



September 18, 2023

The New York City Taxi and Limousine Commission
Office of Legal Affairs
33 Beaver Street – 22nd Floor
New York, NY 10004

Re: Public Hearing on the Green Rides Initiative (September 20, 2023)

Dear Commissioner Do,

Thank you Commissioner Do, and members of the Taxi and Limousine Commission, for holding this hearing on the Green Rides Initiative. My name is Nathan King, and I'm the co-founder and CEO of It's Electric, a curbside EV charging startup. We are headquartered at the Newlab offices in the Brooklyn Navy Yard, in District 33.

About It's Electric

It's Electric is electric vehicle (EV) charging purpose-built for cities, with a mission to unlock access to clean vehicles for all urban drivers. Launched in 2021, It's Electric is solving an urgent challenge: municipalities like New York City are leading the way in setting policy targets to mandate a transition to EVs, but no scalable charging solutions existed for the millions of drivers who don't have access to a private driveway or garage. In New York City alone, one million drivers park on the street, many of them drivers of for-hire vehicles (FHVs). If we want all New Yorkers to have access to electric mobility, we must provide them with convenient and affordable public charging options where they already park: the curb.

It's Electric is addressing this challenge by harnessing spare electrical capacity from nearby buildings to deploy low-footprint curbside Level-2 EV chargers. We create a behind-the-meter connection to property owners' electrical panels to tap this excess capacity, thereby avoiding the barrier of grid limitations and the costly and time-consuming process of creating a new utility interconnection. Because of these significant savings, we can take on the capital and installation costs ourselves, without requiring contributions from our municipal partners or our host properties. Furthermore, we can afford to deploy in areas that don't yet have high rates of EV ownership yet – where we know utilization will initially be low – thus breaking the chicken-or-the-egg cycle that is currently stifling EV adoption in urban areas.

In return for hosting an It's Electric charger, host properties receive 20% of the charger's topline revenue, creating a new passive income stream for them while making it easier for everyone in their community to charge an EV.¹ And unlike other "public" chargers – which are often located in parking lots or garages that charge a fee to access – we are a truly public, no-fee charging

¹ Host properties earn approximately \$800/year in passive income per charger (assuming a 25% utilization rate). The amount of revenue that host properties can expect to earn depends on a number of factors, including the cost of electricity, the charger utilization rate, and the price drivers pay for charging. It's Electric will set pricing in collaboration with the City.



option. With revenue sharing for host properties, plentiful access for (current and future) EV owners, and virtually no impact on municipal budgets – It's Electric is a win for everyone.

We specifically designed our charging hardware to complement the urban landscape. While most other U.S. EV charging equipment is designed for installation in garages, parking lots, or highway rest stops, without a focus on aesthetics, It's Electric chargers are sleek and unobtrusive, with a small footprint. Not only does this make our chargers easier and cheaper to install, it also ensures that the majority of the sidewalk is clear of obstruction – a priority for all New Yorkers, especially those with mobility limitations.

Additionally, It's Electric chargers are the first in North America to feature a bring-your-own charging cord. Detachable cords not only streamline the charger's profile; they reduce the maintenance required from damaged cords or cord management components, which are the most commonly broken element of a public charger. This configuration is widespread in European cities, and is rapidly expanding as these countries electrify, providing a successful precedent for how urban curbside charging can be accomplished in the U.S. We maintain our chargers end-to-end throughout their entire lifecycle in order to exceed the 97% uptime (reliability) requirement set by the National Electric Vehicle Infrastructure (NEVI) Formula.

In our first two years of operations, we have achieved substantial traction for our first-of-its kind business model, including publicly-sponsored deployments in New York City and Detroit, a partnership with Hyundai, acceptance into several highly competitive accelerator programs, and backing from renowned investors and strategic advisors.

Green Rides Initiative

It's Electric supports the Commission's Green Rides Initiative as a key part of the City's transportation electrification strategy. With high-volume for-hire service (HVFHS) vehicles responsible for a significant portion of the city's transportation emissions, transitioning these drivers into EVs is critical to improve local air quality and help the City meet its greenhouse gas reduction targets. Furthermore, if we can solve the public charging problem for these drivers – who on average put 96 miles on their cars each day – we will have gone a long way toward solving the charging problem for the average New York City driver, who travels just nine miles per day by car.^{2,3}

According to a study conducted by HR&A and Uber earlier this year, 54% of Uber drivers park on the street (rather than in a garage or driveway), and thus do not have ready access to overnight charging.⁴ (This may in fact be overestimating the share of drivers who have access to

² NYC Taxi & Limousine Commission. “Charged Up! TLC’s Roadmap to Electrifying the For-Hire Transportation Sector in New York City.” https://www.nyc.gov/assets/tlc/downloads/pdf/Charged_Up!_TLC_Electrification_Report-2022.pdf 2022.

³ Cortright, Joe. “New York City’s Green Dividend.” https://www.nyc.gov/html/dot/downloads/pdf/nyc_green dividend_april2010.pdf April 2010.

⁴ HR&A Advisors, Inc. “NYC Electric Vehicle Infrastructure Assessment for For-Hire Vehicles.” https://www.hraadvisors.com/wp-content/uploads/2023/02/NYC-Electric-Vehicle-Infrastructure-Assessment_2023_Uber_HRA-Advisors-1.pdf February 2023.



overnight charging, as other recent studies have found that only 17% of for-hire vehicles have electrical access where they park overnight.⁵) In any case, given that lack of access to at- or near-home charging is the number one barrier to EV adoption among the general public, it is not surprising that “access anxiety” is particularly acute for HVFHS drivers, who rely on their vehicles to earn a living. Drivers need to have the confidence that they can start their shifts with a fully-charged battery, and have a place to reliably charge at the end of the day. Drivers should not have to rely on DCFC on a regular basis, both to keep operational costs under control and to avoid spending valuable on-shift time in line or waiting for their batteries to charge.

