



**Empire
Clean
Cities**

**Promoting Green Fleets
for a Sustainable**

NYC and Lower Hudson Valley

NYC

Electric Vehicle Readiness & Planning

PURPOSE



THE CITY OF NEW YORK
OFFICE OF THE MAYOR
NEW YORK, NY 10007



- Philly
- Boston
- Open Plans
- CRC Media

The Nuts and Bolts

NYC Mayor's Fund and the NYC Mayor's Office of Long-term Planning was engaged to investigate solving

Policy, Legislative and Grid Barriers

Collaborated with NYC DOT, Con-Edison and other partners

In 2010 NYC released its electric vehicle consumer adoption study which outlined NYC's role in EV adoption

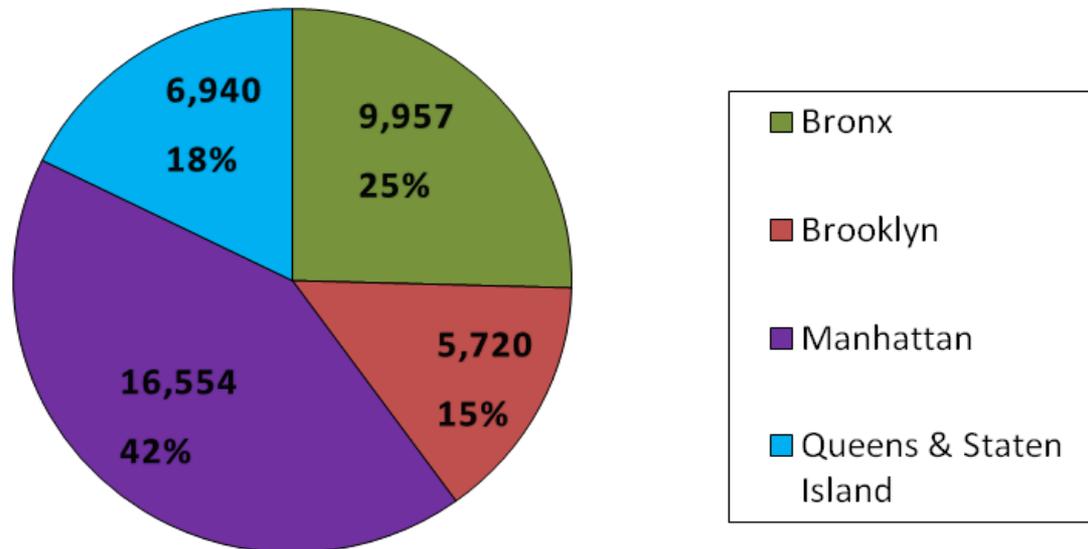
The ISSUES

- 1. Increasing Charger Access**
- 2. Improving Vehicle Economics**
- 3. Conducting Public Outreach**

