

## Low Emission Bus Scheme Certificate

Customer:	EVM Ltd				
Customer Address:	Comagh Business Park, Kilbeggan, Co. Westmeath, Ireland				
Test Purpose:	LEB Testing	Test Type:	Certification	DYNAMOMETER SETTINGS	
Vehicle Manufacturer:	EVM Ltd	Unladen weight (kg)	3750	Test Weight	4424 kg
Vehicle Type & Number:	Mercedes-Benz Sprinter, Unregistered	Gross Weight (kg)	5500	F°	307.98 N
Engine:	Mercedes-Benz 2145cc 6	Seated Capacity	22	F <sup>1</sup>	-11.9231 N/kmh
Transmission:	7 G-tronic Automatic	Passenger Capacity	22	F <sup>2</sup>	0.52959 N/kmh <sup>2</sup>
Euro VI certificate Y/N	Manufacturer Certified	GVW Check	OK	F <sup>3</sup>	-0.004815 N/kmh <sup>3</sup>

### Declared fuel, properties and source plus carbon conversion factors

Net Heating Value: Diesel	36.00	MJ / Litre	Fuel Provider	UK market standard
Well-to-Tank Factor: Diesel	17.02	g CO <sub>2</sub> e / MJ	WTT evidence	UK GHG reporting factors 2020
Well-to-Tank Factor: Electricity	80.04	g CO <sub>2</sub> e / MJ	Fuel Type	UK Pump Diesel, UK Grid Electricity

### Emissions and Energy consumption results from approved test facility - Average 3 tests

Test Phase	HC (g/km)	CO (g/km)	NOx (g/km)	PM (g/km)	CO <sub>2</sub> (g/km)	CH <sub>4</sub> (g/km)*	N <sub>2</sub> O (g/km)*	Fuel Consumption (l/100 km)	Fuel used over phase/cycle (litres)
Rural	0.000	0.000	0.006	N/A	311.3	0.000	0.013	11.76	0.867
Outer London	0.000	0.000	0.005	N/A	390.1	0.000	0.016	14.73	0.948
Inner London	0.000	0.000	0.020	N/A	545.3	0.000	0.025	20.59	0.508
MLTB Average	0.000	0.000	0.009	N/A	433.1	0.000	0.018	16.35	1.456
LUB Average	0.000	0.000	0.008	0.0011	377.9	0.000	0.016	14.27	2.322

### Zero Emissions (Z.E.) Range: Energy consumption and charging efficiency

Total measured energy consumed on vehicle (kWh)	N/A	Distance in Z.E. mode (km)	N/A	Usable Battery Capacity (kWh)	N/A
Measured grid energy during charging (kWh)*	N/A	Charging efficiency (%)	N/A	Max Theoretical Z.E. Range (km)	N/A

### Total Tank-to-Wheel GHG CO<sub>2</sub> equivalent

Test Phase	CO <sub>2</sub> (g/km)	CH <sub>4</sub> (g/km x 25)*	N <sub>2</sub> O (g/km x 298)*	Fuel TTW** GHG (CO <sub>2</sub> Equivalent g/km)
Rural	311.3	0.001	3.752	315.0
Outer London	390.1	0.001	4.703	394.8
Inner London	545.3	0.002	7.445	552.7
MLTB Average	433.1	0.000	5.462	438.5
LUB Average	377.9	0.001	4.689	382.6

### Calculated total Well-to-Wheel GHG CO<sub>2</sub> equivalent emissions over test

Test Phase	Fuel Energy (MJ / km)	Fuel WTT*GHG Emissions (g CO <sub>2</sub> e / km)	Electrical Energy (MJ / km)	Electricity WTT* GHG Emissions (g CO <sub>2</sub> e / km)	Measured Fuel TTW** GHG Emissions (g CO <sub>2</sub> e / km)	Total WTW*** GHG Emissions (g CO <sub>2</sub> e / km)
Rural	4.23	72.0	N/A	N/A	315.0	387.1
Outer London	5.30	90.3	N/A	N/A	394.8	485.1
Inner London	7.41	126.2	N/A	N/A	552.7	678.9
MLTB Average	5.89	100.2	N/A	N/A	438.5	538.8
LUB Average	5.14	87.4	N/A	N/A	382.6	470.1

Data Generated by (On behalf of Test facility):	Date: 07/01/2021	Data Approved by:	Date: 08/01/2021
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### Low Emission Bus Certificate Summary

GHG Well-to-Wheel	470.1	g CO <sub>2</sub> e / km
Euro VI Average Diesel Equivalent	701.0	g CO <sub>2</sub> e / km
WTW GHG saving (compared with Euro VI diesel equivalent)	230.9	g CO <sub>2</sub> e / km
% WTW GHG saving (compared with Euro VI diesel equivalent)	33%	g CO <sub>2</sub> e / km
Zero Emission operating range (km)	N/A	km
WTW CO <sub>2</sub> per passenger km (@ Max Pass Capacity)	21.4	g CO <sub>2</sub> e/pass km
Approved as Low Emission Bus? (15% saving or more)	<b>YES</b>	

\* WTT : Well-to-Tank      \*\* TTW : Tank-to-Wheel      \*\*\* WTW : Well-to Wheel

<b>COMMENTS:</b> Emission results marked in red are below detection levels.
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<b>Test Numbers:</b> ML02019582 (06-Jan-21), ML02019583 (06-Jan-21), ML02019584 (06-Jan-21).			
Certificate approved by: On behalf of Bus manufacturer	Certificate Approved by: On behalf of LowCVP/DJT	Daniel Hayes 25/01/2021	