

#### Mayor's Office of Sustainability

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Nilda Mesa Director

April 18, 2016

### Testimony of Nilda Mesa Director, Mayor's Office of Sustainability

Before the New York City Council Committee on Transportation

Hearing on Introduction 1124 in Relation to Establishing a Pilot Program for the Installation of Street Parking Electric Vehicle Charging Stations

Good morning, Chairman Rodriguez and members of the Committee on Transportation. My name is Nilda Mesa and I am the Director of the New York City Mayor's Office of Sustainability. Thank you for the opportunity to testify today regarding Introduction 1124 ("Intro 1124"), which would require the establishment of a pilot program to install between two and seven on-street electric vehicle charging stations in each of the five boroughs by 2018. This hearing is a fitting start to Earth Week, which will see the release of the OneNYC Annual Update and the first-ever celebration of "Car-Free NYC."

The adoption of electric vehicles is a major component of Mayor de Blasio's commitment to green transportation, and more widely, as we develop the transportation sector within our 80 x 50 greenhouse gas emissions reduction plan.

#### Background: The Role of Electric Vehicles toward 80 by 50

While approximately 70% of the city's overall greenhouse gas emissions are derived from buildings, the next largest tranche is transportation, which clocks in at 21% as of 2014. Approximately 76% of transportation greenhouse gas emissions come from light duty vehicles. For us to make a dent in our transportation emissions, we will need to address lowering emissions coming from cars.

In One New York: The Plan for a Strong and Just City ("OneNYC"), released a year ago this week, transportation was explicitly added as a sector within the planning for reducing greenhouse gas emissions 80% by 2050, or 80x50. In addition, OneNYC included as another goal that NYC would have the cleanest air quality of any large city in the U.S. Reducing fossil-

fuel-based tailpipe emissions within the City is good not only for the environment, but also for our health, because reducing these vehicular emissions helps to improve air quality. Unfortunately, some of our poorest neighborhoods have some of the highest rates of asthma in the U.S. Asthma is the leading reason schoolchildren call in sick, and when children are sick, wage earners may also need to miss work to care for them. So it is the neighborhoods that need their education the most, the neighborhoods where wage earners can't afford to miss work but must to care for sick relatives, that most cruelly bear the greatest impacts of gasoline-fueled cars. Increasing the use of electric vehicles is an important means to reduce greenhouse gas emissions and improve air quality, which in turn promotes positive health outcomes in some of our most vulnerable communities.

As the overwhelming majority of transportation emissions comes from private vehicles running on gasoline, we are working to shift vehicle trips to low-carbon modes of transportation such as walking, biking, and public transit, while simultaneously working to reduce emissions from the remaining vehicle travel to the greatest extent possible.

Within the private sector, more than 2,400 electric vehicles are currently registered in New York City. Manhattan has the most EVs registered, with Queens coming in second. Within ConEd's overall service area, about 5,500 EV vehicles are registered, with the bulk in Westchester County. Cars typically are charged at home overnight, or at the workplace. These vehicles utilize a growing network of EV charging locations throughout the five boroughs, mostly in private parking garages. Recent years have seen steady growth in publicly available charging infrastructure. EV drivers today can plug in at roughly 300 charging locations throughout the city. Moreover, Local Law 130 of 2013 requires that 20 percent of new parking spaces in garages citywide be capable of supporting electrical vehicle charging stations.

Demand for EV charging is likely to increase in the next 24 months as a new generation of electric vehicles, which offer greater driving range at lower cost, comes to market. For instance, later this year, Chevrolet will begin selling the Bolt, a pure battery electric vehicle that can travel upwards of 200 miles per charge and will cost under \$40,000 before incentives. In just a few weeks, Tesla has received more than 325,000 pre-orders for its Model 3, which can travel 215 miles on a single charge and will retail for around \$35,000 before incentives when delivered in late 2017. More encouraging still, it was announced earlier this month that New York State will offer a \$2,000 rebate on plug-in vehicles, which together with a \$7,500 federal tax credit brings the total incentives for EVs purchased in New York State to \$9,500.

As the demand side of the EV market continues to solidify, it will spur demand for additional publicly available chargers. The private sector is now actively seeking additional locations throughout the city for expanding charging infrastructure.

In conversations with the private sector, we have been told of a number of challenges inhibiting greater adoption of EVs in New York City. For example, not all chargers can charge all vehicles. Some chargers take overnight to charge a car, which is ideally suited to home charging or long periods of parking but not to multiple short trips. Other rapid chargers may be able to top off a car in 30 minutes. Signage to direct drivers is not always clear either. And some of the most promising growth for installation of chargers appears to be in public lots near retail centers such as the big box stores and shopping malls.

