

V O L V O



# Volvo BZL – GML Eco Range

Safe, clean and efficient public transport



# Next-level electric buses for Malaysia



Gemilang and Volvo Buses proudly introduce the Volvo BZL – GML Eco Range. The all-new electric low-floor, two-door city bus, built to the highest standards. It offers a new level of safe, efficient and responsible public transport in Malaysia.

## **The GML Eco Range**

The all-new GML Eco Range is a full-electric low-floor premium class city bus. Built in Malaysia from the best components, it is poised to be the flagship of any public transport fleet. Outstanding reliability, safety and environmental performance make the GML Eco Range the responsible choice.

## **The best of both worlds**

Our brand-new city bus is a perfect blend of global experience and local expertise, a joint development between Gemilang and Volvo Buses. The GML Eco Range features a very strong lightweight aluminium body with a powerful and energy-efficient air conditioning system. It is built on the Volvo BZL chassis, renowned for its globally proven electric driveline.





# A perfect match

The Volvo BZL – GML Eco Range is the result of a cooperation between two premium brands in the bus and coach business: Gemilang and Volvo Buses. It is with immense pride that we are now launching the Volvo BZL – GML Eco Range, Malaysia's first indigenously designed, developed and constructed electric full low-floor city bus. The joint launch is a first step in offering electrified and premium public transport solutions on the journey towards a sustainable world.

## About Gemilang

The leading environmentally friendly bus body manufacturer in Asia Pacific. Gemilang is committed to providing distinctive and sustainable solutions to meet the evolving needs of our customers, as well as to giving every passenger a safe, enjoyable and memorable journey. We have exported products to more than 15 markets around the globe.

## About Volvo Buses

Volvo group have operated in Malaysia since 1966 and Volvo Buses first established our activity here in the early 1980s. Offering public transport of the highest safety and quality standards, long service life and low energy consumption are hallmarks of Volvo. Being part of the Volvo Group gives Volvo Buses strength and stability including an extensive service network across Malaysia for service, parts and logistics.

# Attractive and efficient, the future of public transport – today!

The quality and reliability of a public transport service is ultimately judged by its passengers. With the Volvo BZL – GML Eco Range, we've spared no effort to make every journey punctual, convenient and comfortable. Low interior noise, energy-efficient climate control, good thermal insulation and premium seats make for outstanding ride comfort.

## **Quiet and comfortable**

Your passengers will appreciate the quiet ride in the bright and fully flat-floor cabin. The heat-reflecting double glazing not only keeps the heat out, it also contributes to the low interior noise. Seating is provided by 23 safety seats, 4 priority seats, and 6 foldable seats. Depending on the selection of the body length, we can build buses with a capacity of up to 33 seated and 58 standing passengers. The wall-mounted seats are low-maintenance, anti-vandalism and energy absorbing as well as shatter-free in the unlikely event of a crash impact.

## **Safe and durable**

Using premium materials in an advanced structural design has resulted in unmatched strength and energy storage capacity, in combination with a capacity of up to 91 passengers, depending on configuration. Body structure in lightweight and durable aluminium alloys from Switzerland, body glass panels double glazed for better heat insulation, roof-mounted components make for high performance and low maintenance costs. The vehicle's durability is documented in real-life tests and extensive FEA simulations.







# Built for supreme productivity

In-depth knowledge of local public transport requirements is a keystone in designing a transport solution. The GML Eco Range provides operational flexibility, swift maintenance, low energy consumption and multiple charging interfaces.

## **Reducing your operational costs**

The highly energy-efficient chassis is engineered and assembled by the skilled mechanics in Volvo's Swedish manufacturing plant, a perfect match to Gemilang's body concept. The design is modular inside out with a high degree of cross-model commonality. This modularity means lower repair costs, reduced downtime and simplified stockkeeping of spare parts.

## **Superior safety standards**

Safety comes from within. Solid structure, powerful driveline, electronically controlled brakes and advanced systems for driver assistance – ESP, ABS, lean departure warning, collision warning, 360 camera optional e-mirror – make for outstanding preventive and protective safety. Add to that an unparalleled electrical and battery safety architecture, and depot work and maintenance are both safe and swift.

