

Electrifying the Fleet

NYC Fleet

Metropolitan Wash. Council of Governments,
Freight Committee

Keith T. Kerman

NYC Chief Fleet Officer

Deputy Commissioner, DCAS

March 11, 2021

NYC Clean Fleet: Our Goals

With Paris Climate Talks Underway, Mayor de Blasio Announces NYC Clean Fleet - Launching the Largest Municipal Electric Vehicle Fleet in the U.S.

December 1, 2015

City Will Cut Municipal Vehicle Emissions in Half by 2025, 80 Percent by 2035 – Another Key Step Toward 80 Percent Reduction in All Emissions by 2050

NYC Mayor orders all-electric fleet by 2040 and end to expansion of fossil-fuel-related infrastructure

10 February 2020

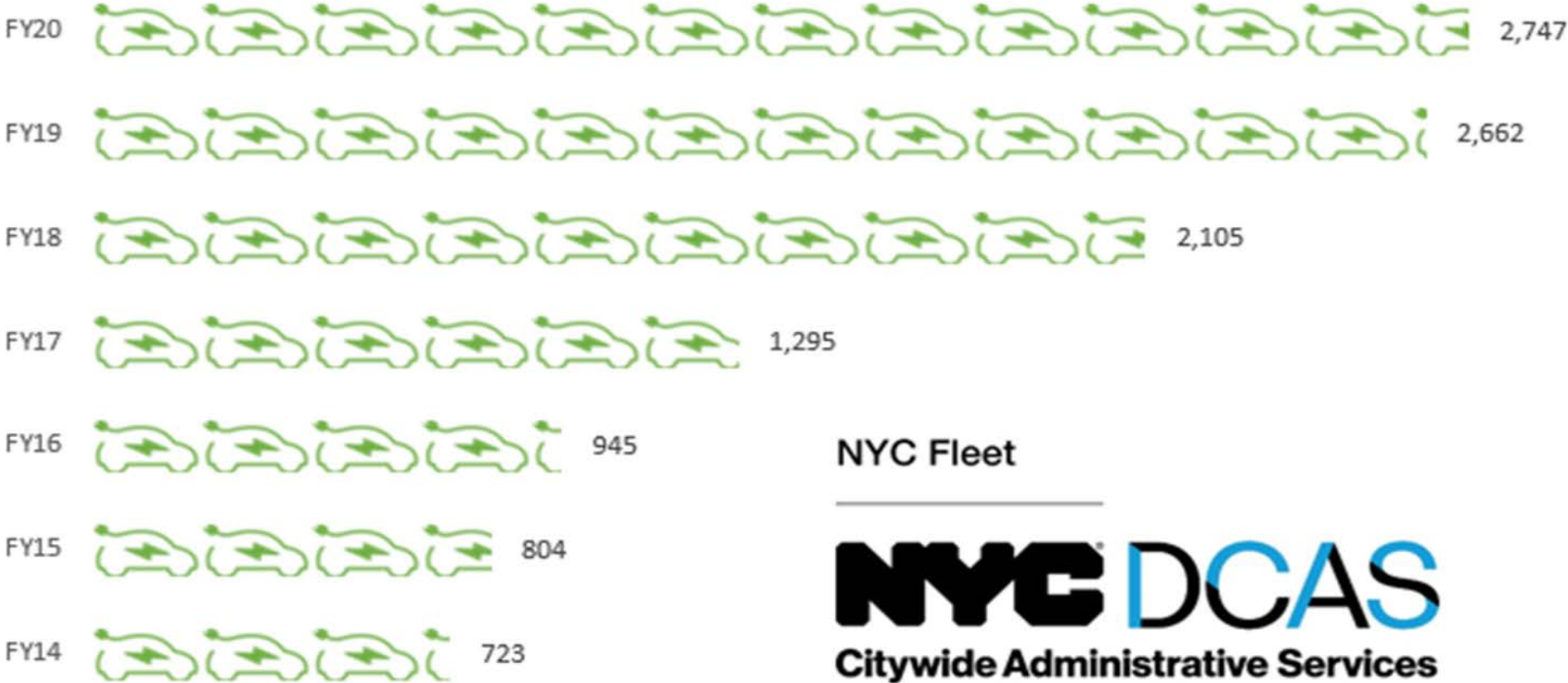
New York City Mayor Bill de Blasio last week issued an [executive order](#) specifying the attainment of an all-electric “carbon-neutral” fleet by the year 2040. New York City operates more than 30,000 owned and leased vehicles (on-road and off-road), the largest municipal fleet in the United States.