Role of Level-2 Chargers

In the recent “Charged Up!” report, the Commission projected that TLC drivers will use DC fast chargers 70% of the time, and Level-2 chargers the remaining 30% of the time. To us, this seems precisely backwards, and not in keeping with the National Renewable Energy Laboratory’s projections that one million of the 1.2 million public chargers to be deployed by the end of the decade will be Level-2 chargers.⁶ Perhaps this is simply a concession to the reality that many HVFHS drivers do not have access to off-street parking. But with grid limitations, and the significant time and cost associated with installing DCFC infrastructure – not to mention the operational and opportunity costs that drivers would incur with frequent usage of DCFC – we urge the Commission and the relevant City agencies to reconsider the role that curbside charging can play in serving this population. Indeed, if drivers have access to overnight/off-shift charging, and can start their shift with a fully-charged battery, that should be able to serve the majority of full-time drivers, who on average drive 96 miles/day.

The City has already recognized the role that curbside Level-2 charging will play in helping New Yorkers transition to EVs. Under the leadership of Mayor Eric Adams, the Department of Transportation (NYC DOT) announced in January that the City will install 10,000 curbside charging stations by 2030; earlier this month, NYC DOT published a Request for Expressions of Interest for parties to inform the development of a formal Request for Proposals. It’s Electric will be submitting our thoughts to NYC DOT, and we will emphasize the need to prioritize deployment in the outer boroughs where HVFHS drivers live.

Policy Recommendations

As the multiple policies driving the City’s transition to EVs go into effect, It’s Electric is supportive of policies that will ensure this transition is a success – measured both in terms of EV adoption rates and maintaining the delicate balance of all curbside needs.

⁵ Moniot, M., Borlaug, B., Ge, Y., Wood, E., & Zimble, J. (2022). Electrifying New York City Ride-Hailing fleets: An examination of the need for public fast charging. *iScience*, 25(4), 104171. <https://doi.org/10.1016/j.isci.2022.104171>

⁶ Wood, E., Borlaug, B., Moniot, M., Lee, D.Y., Ge, Y., Yang, F., Liu, Z. (2023). The 2030 National Charging Network: Estimating U.S. Light-Duty Demand for Electric Vehicle Charging Infrastructure. National Renewable Energy Laboratory. <https://www.nrel.gov/docs/fy23osti/85654.pdf>



First, we support the release of additional EV-only plates by the Commission to encourage drivers to make the switch to EVs. As the response to the release of EV-only plates earlier this year showed, these plates are in high demand, and drivers will make the upfront investment required to switch to an EV if it means getting a FHV license. We would encourage the Commission to reserve most or all of these licenses for individual TLC drivers (rather than businesses) to allow these drivers the opportunity to own their vehicles. From It's Electric's perspective, increasing the number of EVs on the road (especially in the early years of the Green Rides policy) will boost our utilization rates, helping us to deploy and attain economies of scale more quickly.

Second, we know that many HVFHS drivers live in multi-family housing in Queens (Elmhurst, Jackson Heights, Woodside, Jamaica, and South Ozone Park), Southern Brooklyn (Bensonhurst and Kensington), and the Bronx (Concourse and Soundview). We also know that these neighborhoods do not yet have sufficient no-fee public Level-2 chargers available to support a transition to EVs. As such, It's Electric would support parking regulations that reserve overnight access to curbside EV chargers for HVFHS drivers, in places where the Commission and NYC DOT determine is appropriate.

In keeping with NYC DOT's recently released Curb Management Action Plan, we would encourage the Commission and NYC DOT to work together to design a policy that supports HVFHS drivers without unnecessarily limiting other residents' access to EV charging resources. For example, if two chargers were installed on a particular block, one charger would give overnight preference to HVFHS drivers, and the second charger would not have any limitations. This policy could be written in a way to sunset over time, based on factors such as utilization rates and EV charger availability.

Next Steps: Charging Accelerator

It's Electric is eager to work with the Commission and NYC DOT to speed the deployment of EV charging infrastructure throughout the City. To that end, we would welcome the opportunity to work with you in launching a Charging Accelerator, similar to the program that was envisioned in the recent "Charged Up!" report.

The report recommended "the creation of a Charging Accelerator program that streamlines the process for TLC-licensees seeking to install charging equipment such as assisting with grant [applications], securing permits and providing technical assistance." While we support the idea of getting more Level-2 chargers installed where they are needed most, the Accelerator as it's currently structured leaves out the majority of HVFHS drivers, who park on the street. We would support and participate in the creation of an Accelerator that instead works to find interested property owners to host It's Electric curbside charging posts in neighborhoods with high shares of HVFHS drivers. Although many HVFHS drivers may not be able to install Level-2 chargers at home, they may be interested in a curbside solution that provides both themselves and their neighbors with the ability to confidently make the switch to EVs.



Conclusion

Thank you for the opportunity to provide you with our thoughts and recommendations about the Green Rides Initiative, and for the work you are doing to accelerate the transition to EVs in New York City. We look forward to working with you to make this vision a reality.

Sincerely,

Nathan King
Co-Founder & CEO