# The foundation of your fleet

The GML Eco Range is built on the Volvo BZL Electric chassis. Volvo has in-depth and broad-based experience of electromobility from decades of cooperation with operators all over the world and a century-long legacy of innovative automotive engineering. The vehicles are top-ranked in uptime, safety and energy efficiency, and Volvo Buses has 13 well established service network across Malaysia.



## **Flexible charging and energy storage**

With electric buses, charging becomes a planning factor. The GML Eco Range offers charging flexibility by providing hardware interfaces for OppCharge automatic high-power charging as well as CCS charging sockets. The energy storage is roof-mounted, thus contributing to passenger space and optimised weight distribution. Moreover, it can be configured to perfectly suit each route's specific energy needs.

## **A first-class driver's experience**

Your drivers will appreciate the comfortable and ergonomic driver's station with multiple adjustment possibilities. It is designed to meet, and exceed, the ISO 16121 standard. Full control and effortless progress are provided by one or two 200 kW low-loss electric motors, feeding the two-stage automated gearbox. With up to 400 kW (540 hp) the acceleration and uphill capabilities of the GML Eco Range outperform virtually any diesel bus, delivering impressive torque already from a standstill.

# Facts and figures

The Volvo BZL – GML Eco Range represents the latest technology in bus manufacturing; it is the first of its kind in Malaysia's automotive market. It integrates premium chassis technology and signature bus bodies to give you a complete transport solution.

European components are used in accordance with the strictest global standards, so the GML Eco Range brings you the best of both worlds. All the chassis and driveline components in our vehicles are developed, designed and manufactured by Volvo.

Dimensions and weights	
Overall chassis length approx. (mm)	10,600
Wheelbase (mm)	5410
Height (mm)	3200
Overall width (mm)	2500
Permitted GVW (kg)	19,500
Driveline	
Electric motor, output max (kW), one or two motors	200/400
Max wheel torque (Nm)	19,000/31,000
Gearbox	2-speed automated manual transmission
Charging *	
Roof charging: OppCharge max charge power (kW)	300
CCS max charge power (kW)	150
* Max charge power depending on configuration of the energy storage system.	

Energy storage system	
Capacity (kWh)	Up to 470
Traction battery	Lithium-ion battery. Automatically temperature-controlled.
Chassis including energy storage system module for roof mounting.	
Axles, suspension and steering	
Front axle	Volvo RFS-L
Rear axle	ZF AV133
Suspension	Air bellows, front and rear
Kneeling	Optional
Power steering	Electrically driven hydraulic steering
Tyres	275/70 R22.5
Rims	Steel and aluminium rims available
Brakes	
Volvo disc brakes. Electronic Braking System (EBS5). Anti-lock Braking System (ABS). Acceleration Slip Regulator (ASR). Brake blending. Hill Start Aid. Electronic Stability Control (ESC).	

Driver's environment
Mechanically suspended seat with 3-point seatbelt. The driver's cabin complies with ISO 16121 standards. Instrument cluster, tachograph, data logging, outdoor temperature gauge.

Body	
Interior height (mm)	1940
Door 1 width (mm)	1200
Door 2 width (mm)	1200
The body materials are selected for optimised durability, weight and safety. The basic structure incorporates high-quality ferritic stainless steel while aluminium and composites are used for body panels and exterior parts.	
Air conditioning system	
Model	Denso LD9
Cooling capacity	32 kW
Passenger capacity	
Maximum no. of passengers	91 (depending on configuration)
No. of safety seats	23
Priority seats	4
Foldable seat	6
Depending on the selection of the body length, we can build buses with a capacity of up to 33 seated and 58 standing passengers.	

**V O L V O**



[volvobuses.com](http://volvobuses.com)

Equipment that is shown or mentioned in the folder may be optional or available as an accessory and may vary from one country to another. We retain the right to alter product specifications without prior notification.