Our own experience to date also provides insight, and illustrates the challenge of anticipating demand for publicly available chargers. In 2013, the City sought to support the early-adopter market for EVs by providing charging stations for use by the general public. The Department of Transportation ("DOT") and the New York Power Authority ("NYPA") entered into an agreement that allowed DOT to install three charging stations in each of nine municipal parking garages throughout the five boroughs, for a total of 27 dedicated EV charging stations. EV drivers who use these public chargers do not pay any additional fees for charging up beyond the general parking fee paid by all users of the facilities. Of the nine municipal locations with charging stations, the Court Square Municipal Parking facility in Long Island City gets the most use, with the equivalent of two to three full EV charges each day. So far in 2016, this site alone has been responsible for diverting nearly a ton of GHG emissions by using electricity instead of burning approximately 270 gallons of gasoline. Three other participating locations (Lower East Side, Flushing, and Staten Island) have seen moderate utilization rates, while chargers in the remaining five facilities have been used much less frequently.

#### **NYC Clean Fleet**

With respect to our own fleet, the City is committed to leading by example in this sector. On December 1, 2015, the Mayor announced NYC Clean Fleet, a municipal fleet sustainability plan that will give New York City the largest municipal electric vehicle fleet of any city in the country. With this plan, the City intends to make New York City's transportation system the cleanest in the country.

New York City operates the largest municipal fleet in the country, with more than 28,000 vehicles. Its fleet size is second only to the federal government. The City currently operates over 16,000 vehicles that run on some type of alternative fuel, and its fleet has some of the nation's largest programs for hybrid vehicles, biodiesel, and fleet car-sharing.

As part of Clean Fleet, the City pledged to achieve a 50 percent reduction in greenhouse gas emissions from the City's fleet by 2025 and an 80 percent reduction by 2035. A major component of the NYC Clean Fleet initiative is to add 2,000 electric vehicles to the City's sedan fleet by 2025, giving us what will be the largest municipal EV fleet of any U.S. city. The City fleet already operates 388 full-use plug-in vehicles, 65 of which have been introduced since the Mayor's Clean Fleet announcement. The City also operates an additional 610 off-road plug-in units including electric carts, electric forklifts, and solar-powered light towers and signboards. In

the five months since the Mayor's announcement, the City has placed orders for 225 new electric units, including 185 full-use sedans and 40 off-road units. We expect to receive all of these vehicles by the end of June 2016.

NYC Fleet operates the largest EV charging network in New York State with 270 chargers currently dedicated for City fleet use at Department of Parks and Recreation ("Parks") and Department of Sanitation ("DSNY") garages, police precincts, DOT facilities, and Department of Environmental Protection ("DEP") facilities. DCAS is currently finalizing the first long-term citywide requirements contract for fleet charging, and we expect the fleet charging network to increase to at least 350 chargers by the end of the year. The most exciting addition to this charging network is a free-standing solar carport charger, currently located at the Municipal Building, which can be used to charge two vehicles using only solar power. DCAS will be looking to expand its solar carport initiative to meet the charging infrastructure demands of the Clean Fleet EV expansion. In addition, earlier this month, DCAS reached an agreement with Nissan for the donation of ten new EV chargers for use by NYC Fleet.

NYC Fleet is also working to reduce emissions from FDNY ambulances. FDNY and DCAS have ordered 98 new ambulances with alternative power units from Stealth Technology, which will greatly reduce unit idling, saving fuel and maintenance costs.

In December 2015, DCAS issued a request for information to engage the private sector in our Clean Fleet effort. The response was extensive, with 77 formal responses to the RFI representing a wide variety of alternative fuel approaches. DCAS, our office and the major fleet agencies will jointly review the responses and refine our fleet strategy based on them.

Finally, DCAS is doing its part to support Car-Free NYC on April 22. It has asked agencies to limit non-essential fleet use that day and to find alternatives for administrative functions, meetings, and commuting. We will be following up with agencies on their plans and look forward to promoting alternatives to car use this month and moving forward.

On the strength of this leadership in sustainability, we are proud to report that NYC Fleet was recently awarded the 2016 Green Fleet of the Year by *Fleet Owner* magazine.

