Another Voice: Electric buses are cost-effective and healthier

By Another Voice | Published October 6, 2017 | Updated October 6, 2017

The World Health Organization reported in 2012 that approximately 7 million people died – 1 in 8 of total global deaths – as a result of air pollution exposure. This finding more than doubles previous estimates and confirms that air pollution is now the world’s largest single environmental health risk.
Reducing air pollution could save millions of lives. In particular, the new data reveals a stronger link between both indoor and outdoor air pollution exposure and cardiovascular diseases such as strokes and ischemic heart disease, as well as between air pollution and cancer.

This is in addition to air pollution’s role in the development of respiratory diseases, including acute respiratory infections and chronic obstructive pulmonary diseases.

Researchers from MIT's Laboratory for Aviation and the Environment found that in the United States, air pollution causes about 200,000 early deaths each year.

Emissions from road transportation are the most significant contributor, causing 53,000 premature deaths. A person who dies from an air pollution-related cause typically dies about a decade early.

According to the nyc.gov website, air pollution is responsible for about 6 percent of deaths each year as well as untold millions of dollars in associated health care costs. By converting from diesel buses to all-electric buses, New York City stands to reduce health care costs by $100,000 per bus per year (based on population density). Buffalo would not see that magnitude of savings, but the improvement in health would be significant.
Buses running on compressed natural gas emit 108 metric tons of greenhouse gas emissions per bus per year, and the average diesel bus emits 100 metric tons of greenhouse gases per bus per year.

Changing the entire fleet of buses in New York City, for instance, to electric buses would result in a reduction of emissions within the city of approximately 575,000 metric tons of carbon dioxide per year. The net savings, including the incremental power generation required for the electric buses, is nearly 500,000 metric tons of carbon dioxide, assuming the current mix of power generation in New York City and Westchester.

From a financial perspective, the savings associated with fuel (the cost of diesel versus the cost of electricity) and bus maintenance more than offsets the higher cost of electric buses, including the cost of the recharging infrastructure over the lifetime of a bus. Typically, electric buses cost about $300,000 more than diesel buses, and annual savings are estimated at $39,000 per year over the 12-year lifetime of the bus, excluding health care cost benefits, not to mention the climate mitigation benefits.

We encourage the Niagara Frontier Transportation Authority to purchase 10 zero electric buses by 2018.
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