BYD and ADL leading the charge with pure electric vehicles
Cleaner cities. Quieter streets. Zero emissions. Lower operating costs. The benefits of electric buses are clear. But how should you select a partner to support you throughout the EV journey?

As with any new technology, myths and misinformation can dominate headlines and potentially mislead customers. The BYD ADL partnership would like to help clarify these so you can make the right choice of partner to understand and respond to your requirements.

Zero Emissions
Pure electric means no more kerbside CO₂ or NOₓ particulate pollution, helping improve air quality in urban areas.

Reduced Operating Costs
The cost of electricity to operate an electric bus is approximately a third of the price of diesel fuel. It not only saves the environment, but also reduces your operating costs by charging at night on low rate electricity.

Quiet Comfort
Because an electric bus is a zero emissions vehicle it has no diesel engine noise or vibrations, delivering an extremely quiet experience both for passengers and other road users.
The partnership between BYD and Alexander Dennis Limited (ADL) brings together the proven and electric technology of BYD and the market-leading design and build expertise of ADL. Since the collaboration began in 2015, BYD and ADL have launched the Enviro200EV single decker in various lengths and specifications as well as the Enviro400EV double decker.

The Enviro200EV is already single deck EV market leader in the UK, but what else sets it apart?

- 2 million real zero emission operating miles in UK
- Over 250 BYD-ADL EnviroEV buses delivered or on order
- 150 in service today
- Full infrastructure support can be provided from route analysis to site surveys

Experience, expertise and innovation

The perfect combination

Our pure electric buses may be the shape of the future, but they are grounded solidly in meeting the needs of today’s operators.

The battery technology at the heart of the Enviro200EV and Enviro400EV is already well established with millions of miles of passenger-carrying service completed by over 30,000 buses around the globe, is already delivering significantly lower cost of operation.

Add the proven design and build track record of ADL into the mix and you have world class buses that are ready to go into service now.

BYD and ADL:
World-leading technology, built in Britain

EXPERIENCE

How many electric buses are actually in service in UK?
- There are already 150 Enviro200EV in service in UK, this represents over 50% of the total EV bus fleet in the country
- Over 75% of EV orders in UK in last 2 years have been BYD ADL buses

Where are these?
- Enviro200EV are in fleets across the UK – from London to Liverpool, Nottinghamshire and Guildford. The uptake of the Enviro200EV across different cities, terrains and operators’ fleets is testament to the strong customer and passenger acceptance of this vehicle

WARRANTY

How will my vehicle be supported?
- 5 year battery warranty and quoted range as standard
- Ability to warranty batteries and quoted range to 10 years
- 5 year drivetrain warranty as standard
- Best in class aftermarket support
- R&M available if required

IN-SERVICE INFO

What is the actual energy consumption and range in real life operation and how is this measured?
- Range of up to 160 miles
- 0.95kW/km real energy consumption in London
- 99.5% real uptime
- Real range based on 10% state of charge and 75% residual battery

SET-UP COSTS AND INFRASTRUCTURE DEVELOPMENT

How do I tackle the infrastructure development?
- BYD, ADL and our partner utilities providers, such as SSE, undertake route analysis and site surveys to determine requirements and suggest possible configurations
- Turnkey solutions with our utility partners
- We are partners with our customers for the long haul in EV evolution

Will this be costly to set up and run?
- Low cost charging infrastructure and the market’s most compact, mobile EV chargers
- Smart charging to optimise overnight low tariff electricity and reduce peak load therefore minimising infrastructure costs
- Full operating lease on vehicles and infrastructure available
- Available maintenance contracts allow operators to de-risk lifetime costs

EV partner evaluation checklist

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Enviro200EV: Proven performer

With a range of up to 160 miles, our Enviro200EV has already proven itself in practice across the UK. Our joint project with Go-Ahead London at Waterloo Garage (TfL routes 507 and 521) was the first time a depot was fully converted from diesel to electric outside China. 99.8% operation was maintained during conversion despite the depot being highly space-constrained. This highlights that EV installation need not be disruptive if working with the correct partner.

As one of the largest fleets of electric buses in Europe in-operation performance of 0.95kWh/km over a 12-month period (fleet average, without electric heating) was achieved. Since the start of the ADL BYD partnership, we have grown to 75%+ share of the UK electric bus market.

All of which means you’ll be in expert hands on your journey to full electric.

The double deck Enviro400EV

Our Enviro400EV brings proven, full electric drive train technology to a double decker solution.

With high capacity, 382kWh lithium iron phosphate batteries, the Enviro400EV delivers a competitive range of up to 160 miles. All batteries come complete with a five year warranty as standard, extendible up to ten years. Performance is enhanced even further thanks to a lightweight aluminium body that maximises passenger carrying capacity. Our London specification offers forward-facing seats throughout - 43 in the upper and 24 in the lower saloon - and provincial specifications also are available.

- 10.9m length, 4.3m height
- Heat pump solution for all-electric heating
- Wide range of passenger-centric vehicle specification options
This brochure is produced using 50% recycled post-consumer waste and controlled wood material from well managed forests with FSC certification.

Alexander Dennis Limited (ADL) has a policy of continuous development. We reserve the right to change specifications at any time without prior notice. For the latest details always consult ADL. 05/19

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