#### **Intro 1124**

The Mayor's Office of Sustainability and our colleagues at DCAS and DOT look forward to to working with the Council to support the adoption of electric vehicles and the infrastructure required to support them in New York. We suggest, however, based on our initial research and experience to date, that there may be different and better ways to support for electric vehicles than the method required by this legislation as drafted.

Intro 1124 would require DOT to install between two and seven on-street electric vehicle chargers in each borough, and to report on total program cost, charger utilization, and recommendations based on program experience by March 1, 2018.

To date in New York City, on-street charging is an untested model. In part that reflects open unresolved questions, such as whether on-street parking with EV charging stations would be exclusive to EVs, or also available to other vehicles, and how that might work where parking space is already at a premium. It is not clear where the electric infrastructure could accommodate this on-street, and what the best type of charging stations would be. If the chargers require approval from the Public Design Commission, 180 days may not be enough time.

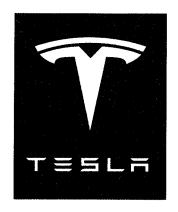
We have only begun to tap opportunities for off-street charging – in fact, there is still ample room for improvement. We may want to review Local Law 130 implementation to improve support for chargers in private garages. With the efforts by the private sector to build out additional infrastructure, it is possible that the private sector working with us could best assess patterns and gaps, and that we may be able to limit the use of taxpayer funds while also utilizing the private sector's expertise and knowledge of customer needs and behavior to encourage private deployment of chargers. It could be that the greatest potential for growth is in the public lots near retail, rather than on-street parking in residential neighborhoods.

Or it might be wherever people access trains, buses, or ferries in the boroughs outside Manhattan. For example, the high charger utilization at DOT's Court Square facility demonstrates the promise of adding chargers at park-and-rides. If we could provide access to chargers adjacent to public transportation we could in theory provide an incentive for drivers to take mass transit where they may otherwise choose to drive, and so improve traffic congestion as well.

We do not have the answers yet, but we would like to continue conversations with the Council so as to not rule out other promising strategies.

#### Conclusion

On behalf of the Mayor's Office, I offer my strong support for the expansion of electric vehicle use throughout the city. The Mayor's Office of Sustainability, DOT, and DCAS welcome the opportunity to work with members of the Committee on Transportation and the Council to craft a thoughtful but ambitious approach to catalyze EV uptake in our city. Thank you again for the opportunity to testify this morning.



### Statement for the Record for Tesla Motors, Inc.

# Testimony of Will Nicholas Government Relations Manager

**Serification**New York City Committee on Transportation

April 18, 2016

Good morning. My name is Will Nicholas and I am the Government Relations Manager for Tesla Motors, Inc. I want to thank Council Members Constantinides, Rodriguez, Richards, Cornegy, Cabrera, Greenfield, and Rose for allowing me the opportunity to describe Tesla's interest in bill 1124 before the Committee. Just last week, one of the few gas stations left in Manhattan closed, and it seems appropriately timed that we now discuss how to refuel this city with the technology that will move us into the future.

#### I. Background

Tesla is an American technology and design company that solely manufactures and distributes electric vehicles (EVs). Founded in 2003 by five Silicon Valley engineers seeking to end our country's dependence on oil, particularly foreign oil, this U.S. based company's core mission is to catalyze the mass market for sustainable transport.

From the outset, Tesla's plan has been to capitalize on its innovative new powertrain technology in high end products with a goal to aggressively drive down price while iterating and improving the technology in subsequent product offerings. The company first designed and built the market-inspiring Tesla Roadster in 2008; a two-seat sport car, capable of 245 miles of range on a single charge, with a zero to 60mph time of 3.7 seconds. 2,450 units were sold around the world with a starting price of \$109,000. The car had an intentional limited production run in order to quickly move to the next offering – the award-winning Model S.

Released in 2012, less than a year after the conclusion of the Roadster program, the Model S is capable of achieving over 270 miles of range on the updated EPA test that takes into account air conditioning usage, cold weather operation and high speed driving. With a starting price of \$71,500, Tesla has taken out nearly half of the cost of this next iteration vehicle while providing vastly improved utility (i.e., seating for five adults and two children in optional rear facing child seats, class-leading storage, Supercharging capability, etc.) and performance (0-60mph times of as little as 2.8 seconds, improved range, and a dual motor all-wheel drive powertrain). The Model S has won numerous awards, including being named MotorTrend Magazine's 2013 Car of the Year; Automobile magazine's and Yahoo Automotive's automobile of the year; and lastly, being referred to by Consumer Reports as "the best car they ever tested" scoring 103 out of possible 100. In the third quarter of last year, Tesla released the Model X, a crossover vehicle with seating for up to seven adults and other compelling features.