Under the executive order, New York’s Department of Citywide Administrative Services (DCAS) and NYC Fleet are to issue and implement a Clean Fleet Transition Plan, updating it every two years. The CFTP will outline alternative fuel, fuel efficiency and electrification for all City fleet units by type.

Section 4. Fleet of the Future Network. DCAS, working with the Department of Transportation (DOT), the Business Integrity Commission (BIC), the Department of Consumer and Worker Protection (DCWP), the Mayor’s Office of Sustainability (MOS), and others will establish a contact list and communication network for public, private, and non-profit fleets operating in the five boroughs of the City of New York. This network will be used to establish lines of communication on issues of sustainable and safe fleet operation. DCAS will establish newsletters, events, and trainings aimed at these partner fleets and will share best practices throughout the network.

Our Strategy: 1) Electrify Where We Can

NYC Fleet Electric Vehicles



NYC Fleet



Image from vecteezy.com

DSNY Pilot EV Garbage Truck



NYPD Non-Pursuit EV Fleet



All Electric Citywide Fleet Share



The Mayor's EV



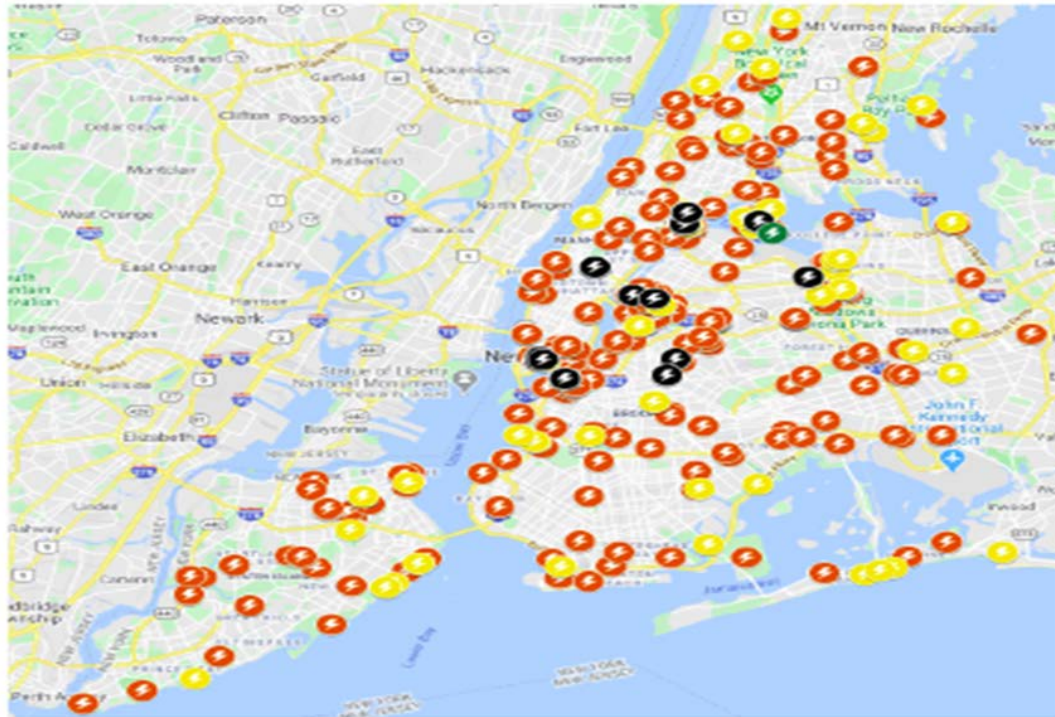
Seth Stein @SethStein · Jan 16

What's got 4 wheels, gets 82MPGe, all-electric 32 mi range & sleek #dadcore styling? The Mayor's new hybrid minivan



