10/2017	California LEV III
>3.5 tonnes (公噸)	Light Bus and Goods Vehicle 小型巴士及貨車	1/1/2018	Euro 6b, OBD Euro 6-1
		1/9/2020	Euro 6c, OBD Euro 6-2
>9 tonnes (公噸)	Goods Vehicle 貨車	1/10/2018	Euro VI, OBD A/B
>9 tonnes (公噸)	Bus 巴士	1/4/2019	Euro VI, OBD C
>3.5 tonnes (公噸)	Light Bus 小型巴士	Euro V now, planning to tighten to Euro VI, OBD C in 2021 現時為歐盟五期，計劃於2021年收緊至歐盟六期OBD C	
≤9 tonnes (公噸)	Bus 巴士	Note: EU implemented Euro VI, OBD C on 31/12/2016 註: 歐盟已於2016年12月31日實施歐盟六期OBD C	
N/A 不適用	Motorcycle 電單車	Euro 3 now, planning to tighten to Euro 4 in 2020 現時為歐盟三期，計劃於2020年收緊至歐盟四期	
	Motor Tricycle 機動三輪車	Euro 3 歐盟三期	

Supply of Euro VI Light Bus DW > 3.5t

歐六小巴(設計重量逾3.5公噸)的供應

Light Buses, LB (Diesel)

- As of end Oct 2018, there are 4 Euro VI LB models type-approved by the Transport Department, TD (VI-A: 3 models; VI-C: 1 model). Type approval applications of 3 Euro VI (VI-A: 1 model; VI-C: 2 models) LB models are being processed by TD.
- We learnt that some vehicle suppliers have plans to introduce Euro VI OBD C LB models to HK. By early 2021, we anticipate that there will be adequate Euro VI OBD C LB models (including popular LB models)

小巴 (柴油)

- 直至2018年10月，共有4個歐六小巴型號獲運輸署類型審批 (VI-A: 3個; VI-C: 1個)。運輸署正處理3個歐六(VI-A: 1個; VI-C: 2個)小巴型號類型審批申請。
- 我們知悉部份車輛供應商有計劃引入歐盟六期診斷系統階段C小巴型號，我們預計到2021年年初將有足夠歐盟六期診斷系統階段C小巴型號供應(包括受歡迎的型號)

Supply of Euro VI Light Bus DW > 3.5t 歐六小巴(設計重量逾3.5公噸)的供應

Light Buses, LB (LPG)

- Only one LPG Light bus model is available in local market, and will be ceased production later.
- We learnt that vehicle suppliers have no plan to introduce Euro VI LPG light bus model to HK.

小巴 (石油氣)

- 現時市場上唯一石油氣小巴型號將會停產
- 我們知悉各車輛供應商沒有計劃引入歐六石油氣小巴型號

Supply of Euro VI Bus DW ≤ 9t

歐六巴士(設計重量不逾9公噸)的供應

Buses

- As of end Oct 2018, there are 3 Euro VI Bus models type-approved by TD (VI-A: 2 models; VI-C: 1 model). Type approval applications of 7 Euro VI (VI-A: 4 models; VI-C: 3 model) bus models are being processed by TD.
- We learnt that some vehicle suppliers have plans to introduce Euro VI OBD C bus models to HK. By early 2021, we anticipate that there will be adequate Euro VI OBD C Bus models (including popular models)

巴士

- 至2018年10月為止，共有3個歐六巴士型號獲運輸署類型審批(VI-A:2個; VI-C: 1個)。運輸署正處理7個歐六(VI-A:4個; VI-C: 3個)巴士型號類型審批申請。
- 我們知悉部份車輛供應商有計劃引入歐盟六期診斷系統階段C巴士型號，我們預計到2021年年初將有足夠歐盟六期診斷系統階段C巴士型號(包括受歡迎的型號)供應

Comparison of Euro V and VI Diesel HDV Tailpipe Emission Limits

歐盟五期和六期重型柴油車尾氣排放限值的比較

- Compared with Euro V counterparts, Euro VI heavy duty diesel vehicles emit about 80% less NOx and 50% less RSP
- 與歐盟五期型號相比，歐盟六期重型柴油車減少排放約80%的氮氧化物及50%的可吸入懸浮粒子
- Introduce Particle No. Emission Limit
- 引入粒子數量排放標準

	CO 一氧化碳 (mg/kWh)	THC 碳氫化合物 (mg/kWh)	NOx 氮氧化物 (mg/kWh)	PM 可吸入懸浮粒子 (mg/kWh)	PN 粒子數量 (#/kWh)
Euro V 歐五	1,500	460	2,000	20	Not required 不須量度
Euro VI 歐六	1,500	130	400	10	8×10^{11}
		72% ↓	80% ↓	50% ↓	

Note: Using the emission limit (Compression ignition engine) under WHSC testing cycle for comparison

註:以排放標準(壓燃式引擎,WHSC測試工况)作比較

Proposal to Tighten Emission Standards of First Registered Light Bus DW > 3.5t and Bus DW ≤ 9t

建議收緊小巴(設計重量逾3.5公噸)
及巴士(設計重量不逾9公噸)的排放標準

- We propose to tighten the statutory emission standards for first registered Light bus* (DW > 3.5T) and Bus* (DW ≤ 9T) to **Euro VI OBD Phase C** in **1st quarter 2021.**