And just weeks ago, the company unveiled drivable prototypes of its mass market vehicle, Model 3 – the first car based on its third generation platform, with a starting price of \$35,000. Tesla announced that the affordable EV will travel 215 real world miles per charge, achieve a 5-star safety rating in each category, seat five adults comfortably, and have compatibility with the Supercharger network. Scheduled for start of production in late 2017, this third generation EV, planned less than a decade after the introduction of Tesla's first ever vehicle, will represent the market entry of a long range EV at 1/3 the price of the Roadster. Once achieved, this aggressive technology innovation will represent a feat in engineering and price reduction that no other automobile manufacturer has ever matched.

#### **II.** Charging Initiatives

To further the adoption of EVs and create driving confidence for customers, Tesla has launched several initiatives to make charging easy and convenient. First, Model S and Model X are compatible with any conventional outlet. The universality of the architecture allows customers to charge their vehicles in the convenience of their homes with standard 120V and 240V outlets.

Tesla also manufactures a wall fixture that charges with up to 80 amps and has an 18-foot chord. These are often installed in customers' garages, but workplaces and businesses have begun to install them to accommodate employees and attract patrons. This effort to partner with parking garages, shopping centers, business parks and travel destinations has increased Tesla's overall charging footprint. Tesla customers can find where wall connectors are from the company's public website and receive navigation to the locations through the vehicle's 17-inch onboard screen. Currently, there are over 3,815 wall connectors across the U.S. with 105 of them in Manhattan and Brooklyn. Tesla customers can also leverage third party chargers via adapters: SAE J1772 adapters come standard with each vehicle and CHAdeMO chargers can be purchased online or at a service center.

In addition to these options, and potentially most importantly, Tesla customers have access to the growing Supercharger network that spans the globe. Superchargers are free connectors that charge Tesla EVs in minutes instead of hours. Stations are strategically placed to minimize stops during long distance travel and are conveniently located near restaurants, shopping centers, and WiFi hot spots. Tesla has deployed over 3,644 Superchargers worldwide, and over 1,841 in the United States. Of those, 52 are located in New York. This network allows free, long distance travel for all customers on the most popularly traveled routes. The company is working rigorously to improve and expand the network anticipating that there will be hundreds of thousands of Tesla EVs on the road in the next few years.

#### III. Proposed Legislation

Tesla supports initiatives that encourage the acceleration to sustainable transport including improving current charging infrastructure. Bill 1124 will enable New York City to study the impact of pubic charging across each borough, and the data will allow stakeholders to thoughtfully shape the landscape for future charging projects. Markets around the world including New York City are experiencing increases in EV interest, and it is critical that stewards of this technology shift prepare for the upcoming demand.

Due to the volume of drivers in the greater New York City metro area, Tesla encourages stakeholders to consider installing charging solutions that meet driver expectations including convenient parking and quick charging. Both are challenging, but it is important for the large-scale adoption of EVs that level-3 or quick charging locations are made available to the public in addition to level-2 chargers. And understanding the limited space in our dense urban landscape, Tesla encourages policy that can remove barriers to identify charging locations and expedite approval processes. Optimizing the approach to build out the infrastructure will help ensure that the city can accommodate the many drivers who will rely on EVs for their personal transport.

Thank you for the opportunity to provide this testimony. I welcome any questions about the bill or Tesla.



#### **TESTIMONY**

of the

#### NATURAL RESOURCES DEFENSE COUNCIL

before the

**NEW YORK CITY COUNCIL** 

**COMMITTEE ON TRANSPORTATION** 

REGARDING

**INTRO. 1124** 

**APRIL 18, 2016** 

Kimberly Ong Staff Attorney Good morning Chairman Rodriguez and Members of the Committee. My name is Kimberly Ong and I am an attorney at the Natural Resources Defense Council (NRDC). As you probably know, NRDC is a national, non-profit legal and scientific organization that has been active on a wide range of environmental health, natural resource protection, and quality-of-life issues—around the globe and right here in New York City—since its founding in 1970. I appreciate the opportunity to testify before you today.

NRDC strongly supports Intro. 1124. We are convinced that installing curbside electric vehicle charging stations would encourage the widespread adoption of electric vehicles, which in turn would reduce greenhouse gas emissions and improve air quality in the City. The passage of this bill would be a significant step in the transition away from dirty fossil fuels and towards cleaner, cheaper domestic electricity as our major transportation fuel. In addition, this bill would also pave the way for great access to charging stations for New Yorkers in all five boroughs.