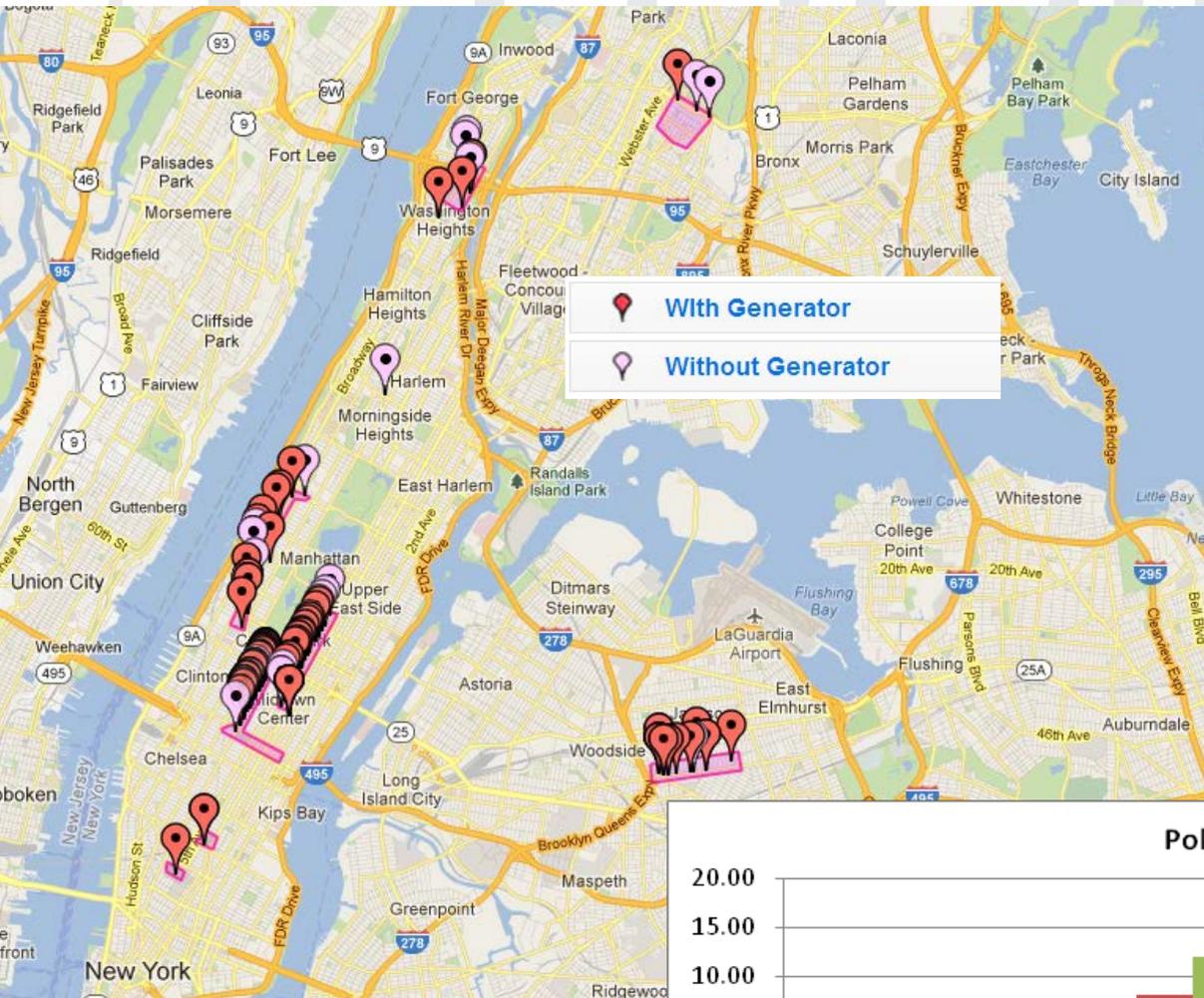
Increasing Charger Access

1) EV Building Codes - updating codes to ensure that new parking facilities would be EV-Ready

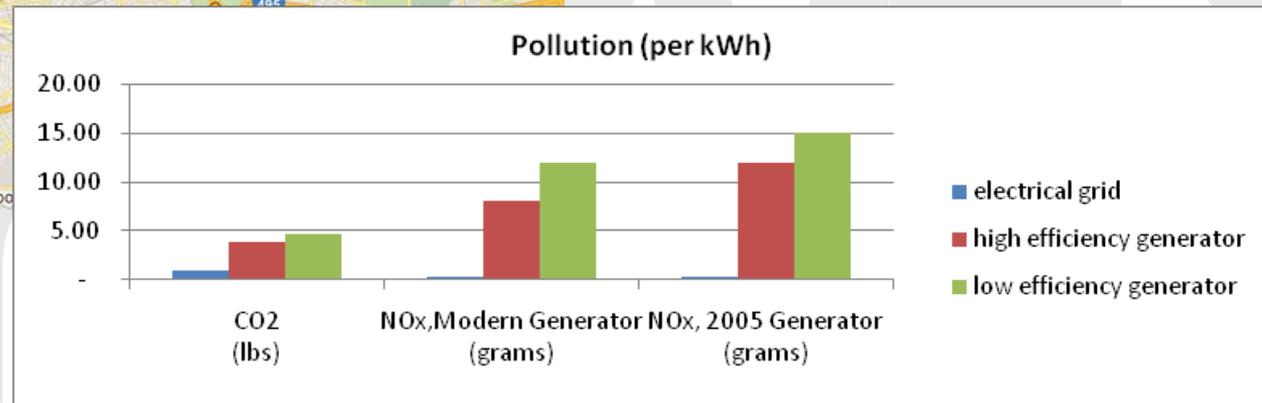
New Parking Spots Permitted in NYC (1/2009-7/2012)



Increasing Charger Access



2) Curbside Charging in NYC – “2 birds with 1 stone”. Providing electricity to food trucks in the short term will reduce overall emissions created by food trucks and also lay the groundwork for EV-Ready curbside infrastructure



Increasing Charger Access

3) Fast Charging – ID-ing locations and economic challenges to understand feasibility





Increasing Charger Access

4) Developed training manual for parking garage attendants

- Basic Administration and Record of Training
- Understanding Level I and II EVSE's
- EV Garage Parking Methodology:
 - Location, Plug position, Availability, Make model of EV, Type of patron
- EVSE Operation, Communication
- Billing
- Charging Demo
- Safety
- Troubleshooting and support

\$ Improving Vehicle Economics \$

- 1. EV CarShare** – Is car-share a good operational match for Evs – YES!

<i>Vehicle</i>	<i>Electric Range</i>	<i># Trips within Electric Range</i>	<i>Percent</i>
<i>LEAF</i>	70	646	98%
<i>Volt</i>	35	441	67%
<i>Prius Plug In</i>	11	74	11%

Figure 1: Car Share Trips Meeting Electric Vehicle Requirements

\$ Improving Vehicle Economics \$

2) ToU EV Metering –Remove codes that prevent customers from taking advantage of installing a 2nd meter to allow Con-Edison customers to take advantage of ToU rates. Also added cost-effective sub-metering to allow customers to take advantage of benefits w/o a 2nd meter, reducing costs.



