Electric School Buses Are Reliable

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Facts About the Croton School District's Mischaracterization of the White Plains School District's (WPSD) Experience with Electric Buses:

Fossil fuel industry enablers spread fear, uncertainty and doubt about electric vehicles. We do not need the Croton Harmon School District adding to the fog with misstatements and mischaracterizations, just as we are starting out on a long journey to electrify all our transportation needs. Based on the fact pattern below, we call on the School to clear the air and retract its misleading statement about the WPSD's experience with e-buses.

According to minutes from the Croton Village Sustainability Committee meeting of July 26, 2020, the School's Transportation Director reported that she and school transportation mechanics visited the WPSD transportation department on June 16. She stated "The consensus in White Plains is the same as what we feel. Diesel and gas are still the way to go but the electric buses do hold promise for the future."

Based on public record information and conversations with the WPSD transportation leadership, this does not accurately describe the consensus of WPSD's experience with electric buses. In fact, WPSD is enthusiastic about its transition to e-buses because its e-bus pilot has been successful.

Specifically, in a thorough report of the pilot e-bus program in White Plains, Con Edison documented the performance of the buses.[1] It found "Reliability has been stable and excellent. The drivers that used to operate the non-electric school buses have continued to operate the electric vehicles and continue to report high vehicle satisfaction." Report at 4. The report concludes that the buses "are meeting expectations" as to the primary goal of functioning well in providing transportation. Id. at 10. In Lessons Learned, the report states "The buses have succeeded because they have been reliable, with a minimum of fit & finish issues." It further explained in its "Application of Lessons Learned" that "Electric school buses can be successfully operated by a vehicle operator that is motivated, committed and sophisticated enough to accept the need for operational changes." Id. at 11. It also pointed out that milestones include

[1] Con Edison, REV Demonstration Project: Electric School Bus V2G, 2019 2Q Quarterly Progress Report, July 31, 2019. This is the only quarterly report easily locatable on the internet. Other quarterly reports that have been reviewed are similar in sum and substance regarding bus performance and driver satisfaction. I am not aware of any other reports with contrary information.

"No vehicle failures from technical causes or otherwise" having run for "293 days of school bus operations." Id. "Finally, there were no incidents of vehicle failure due to out of specification range or misleading range data provided to the driver." Id. at 5.

Con Edison has reiterated its analysis of the success of the WPSD e-buses in a presentation as recently as April 30, 2020. Its summary states "Buses have had >95% planned uptime through 2019." It concludes "E buses function well as transportation."

A similar public report about the success of the e-bus pilot in the WPSD was prepared by the New York State League of Conservation Voters (NYLCV) Education Fund. Specifically, the NYLCV conducted a case study of the WPSD. It found that "the buses can run 70 miles on a single charge, more than enough for the 10-mile routes they typically do.[2] Vehicle uptime, or the percentage of time the vehicle is available to perform its intended function, is currently 95%. Unlike reports from other pilot programs, cold weather has not affected the school buses' batteries or operation." Report at 20. The Case Study Key Takeaways are:

- "Overall, the buses run very well and have had few operational issues. Stakeholders report savings on fuel and maintenance costs, estimated to be about $10,000 per year."
- "Community Response has been positive. The community and school district are passionate about clean school buses." The Superintendent of the White Plains School District called the pilot "a tremendous learning experience" as it has provided an opportunity to teach children about climate change and air pollution issues.
- Upfront costs are the barrier to large-scale electrification of school bus fleets, rather than technology or performance issues.[3]

Report at 21.

Remarkably, the WPSD Transportation Supervisor, Sergio Alphonso, spoke on a conference panel entitled "Electric School Buses: Success Stories Across the Nation".[4] He stressed that with respect to the e-buses "I am a satisfied Supervisor." He then went on to explain that "the community feedback was just great, we are in an industry where we emphasize service, the quality of the service, efficiency, most importantly, the safety of our students. So, whenever we want to talk about the health and well-being of our students, it [use of e-bus] is really a no-brainer." He also emphasized that the WPSD has a "great partnership with our provider [Lion Electric]." This is a remarkable testimonial: The Transportation Superintendent was selected to

[2] The Lion C bus that the Croton School recently passed on has a range of 100 miles.

[3] The Lion C bus that the Croton School recently passed on would have cost about $26,000 more than the gas bus that was purchased, an amount that would have been recovered by lower fuel and maintenance costs in less than 3 years. Moreover, an additional $78,750 flowed to the Croton District in State aid in conjunction with the $225,000 transportation bond it procured with community approval. Some of those $78,750 funds could have been used to off-set the $26,000 higher purchase price of the e-bus.

[4] Youtube video available at Livinggreenct.org
Introduction of Sergio Alphonso, Youtube at 2:20:03; Quotes starting at: 2:22.08.

speak at a National Conference on e-buses because WPSD is part of a *Success* story, and he enthusiastically characterizes his experience with e-buses in positive terms.

After hearing Sergio Alphonso speak at the NCSD Conference on a panel of Success Stories, I reached out to him to hear more specifics about the White Plains experience.[5] He was again, enthusiastic about e-buses. He readily offered to arrange for a conference call with me and another member of Croton100 and the National Express operators of WPSD buses: the General Manager of Transportation, Assistant General Manager of Transportation and the Operational Dispatcher.[6] At no time did they express any sentiment in the realm of "consensus in White Plains is that gas and diesel are the way to go" or that the promise of electric buses are in the future, rather than in current successful operation. To the contrary, they unanimously expressed the following:

- Drivers find the e-buses "reliable" and found them easy to drive.
- Transition for drivers was "easy."
- E-buses are "just as reliable as gas/diesel", any maintenance issues were taken care of without a "real setback."
- Diesel buses are just as prone to maintain.
- E-buses are "running really good for us."
- While the buses are not as efficient going up hills, this is "not a major problem", efficiency is improving.
- There "are no show-stoppers," snowy driving was fine.
- Biggest problem, they have a tight urban parking lot, setting aside a dedicated space for charging, they are planning to expand to larger depot.
- National Express, which is the contractor for WPSD is "looking to expand" e-bus offerings.
- Lion provided ample driver training onsite with each driver test driving 10 to 15 minutes.
- The cost of operating the bus went from 80 cents per mile for diesel to 30 cents per mile for electric.
- Tires were the only main maintenance needed.

Given all these reports describing the WPSD positive experience, the Croton School's bias toward buying a gas bus filtered out facts that are favorable to buying an e-bus from important communications in the School's deliberative process, while distortions of fact were accepted to justify the decision not to buy an electric bus, even from a qualified vendor. The statement that there is consensus in the WPSD favoring gas and diesel buses goes beyond boundaries of accuracy and has contributed to a harmful policy decision. All the objective available information establishes that there is consensus that the WPSD e-buses are a success.

[5] Notes from the NCSD conference were transmitted to Superintendent O'Connell on May 29.
[6] Superintendent O'Connell was informed of the conversation with the WPSD bus team on June 17.

All of these facts and the concerns have been shared with the Croton School District Board of Education and Superintendent Deborah O'Connell. Our electrification journey is critical; it should not start with misinformation. We call on Superintendent O'Connell and Director of Transportation to set the record straight by embracing facts that the White Plains e-buses are highly reliable and its pilot has been successful, before more damage is done from misleading statements.