NRDC encourages the adoption of electric vehicles in New York City because it is necessary to combat both climate change and air pollution. A study by NRDC and the Electric Power Research Institute found that widespread electric vehicle use nationwide could cut carbon pollution by 550 million metric tons annually in 2050, equivalent to the emissions from 100 million passenger cars.

On the regional level, New York State signed an agreement with 7 other states to collectively put 3.3 million Zero Emission Vehicles (ZEVs)<sup>1</sup> on the road by 2025. New York's responsibility is to place approximately 820,000 Zero Emission Vehicles on the road in the next nine years. As of early 2016, there were only about 12,000 Zero Emission Vehicles in New York State—therefore, a nearly 70-fold increase would be required in the next decade to meet the state's commitment.

In New York City, we have pledged to reduce our carbon emissions 80 percent by the year 2050. It is hard to see how City officials will be able to achieve this ambitious goal without a major shift to cleaner vehicles like electric cars.

Widespread electric vehicle use would also combat ozone and particulate matter pollution, since electric vehicles do not emit pollution from their tailpipes, unlike gas-powered vehicles. Both ozone and particulate matter pollution can aggravate asthma and other lung conditions, and cause premature death in people with heart and lung disease. Children, the elderly, and residents of neighborhoods with pollution sources are especially vulnerable. In 2013, 2,700 premature deaths were tied to ozone and fine particulate matter-related health issues, eight times higher than the number of people who died from murder.

The lack of public charging stations in New York City is a major impediment to progress on electric vehicles. There are only 260 publicly available charging stations within the City

<sup>&</sup>lt;sup>1</sup> Zero Emission Vehicles include hybrid plug-in, battery electric and hydrogen-powered fuel cell EVs.

limits, and the vast majority of them are located in private parking facilities in Manhattan. This shortage of available charging stations can lead to "range anxiety," which can serve as a barrier to electric vehicle adoption. With curbside charging stations in all five boroughs, drivers across the City would be able to plug in more and more, maximizing the usefulness and benefits of electric vehicles. Increasing access to a cleaner and more affordable fuel would especially benefit families that spend a greater share of their income on transportation expenses.

Charging stations would also serve as a symbol, educating New Yorkers about the benefits of electric vehicles and reminding us all that climate change is not only real but happening to us now, and that there are practical solutions to this global problem.

If this bill passes, as we hope will be the case, NRDC urges DOT to consider the needs of environmental justice communities when deciding where to site the charging stations. EJ communities often have the least access to public transit and are at the same time the most vulnerable to air pollution. As the technology advances and as electric vehicles become more affordable, the City will need charging stations in these areas to make electric vehicles a real choice for these communities. To reduce our carbon emissions, electric vehicles must become a mainstream transportation option. That means that they must be accessible to everyone.

If the Council were to adopt this legislation, it would be following sensibly in the footsteps of other progressive cities. For example, Washington, D.C. has already installed at least twenty charging stations on its city streets. The City of Amsterdam has over 1,000 public charging stations, and aims to have 4,000 charging points by 2018. When Indianapolis completes their electric vehicle program, it will have 200 charging stations on the streets. In addition, cities like Baltimore, Boston, Burbank, Oslo, Paris, London, and Berlin have also moved successfully to implement electric vehicle charging station programs.

In short, NRDC believes that Intro. 1124, if enacted, would reduce reliance of dirty fossil fuels, cut climate change emissions and reduce air pollutants for residents in neighborhoods across New York City. We thank you, Mr. Chairman, for holding this hearing and for your leadership on this issue. NRDC sternly supports the proposed legislation.

### Electric Vehicle Curbside Charging Stations In Practice

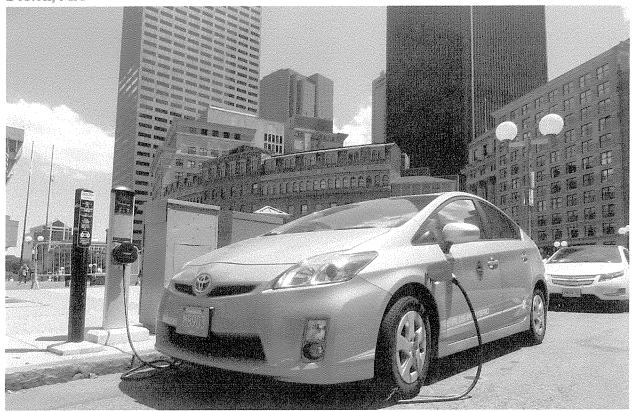
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#### Statement of AAA Northeast, Inc. before the New York City Council Committee on Transportation

#### New York, NY - April 18, 2016

Good afternoon. AAA Northeast, which serves over 570,000 members in the five boroughs of New York City and over 1.6 million drivers in the metropolitan area, is pleased to submit this testimony, and we would like to thank the Committee on Transportation for holding this hearing.