Build EV Charging

NYC Fleet EV Charging Network as of 9/21/2020



Total 1,015 Electrical Charging Ports Across 705 Stations

-  - 900 Charging Ports / 590 Reg Stations
-  - 87 Solar Carports
-  - 27 DC Fast Chargers
-  - 1 Mobi Mobile Charger



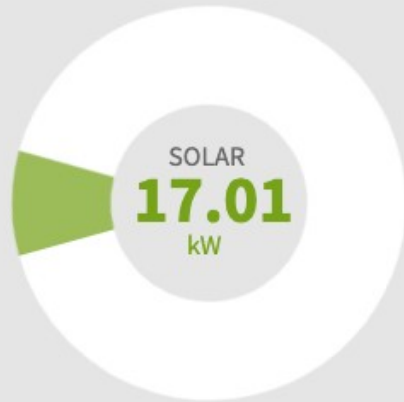
Fleet as Producer of Power



OPTICS_{RE}



CURRENT PROFILE TIME : 07/09/2020 15:50



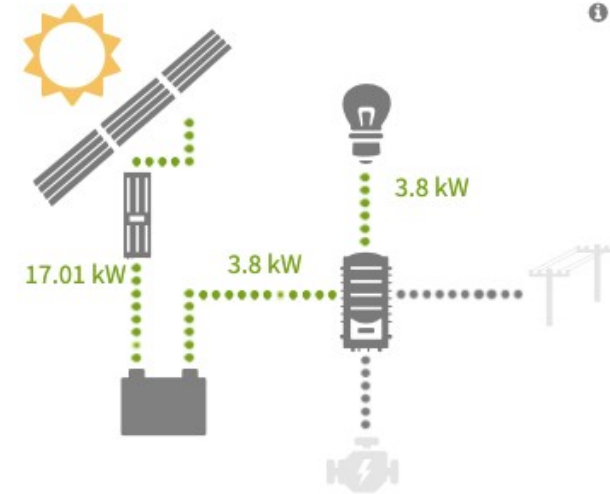
Right Now, You are

PRODUCING

Solar 17.01kW

Load 3.8kW

POWER FLOW



The Day Of



07/09/20



TODAY

Solar
199kWh

To Load
16.6kWh

2) Hybrids and More Efficient Vehicles

CBS2 Rides Along In NYPD Highway Unit's New Hybrid SUV

Program: CBS2 News At 5 Categories: Automotive, News, Local News, WCBSTV



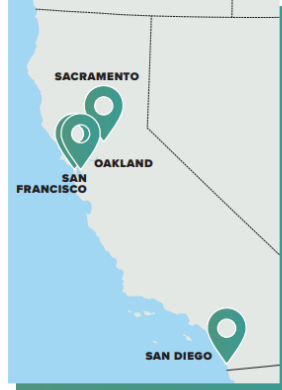
3) Biofuels and a Low Carbon Fuel Standard



CASE STUDY

RENEWABLE DIESEL IN CALIFORNIA

Many cities and private companies have seen the importance and opportunity of replacing fossil diesel fuels with renewable diesel, a next stage biofuel derived from waste cooking oils, animal fat and excess soybean oils. Critically, renewable diesel can be used by a traditional engine and can immediately replace fossil diesel without investing in new or retrofit equipment. **San Francisco, Oakland, Sacramento, and San Diego** have successfully switched to entirely renewable diesel, and UPS, Google and Boeing have also begun to phase in RD in their fleets.



EV Beginnings





Who Killed The Electric Car?



