

Electrification at scale

Building compliant, high-performing public transportation.

Based on conversations with customers and industry leaders, including Keolis, TPG and HESS, we know that public transport is moving beyond early electrification pilots to full-scale deployment. As eMobility takes a central role in strategy, the focus has shifted to building systems that are cleaner, more reliable, and ready to operate at scale.

1

Barriers to transformation

Discussions have highlighted several shared challenges:

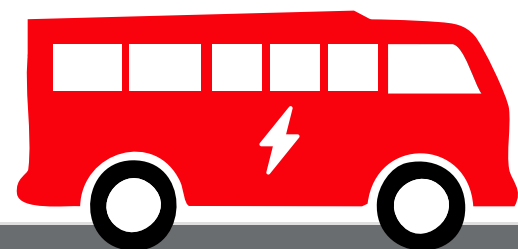
- Scaling adoption while maintaining service reliability
- High upfront investment and total cost of ownership
- Technology readiness across batteries, charging and grid integration
- Insufficient access to data which slows learning and optimization

2.

Transformation trends

Despite the challenges, strong momentum is shaping the eMobility transition, including:

- Advances in AI, battery technology and charging systems
- A focus on safe, reliable and attractive transit systems
- Regulatory changes creating uncertainty, but not slowing long-term OEM investment
- Continuous, incremental improvements in battery performance and efficiency



3.

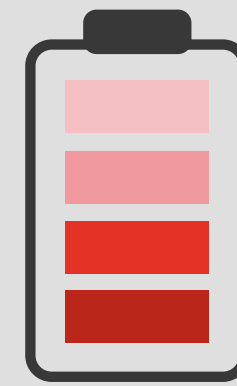
Data: what matters most

An ongoing theme is the role of data in achieving better operations:

- Data is proprietary but essential to successful eMobility
- Data must be accessible, standardized and usable to unlock its full value
- Collaboration across stakeholders is critical to turn data into insight



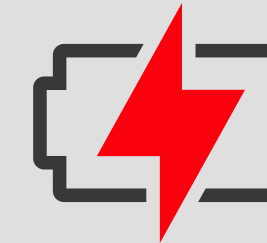
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4.

Batteries: shifting the mindset

- The goal is to move more people with fewer batteries, using them more efficiently
- Batteries should be treated as long-term assets, not consumables
- Safety remains a top priority across design, operation and maintenance
- Second-life use cases are key to improving sustainability and overall value



5.

How operators and partners are responding

Operators

- Managing the complexity of urban environments while integrating new technologies
- Addressing infrastructure constraints, including depot and charging capacity
- Scaling fleets while maintaining performance and service levels
- Strengthening collaboration with suppliers and technology partners

Manufacturing and supply chain

- Taking a focused approach to innovation, co-developing solutions with partners
- Prioritizing proven, reliable solutions over untested innovation
- Designing products with a 20-year lifecycle to optimize total cost of ownership
- Keeping reliability as the primary design principle

6.

Closing insight

Electrification at scale depends on connecting fleets, infrastructure, energy, data and people into one system. The operators and partners that take this joined-up approach will be best placed to deliver better, more effective and sustainable transport.

“Electrification at scale is **not just** about new vehicles”