We write to comment on Intro. 1124, which would establish a pilot program for electric vehicle charging spaces. The idea of a pilot program for street parking spaces for electric vehicles is a reasonable one. However, we wonder if there is sufficient demand to justify the expense. Since 2010, electric and plug-in hybrid vehicles have been eligible for a federal tax credit up to \$7500. This rebate has contributed to a modest increase in demand for electric vehicles, as will a newly enacted \$2000 credit from New York State.

But electric vehicles still remain a distinct minority. Of the 1.88 million registered passenger vehicles in New York City, only 500 are classified as electric by the Department of Motor Vehicles – approximately a quarter of one percent. The majority of these vehicles are in Manhattan, and over 70% of the electric vehicles across the five boroughs are Teslas – most of which, we suspect, are stored in garages or driveways.

Borough	<b>Electric Vehicles</b>
Bronx	25
Brooklyn	72
Manhattan	256
Queens	107
Staten Island	40
Total	500

While automakers have made great strides in electric and hybrid vehicle technology, consumers' recent preferences have been for less fuel-efficient vehicles. About half of all vehicles registered in New York City are sedans. But thanks in part to lower gas prices, only 43% of 2015 models were sedans, as buyers increasingly opted for larger vehicles.

AAA is committed to promoting green vehicles by educating our members about their benefits and specifications. We have told our members that they may regret buying larger vehicles if low gas prices do not last. Later this week, AAA will release our annual Green Car guide, which uses AAA automotive research to rank green cars on fuel economy, emissions, and other factors. The Green Car Guide also is hosted on our website at aaa.com/GreenCar, where consumers can use an interactive tool to find the best vehicle for them. Our Electric Vehicles website discusses the benefits of driving electric, shows fuel cost savings, and includes a map of nearby charging locations.

<sup>&</sup>lt;sup>1</sup> Data from NYS Open Data portal, "Vehicle, Snowmobile, and Boat Registrations," updated March 11, 2016.

We see benefits to encouraging electric vehicle usage, and recognize that this is a chicken-or-the-egg problem. However, given the many competing uses for the curb, results from other northeastern cities, and the high cost of on-street chargers, a wide-scale on-street pilot program should be a lower priority than maximizing the use of currently-underutilized charging stations in municipal garages.

Thank you for the opportunity to comment and for your interest in these matters.



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April 18, 2016
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#### **Memorandum of Support**

#### Intro. 1124-2016

A Local Law in relation to establishing a pilot program for the installation of street parking electric vehicle charging stations.

The New York League of Conservation Voters strongly supports Intro 1124, a bill that would require the Department of Transportation to establish a pilot program for the installation of street parking electric vehicle charging stations.

Intro 1124 is a natural extension of New York City's efforts to encourage zero emission vehicles in both the public and private sectors. The launch of NYC Clean Fleet by Mayor de Blasio will take the city's municipal fleet, which now operates more than 300 full-use electric vehicles (EVs) to more than 2,300 over the next decade, the largest municipal EV fleet in the country.<sup>1</sup>

This success and momentum can be harnessed within the private sector by assuring EV infrastructure is available and accessible to the public. According to the 2015 DOT Electric Vehicle Advisory Committee Report there are 260 publically available charging stations, but the vast majority of these are located in private parking facilities in Manhattan.<sup>2</sup> Intro 1124 will ensure that electric vehicle charging stations are visible and accessible spurring greater consumer confidence. Convenient charging infrastructure coupled with New York State's consumer rebate toward the purchase of new electric vehicles will spur demand and create a vibrant zero emission vehicle market.

New York City is home to more than two million vehicles, which accounted for 24 percent of the city's total greenhouse gas emissions in 2013.<sup>3</sup> We can address these emissions by supporting zero emission vehicles. Intro 1124 is the right step towards expanding publically available infrastructure and encouraging consumer confidence in the electric vehicle market. The State has committed to increasing electric vehicle use and the City should continue to lead in both the public and private market.

<sup>1</sup> http://www.nyc.gov/html/dcas/html/employees/fleet.shtml

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