\$ Improving Vehicle Economics \$

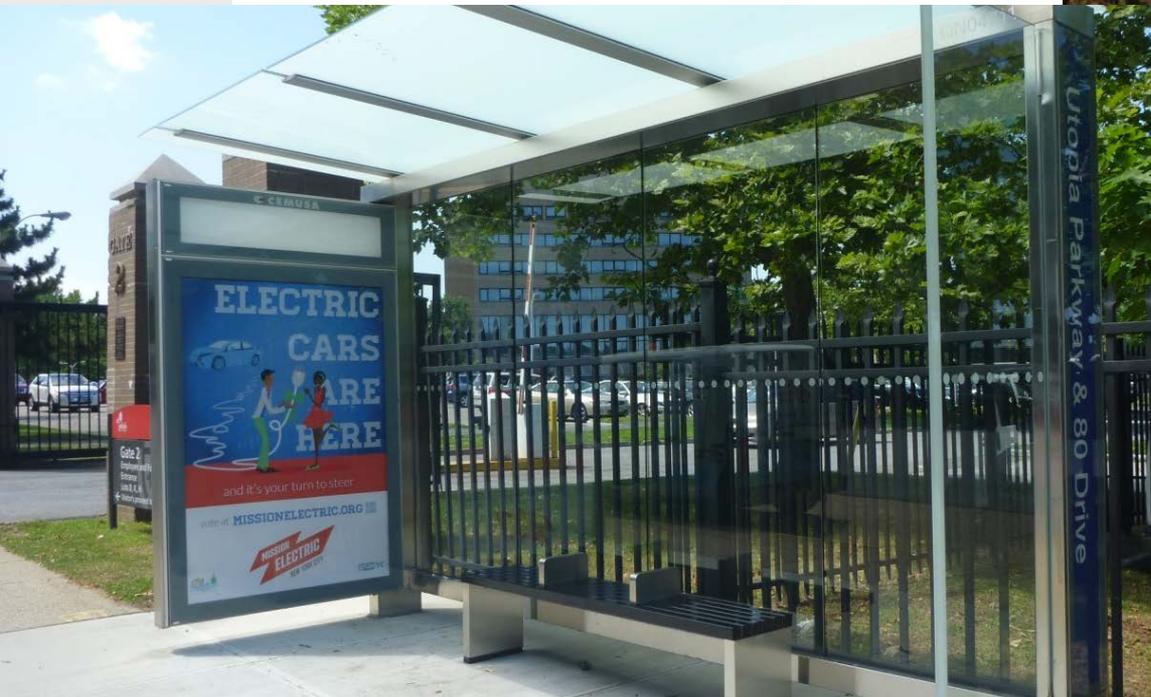
3) V-to-G/V-to-B-

Opportunity- potential for 5,000 EVs in NYC can help Reduced Demand and Capacity Charges

Current Obstacles

- a) net metering technology to measure the amount of power provided,
- b) sufficient power availability to address the duration of peak demands, and
- c) vehicle connectivity coincident with periods of peak power demand

**MISSION
ELECTRIC**



**Conducting
Public
Outreach**



DRIVE YOUR CITY ELECTRIC

Mission Electric empowers you to pave the way for electric vehicles, and for a future of clean and efficient transportation in your city.

Join our email list for mission updates!

JOIN

Like 86k Tweet 93



Mission 1: Electrified Events

Submit your own event

See past and future missions

Vote for the local events you want to see electrified!

Mission Electric events User-submitted events



Your Mission: ELECTRIFIED EVENTS

Mission Electric wants to give New Yorkers a firsthand experience with electric vehicles. We're electrifying local events by bringing EV drivers and other clean transportation experts to show you their stuff at events in the city. By completing this mission, you'll give fellow New Yorkers the opportunity to experience EVs, and yourself the opportunity win a [insert incentive, see below]!

Recent Votes

798 actions / 12 days to go

- [Agent Name] just voted for the Mermaid Parade
- [Agent Name] just added Name of Event Here
- [Agent Name] just voted for the Mermaid Parade
- [Agent Name] just added Name of Event Here
- [Agent Name] just voted for the Mermaid Parade

How does this mission work?



MISSIONELECTRIC.ORG

GO
VOTE
TODAY!!!

Funded by US
Dept of Energy

Electric Car-Share

- Hertz Connect
- Vote on which car-share locations should offer EVs
- PR and customer engagement opportunities for car-share brands as well as higher utilization of wining locations
- 949 Visitors, 397 FB Likes

E-Truck Challenge

- Duane Reade
- Vote on which neighborhoods should be serviced by the E-Trucks of participating companies
- Heightened visibility and buzz for brands
- 1775 Visitors, 95 FB likes

DUANE Reade's Smith EV at Plug-In Day in Times Square



The background features a repeating pattern of the words "Empire Clean Cities" in a light gray, sans-serif font. The word "Empire" is at the top, "Clean" is in the middle, and "Cities" is at the bottom. On either side of the text, there are silhouettes of skyscrapers, with the most prominent one being the Empire State Building. The central text "Electrified Events" is overlaid on the "Clean" part of the background.

Electrified Events

Ford EV Throws the 1st Pitch at the SI Yankees Game



BMW's Active-E showcased at Das Haus in White Plains





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