# **Advocacy Talking Points:**

## **Zero-Emissions Buses in Public Transit**



Join us in advocating for zero-emission buses to transform our community's future. Cleaner air, greater equity, and a legacy of sustainability can all be ours if we lead in green innovation, saving costs now while ensuring a greener tomorrow. These buses amplify resilience, justice, and progress, amplifying our impact globally. Let's unite for a thriving, equitable, and sustainable city as we demonstrate our dedication to a brighter future.

## Inspiring Talking Points (speak from the heart!)

"Breathing Easy Together:" Zero-emission buses mean cleaner air for all, fostering equity, health, and justice in our diverse community.

"Green Transit, Fair Transit:" Equitable access to sustainable transport promotes justice and reduces disparities, connecting every neighborhood to opportunity.

"Leadership in Sustainability:" By choosing zero-emission buses, we lead with innovation and set the standard for a greener, brighter future.

"Savings for Tomorrow, Today:" Investing in zero-emission buses saves money, trimming operating costs while preserving our planet for generations ahead.

"Climate Justice in Motion:" Choose zero-emission buses to combat climate change and prioritize justice for communities disproportionately affected by pollution, especially Black, Brown, and immigrant communities.

"Healthy Choices, Healthy Lives:" Zero-emission buses improve air quality, protecting public health and fostering resilient, vibrant communities.

"Legacy of Sustainability:" Pave the way for future generations by adopting zero-emission buses, securing a sustainable legacy that reflects our values.

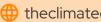
"Transit for Everyone:" Zero-emission buses enhance both riders' and drivers' experience of public transportation, making it reliable, efficient, and accessible for all residents.

"Equity on Wheels:" Zero-emission buses ensure fairness, bringing cleaner air and greener options to neighborhoods that need it most.

"Smart Investments, Brighter Future:" Choose zero-emission buses for long-term savings, demonstrating wise stewardship of public resources and a commitment to our city's future.

"Global Impact Starts Local:" By advocating for zero-emission buses, we join a worldwide movement toward cleaner transport, inspiring change beyond our city limits.









"Resilience on the Road:" Zero-emission buses contribute to urban resilience, helping us weather challenges while reducing our carbon footprint.

"Act Locally, Influence Globally:" Our choice for cleaner transportation amplifies our impact, influencing a broader shift towards sustainable urban mobility.

"Unleashing Our Communities' Potential:" Embrace zero-emission buses to unlock our communities' potential, creating a healthier, thriving urban environment for all."

## Technical Talking Points (in case you want to "throw" some data!)

### Battery Electric Buses (BEB) Are The Most Environmental Responsible Choice:

- BEBs emit 1.29 pounds of greenhouse gases (GHG) per mile, while Compressed Natural Gas (CNG) buses emit a significantly higher 5.77 pounds of GHG per mile (nearly 4.5x more per bus!).
- In the near term, FCEBs would create 2.6x more GHG emissions than those of BEBs.
- Hydrogen fuel-cell electric vehicles (FCEVs) hold onto a mere 18-46% of the generated electricity required to propel them, losing a significant amount of energy. Contrasting this, Electric Vehicles (such as BEBs) preserve an impressive 95% of energy. The implication is striking - the pursuit of carbon neutrality with FCEVs would necessitate a power demand surge 2x to 5x greater than that required for battery-electric vehicles.
- Hydrogen production requires significant water resources. Powering a hydrogen bus for a day consumes between 224-510 local gallons of water, equivalent to the daily usage of 2-5 singlefamily households.

#### **Cost-Effective Sustainability:**

- Fueling BEBs would cost only \$0.43 per mile, and differently than CNG, would present strong environmental and health benefits. Hydrogen, in contrast, is the most expensive fuel and would cost 2x to 10x more per mile for charging.
- There is a high level of satisfaction with BEB fleets among agencies that have begun transitioning.<sup>1</sup>

## **Health and Community Impact**

- BEBs and FCEBs are both zero-emission buses that do not release harmful air pollutants like carbon monoxide, NOx, particulate matter, VOCs, and SOx. As such, they help prevent respiratory, cardiovascular, and pregnancy issues linked to inhaling pollutants from diesel and CNG/RNG buses.
- Transitioning to ZEBs will improve transit justice by reducing air pollution in underserved communities.

#### **Social Justice Considerations:**

- The construction of natural gas pipelines raises social justice issues and can result in environmental disturbances, pollution, and explosions. Furthermore, the disproportionate impact of fracking on communities of color results in health issues and water contamination.
- On-route charging could effectively extend the range of BEBs and give them a replacement rate of nearly 1:1 with mainstream diesel transit buses.

<sup>&</sup>lt;sup>1</sup> Based on a survey conducted by C3 of nine transit leaders nationwide,