USA: DaimlerChrysler and city authority to put zero-emission, all-electric GEM vehicles to work in NYC

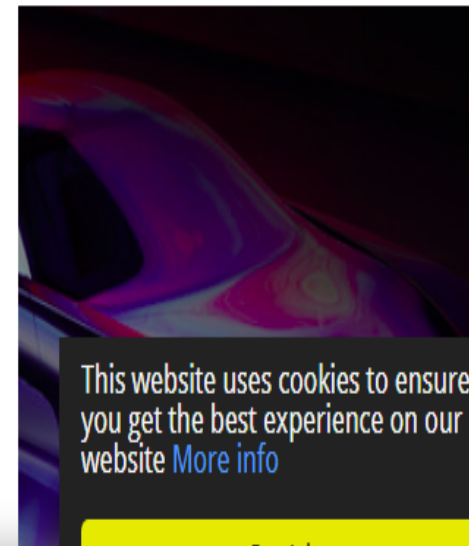
By just-auto.com editorial team | 20 November 2003



Font size Email Print

DaimlerChrysler and the City of New York have marked their collaboration on an electric vehicle program that is claimed to be a model for reducing the environmental impact of the automobile in urban areas.

In a ceremony at City Hall, City officials gathered with representatives of DaimlerChrysler to officially accept the keys to zero-emission, all- electric GEM vehicles. DaimlerChrysler has donated 352 GEMs to the City for use in departments around the five boroughs. The vehicles are being provided to the New York City Parks and Recreation Department and will be put to use in City parks and facilities to provide clean, convenient, low cost transportation for city projects.



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Sent: Thursday, November 15, 2012 1:06 PM

To: Keith Kerman

Subject: RE: NYC Fleet: Tracking storm and flood damaged vehicles for purposes of salvage and auction

Hi, I heard of one eStar (DOE) that was flooded in 4 feet of water (see attached). Would the

Next Steps

- And you're all involved.....

NA for RD

The screenshot shows the NYC City Record website interface. At the top, there is a navigation bar with 'NYC City Record' on the left, 'Select Language' and '311' in the center, and 'Search all NYC.gov websites' on the right. Below this is a secondary navigation bar with links for 'Home', 'Sections', 'User's Guide', 'FAQ', 'Contact Us', 'Print Edition', 'Log In', and 'Sign Up'. A large banner image of the NYC skyline at night is visible, with the NYC Citywide Administrative Services logo and 'The City Record Online' text on the left, and a search bar with a 'Q' icon and 'ADVANCED' button on the right. Below the banner, the page title 'Notice Details' is displayed. The main content area shows a notice titled 'Correction: HYDROGENATION-DERIVED RENEWABLE DIESEL - (HDRD) FUEL'. The notice details are as follows:

Section	Status
Procurement	Archived
Agency Name	Category
Citywide Administrative Services (DCAS)	Goods
Agency Division	Selection Method
Administration	Negotiated Acquisition
Request Address	Publication Date
1 Centre Street, 18th Floor South, New York, NY 10007	10/22/2020

EO 53, 2020: Clean Fleet Transition Plan (CFTP)

MOU with US DOT Volpe

Section 2. Clean Fleet Design and Electrification. The Department of Citywide Administrative Services (DCAS) and NYC Fleet will issue, implement and update a Clean Fleet Transition Plan (CFTP). This plan will be updated at least every two years. The plan will outline alternative fuel, fuel efficiency, and electrification requirements for all City fleet units by type. The plan will also review fuel efficiency and emissions reductions outfitting that is implemented for specific fleet segments only and/or being tested. As part of the plan, the City will report on electrification and charging options for each class of fleet vehicle. The plan will include a schedule for adoption of cleaner vehicles and technologies which will lead to a fully-electric, carbon-neutral fleet by 2040. In addition to City fleet agencies, DCAS will consult with private, non-profit and other public fleets that operate in NYC on this plan. The plan will include a section discussing options for requiring and/or encouraging adoption of these clean fleet improvements with the private fleets the City contracts and regulates. The first CFTP plan aimed at both public and private fleets will be published by January 1, 2021.