- 我們建議於**2021年第一季**收緊首次登記小巴*(設計重量逾3.5公噸)及巴士*(設計重量不逾9公噸)至**歐盟六期診斷系統階段C**

*Including compression-ignition engine (Diesel) and positive-ignition engine (Petrol or Liquefied Petroleum Gas (LPG))

*包括壓燃式引擎（柴油）及強制點火式引擎（汽油或石油氣）

Detailed Requirements for Type Approval of Heavy Duty Vehicles

重型車類型審批詳細要求

Emission Standards 排放標準	Type Approval 類型審批			Market Surveillance 在用車監控	Repair & Maintenance Information ¹ 維修保養資料 ¹
	Emission 排放	Off Cycle Emission 非測試工况排放			
		WNTE	PEMS ²		
Euro VI 歐盟VI	WHSC + WHTC with Particle No. WHSC + WHTC 包括粒子數量	Required 需要	Required 需要	IUPR Data collection required for EPD information at initial stage 在初始階段需要收集 IUPR ³ 數據予 EPD 作參考	Publicly Available 向公眾提供
US EPA 2007 for C.I. & US EPA 2008 for P.I.	+ 歐盟VI 粒子數量 + Euro VI Particle No.	Required 需要	+ Euro VI PEMS + 歐盟VI PEMS		
JPN PPNTL	NOT accepted 不接受				

1) Including information for diagnostic tools 包括維修診斷工具

2) PEMS: 可攜式排放測試系統

3) IUPR: 實際監測頻率

Implementation timetable (Tentative)

實施時間表(暫定)

November 2018 2018年11月	Trade consultations 諮詢業界
December 2018 2018年12月	Finalize the proposal and consult the Advisory Council on the Environment (ACE) and the Panel on Environmental Affairs of the Legislative Council 為建議定稿及諮詢環境諮詢委員會及立法會環境事務委員會
4th quarter of 2019 2019年第四季	Table the amendment regulation to the Legislative Council for negative vetting 將修訂的規例提交立法會審議
1st quarter of 2021 2021年第一季度	Implement the new emission standards (Tentative) 實施新排放標準(暫定)

Transitional Arrangement

for LB with DW > 3.5t and Bus with DW ≤ 9t Not Meeting Euro VI Emission Standards

**給予未達歐盟六期排放標準的小巴
(設計重量逾3.5公噸)及巴士(設計重量不逾9公噸)
之過渡性安排**

- According to established practice, transitional arrangements will be offered to vehicle dealers
- Unsold Euro V LB with DW > 3.5t and Bus with DW ≤ 9t, meeting certain conditions can still be first registered after the implementation of Euro VI
- 按過往收緊首次登記車輛廢氣排放標準時的一貫做法，環保署會向汽車代理提供過渡性安排
- 符合特定條件的歐盟五期小巴和巴士貨尾在歐盟六期排放標準實施後仍可作首次登記

有關未達歐盟六期排放標準
的小巴(設計重量逾3.5公噸)
及巴士(設計重量不逾9公噸)
之過渡性安排

有關未達歐盟六期排放標準的小巴(設計重量逾3.5公噸)及巴士(設計重量不逾9公噸)之過渡性安排

- 符合下列情況的小巴(設計重量逾3.5公噸)及巴士(設計重量不逾9公噸)可獲豁免：
 - 符合現時排放標準(歐盟五期)；及
 - 車輛**在刊憲之前**已訂購/與顧客簽訂買賣合約並在新排放標準實施日期(暫定2021年第一季度)之前到達本港；或
 - 車輛**在刊憲當日或之後**訂購/與顧客簽訂買賣合約並在新排放標準實施日期之前到達本港，
 - 獲豁免的車輛數量上限不能超過車輛供應商在刊憲之上一個年度的每月平均銷售車輛數量乘以1.1倍。

有關未達歐盟六期排放標準的小巴(設計重量逾3.5公噸)及巴士(設計重量不逾9公噸)之過渡性安排

- 證明文件

- 與車廠的書信往來、車廠的發票、海運提單及到港通知書、合約、入數紙及刊憲之上一個年度之銷售數字(適用於在刊憲之後訂購/與顧客簽訂買賣合約車輛的豁免申請)

Transitional Arrangement for LB with DW > 3.5T and Bus with DW ≤ 9T Not Meeting Euro VI Emission Standards

Standing Transitional Arrangement for LB with DW > 3.5t and Bus with DW ≤ 9t Not Meeting Euro VI Emission Standards

- Exempting LB with DW > 3.5t and Bus with DW ≤ 9t satisfying the following conditions from the new statutory emission standards:
 - meet the current emission standards (Euro V); and
 - ordered/contracted to customers **before the gazette date of the amended regulation** AND arrived Hong Kong before the effective date of **new emission standards** (tentatively before 1st quarter 2021);
- or
- ordered/contracted to customers **on or after the gazette date** AND arrived Hong Kong before the effective date of **new emission standards**
 - The no. of exempted vehicles is limited to 1.1 times the monthly average sales figure in the year before the gazette date

Standing Transitional Arrangement for LB with DW > 3.5t and Bus with DW ≤ 9t Not Meeting Euro VI Emission Standards

Supporting Documents -

- correspondence with vehicle manufacturers, vehicle manufacturer invoice, arrival notice & bill of lading, contract & bank-in statement for contracted vehicles, sales figures (for vehicles ordered/contracted to customers after the gazette date), etc.

END

完