There are 46,500 diesel school buses in New York

CO$_2$ is the principal Greenhouse Gas (GHG) emitted from diesel engines

Kids are particularly vulnerable to GHG

GHG have harmful repercussions on the environment, human health and generally on our society

AN ALL-ELECTRIC SCHOOL BUS SOLUTION IS AVAILABLE
LION OVERVIEW

- The LIONC is the first all-electric school bus in North America
- Only zero-emission solution
- 1 million miles driven and counting
- Built with materials that have already proven themselves
- Lion has been designing electric buses for 7 years
- The Lion is in its third commercialization year
- Lion sold hundreds of electric Type C school buses in North America
- Lion is launching its electric minibus in the summer of 2018;
  - the Lion will meet customer needs in paratransit, school, and public transportation requirements
- Lion is developing Class 5 to 8 all-electric trucks. Class 8 will be available by the Fall of 2019.
Benefits of an All-Electric Bus

<table>
<thead>
<tr>
<th>RANGE</th>
<th>ENERGY</th>
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<tbody>
<tr>
<td>65 miles</td>
<td>88 kWh</td>
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<tr>
<td>100 miles</td>
<td>132 kWh</td>
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<tr>
<td>125 miles</td>
<td>176 kWh</td>
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<tr>
<td>155 miles</td>
<td>220 kWh</td>
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ELECTRIFYING SCHOOL BUSES IS INEVITABLE

Electrifying school buses is the only environmental, social and economical solution that makes possible protecting our most precious capital, our children.

- North America is aiming to be a green and electric society with a healthy population and healthy children.
- The Lion solution is a proven and reliable solution that is available now.

Current Deployments:
- Lion deployed 75 buses in Quebec in the last 2 years
- Lion deployed 50 buses in California in the last year
- Lion will deploy 25 buses more in California than last year
- Lion is deploying 15 buses in Ontario this month
- Electric school buses adapt well to all climates

Key Takeaways from current deployments:
1. Lion provides additional charging infrastructure knowledge, selects charging equipment based on needs and assists with infrastructure installment.
2. Lion provides enhanced training to school districts and provides Lion EV certification to key employees.
3. Lion provides additional route options based on needs to reduce range anxiety while maximizing the return on investment.
Additional All-Electric Solutions
• The eLIONM meets the urban paratransit transportation expectations
• Low floor and design optimized for paratransit
• The eLIONA is a mini school bus
• Flexible configuration options
• All-electric powertrain
• Safe, high-performance lithium-ion (NMC) batteries from LG Chem
• 75 miles – 150 miles range
• 1 or 2 swappable 80kWh batteries
• 19.2 kW on-board charger that uses a J1772 charger
• Available for school transportation purposes
• Will launch in the Summer of 2018
Range and Energy

Charging Times:

- **AC /19.2**: 4-9 hours
- **DC 50kW**: 1.6 – 3.2 hours
- **DC 100kW**: 0.8 – 1.6 hours

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<tr>
<td>75 miles</td>
<td>80 kWh</td>
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<tr>
<td>150 miles</td>
<td>160 kWh</td>
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**eLIONA**

<table>
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</table>

**eLIONM**
HEAVY VEHICLES ARE RESPONSIBLE FOR ABOUT 50% OF ALL ROAD VEHICLES GLOBAL EMISSIONS
GARBAGE TRUCK: Eliminating hydraulics saves maintenance but also eliminates hydraulic leaks and related fines

CRANE TRUCK: Significant reduction in consumption when vehicle is stopped

EMERGENCY VEHICLE: Electric motorization facilitates the integration of new technologies and improves the performance of the vehicle to reduce the inaction time

REFRIGERATED TRUCK: Quiet vehicle allow for all-day service outside of traditional working hours

MINING TRUCK: Eliminates the need for expensive ventilation systems inside mines

**ELECTRIFYING HEAVY DUTY VEHICLES IS INEVITABLE**
CLASS 8 ALL-ELECTRIC VEHICLE
AVAILABLE IN THE FALL OF 2018
LION’s Next Steps

Sales
- Lion sold hundreds of Type C buses in North America; more specifically in California, Massachusetts, Minnesota, Quebec, Ontario and Alberta
  - Lion is currently targeting other major markets and is extending its reach to **205 million people** in **19 different states and provinces**

Cities
- **96” width** all-electric school buses are now available

Built in the US for the US
- Lion will open a facility in the US by 2019
LION

Power in Progress

thelionelectric.com
1 (800) 546-6706