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Mobility

Charging ahead, unevenly

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Q&A with ChargePoint

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The electrification of transport is no longer constrained by vehicles but by the systems that support them. As electric cars and trucks proliferate, attention has shifted to the charging networks that must underpin mass adoption. What was once a question of rollout is now becoming one of performance: reliability, interoperability and economics are emerging as the industry's defining challenges.

Public charging, in particular, remains uneven. Drivers encounter incompatible systems, inconsistent uptime and opaque pricing, while behind the scenes, operators face grid constraints, long connection queues and uncertain returns on investment. The result? A sector that is expanding quickly, but not always coherently, where scale exposes fragmentation.

The next phase of growth will depend less on hardware deployment and more on coordination — across standards, utilities, software platforms and business models. As power demand rises, especially from heavy-duty vehicles, the limitations of existing infrastructure are becoming harder to ignore. Grid capacity, rather than charger availability, is increasingly emerging as the binding constraint.

At the same time, new technologies — from vehicle-to-grid (V2G) integration to AI-driven maintenance — promise to improve efficiency and utilization. Yet many remain commercially immature, held back by weak incentives or incomplete regulatory frameworks. Even as hardware costs fall, competitive advantage is shifting toward software, operations and customer experience.

Against this backdrop, the industry faces a set of practical questions: how to make charging networks work seamlessly, how to deploy them faster and how to ensure they are used efficiently once built. To explore these issues, we spoke with Rick Wilmer, chief executive of ChargePoint.

The following is an edited transcript of the conversation.

S&P Global Mobility: What is the single biggest interoperability blocker today and what would fix it fastest — standards, regulation or commercial agreements?

Rick Wilmer: The biggest interoperability blocker is fragmentation across hardware and software systems.

Charging networks, vehicles and apps often use different standards and don't integrate cleanly,

which leads to inconsistent user experiences and reliability issues.

The fastest way to fix this would be a combination of widely adopted technical standards and commercial agreements that ensure systems work together. Regulation can help enforce baseline compatibility, but industry alignment on common standards and integrations is the most effective path.

What reliability metric should become the industry's audited "north star" KPI for public fast charging?

The industry's "north star" KPI should be station uptime — measured as the percentage of time each charging port is operational.

Improving this depends on better monitoring, predictive maintenance, and consistent installation and servicing practices. Metrics should be independently audited and standardized, so reliability is measured the same way across networks.

How do you cut time-to-power for new charging sites in markets where grid connection queues are now the constraint?

The main constraint is grid connection delays. To reduce time-to-power, developers need early coordination with utilities and local authorities, better up-front planning and faster permitting. Working with experienced partners like Eaton can also streamline deployment and reduce delays.

What is the binding constraint for scaling high-power truck charging over the next two years: site power availability, tariffs or operational integration?

Distribution capacity and grid upgrade timelines are the dominant limiting factors. Heavy-duty commercial EVs need significantly more power than passenger EVs, and so installing Megawatt Charging Systems requires significantly more power too. Existing industrial estates, highway depots and service areas were simply not built with the required level of power available.

What needs to change for V2G to reach commercial scale: standards alignment, OEM participation, market access or utility tariffs?

Vehicle-to-grid technology remains largely in the pilot phase because the supporting infrastructure, vehicles and regulatory frameworks have not caught up with the technology we have available today. While technical standards and automaker involvement are slowly aligning, the lack of a standardized financial incentive makes adoption difficult for the average consumer. Most current models still treat electric vehicles as passive loads rather than mobile energy assets, offering no clear path for owners to monetize the power they send back to the grid.

Do you expect stationary storage to become standard at high-power sites, or will tariff reform remove the need?

While tariff reform and smart charging are crucial for grid stability, they won't eliminate the need for physical storage. That is going to be a vital component of any network to manage extreme, concentrated peak loads. In addition to that, there are many use cases where stationary storage will play a vital role, such as in fleets. Together with our partner, Eaton, we are developing technology based on the Express architecture that will unlock low-cost charging in those scenarios, which will require on-site renewable energy generation and storage.

As hardware commoditizes, what will remain defensible differentiation for charging

networks: software, operations or customer relationships?

Defensible differentiation will come mainly from software, operations and customer experience — not hardware alone.

As hardware becomes more standardized, advantages will come from reliable operations, integrated software (for monitoring, billing and grid management) and a seamless user experience. Strong customer relationships and service quality will also matter, but they depend on consistent performance and ease of use.

How are you planning to sustainably improve charger utilization across your network — particularly at underused and rural sites — without compromising customer experience or grid constraints?

Improve utilization through better site selection, visibility, and scalable deployment. This means doing thorough site evaluation up front, making chargers easier to find via apps and in-vehicle systems, and adding capacity incrementally as demand increases.

What is the current utilization rate of your network, and what utilization benchmarks are you targeting over the next 3 to 5 years?

This is a commercially sensitive metric, so not something we share, and rates vary depending on several factors, including location and pricing. However, we have recently reported that more than 100,000 AC ports recorded time utilization above 30% at least one day in January 2026, indicating over seven hours of continuous use per day across workplace, retail and other locations. What I can also tell you is that we've delivered more than 424 million charges all-time, and the growth rate of charging sessions we enable continues to outpace growth in new ports, indicating a need we believe for more charging infrastructure.

How are you integrating AI into your charging operations today, and what measurable results do you expect from its adoption?

AI plays a role in proactively scheduling maintenance. Instead of waiting for a charger to break, AI analyzes real-time data such as power fluctuations, temperature changes and connector wear to predict failures before they happen. The result is greater uptime for the driver. We also use AI for dynamic pricing optimization and AI data assistance as a support tool for station operators and drivers.

What is your take on the proposal of using 100% made-in-America chargers to qualify for NEVI incentives? Do you see it as a short-term pain for a long-term gain or a protectionist measure that could harm the charging industry's growth in the future?

Domestic manufacturing can strengthen supply chain resilience, but there is a need for regulatory clarity and realistic transition timelines for this proposal to work. Abrupt policy shifts risk slowing deployment.

Can you shed some light on your growing product portfolio across hardware, software and services, and what gaps or customer pain points are shaping your road map?

We've had a very busy 12 months, and it has been a productive year defined by our commitment to innovation and technological leaps. For example, we are introducing a new Level 2 as well as a new DC [direct current] architecture for North America and Europe. The DC platform, called Express, was developed in collaboration with Eaton and advances bidirectional power and V2X [vehicle-to-

everything] capabilities, showcasing our leadership in next-generation charging solutions.

To enhance reliability and security, we launched ChargePoint Protect, featuring the industry's first cut-resistant cable, and Safeguard Care for proactive monitoring. Our Omni Port offering now allows any EV in North America to charge at the same spot regardless of connector type, while ChargePoint Premier Care provides dedicated operational support to optimize business results.

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