Fast Charging Announcement Jan. 2021

For Immediate Release



Media Contact:
Nick Benson
Director of Communications
communications@dcas.nyc.gov

City's Fast Electric Vehicle Chargers to Power Fleet Vehicles in a Fraction of the Time

In Addition to Supporting Greenest Municipal Vehicle Fleet in the Country, Some Chargers Now Open for Public Use

NEW YORK – New York City Department of Citywide Administrative Services (DCAS) Commissioner Lisette Camilo today announced that the City has opened 58 fast electric vehicle charging stations to power City fleet vehicles. Fast electric vehicle chargers can charge vehicles seven times as quickly as regular chargers – allowing for 120 miles of driving on a one-hour charge. Faster charging will enable DCAS to phase out more gas-powered vehicles and replace them with electric vehicles to help meet Mayor Bill de Blasio's goal of a fully-electric vehicle fleet by 2040. The City currently has over 2,700 electric vehicles in its fleet. By the end of the year, the City expects to have at least 100 fast charging stations in operation.

In addition to the fast chargers' use for City fleet vehicles, DCAS has opened two charging stations for public use: three fast chargers are available at Randalls Island and two at Midland Beach. At least five stations will be available for public use by June 2021.

Fast and Public Charging

News

Public electric vehicle charging stations installed on Staten Island

Updated Jan 28, 2021: Posted Jan 27, 2021



Electric vehicle chargers installed at Midland Beach



756 shares

By [Erik Bascome](#) | tbascome@siadvance.com

STATEN ISLAND, N.Y. -- Electric vehicle owners on Staten Island now have a new place to charge up.



Adding EV Charging

We will need a lot (lot) more charging, especially at Facilities and Curbside!

Coping with COVID: Restoring Fleet Acquisitions

'We're at War': New York City Faces a Financial Abyss

The pandemic has crippled tourism, retail and the culture sector. The damage could last years, and layoffs, service cuts and added debt are all on the table.



At Manhattan's major retail corridors, like Hudson Yards, business has been slow to recover. Spencer Platt/Getty Images

By Dana Rubinstein

Sept. 28, 2020



Reducing Maintenance and Fuel Costs

AXIOS

Sections

About Axios

Sign up

Mar 19, 2019 - Energy & Environment

EV maintenance costs in NYC run lower than gas-powered cars



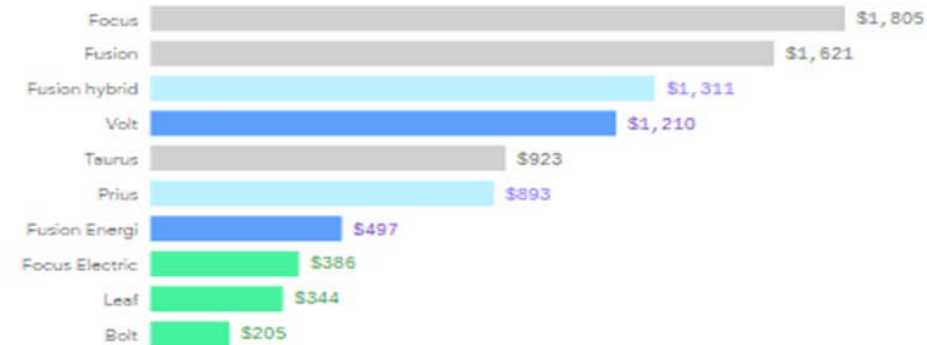
Dan Geman, author of [Generale](#)



The New York City government's maintenance costs for its electric vehicle fleet were much less per automobile than its gasoline-powered cars, city data released this month shows.

Average maintenance cost for NYC municipal vehicles in 2018

By car energy type: ● Gasoline ● Hybrid ● Plug-in hybrid ● Electric



Date: NYC Department of Citywide Administrative Services; Chart: Andrew Wilenspoon/Axios

Why it matters: Municipal and corporate vehicle fleets are a growth area for EVs, and not just for environmental reasons. That's the upshot of the latest edition of a newsletter I'd never seen until yesterday: the [NYC Fleet Newsletter](#) from Citywide Administrative Services.

Bidding EV Contracts for All Types

The screenshot shows the NYC City Record website interface. At the top, there is a navigation bar with the NYC logo, 'City Record', and links for 'Home', 'Sections', 'User's Guide', 'FAQ', 'Contact Us', and 'Print Edition'. On the right side of the navigation bar, there are links for 'Select Language', '311', 'Search all NYC.gov websites', 'Log In', and 'Sign Up'. Below the navigation bar is a banner area with the NYC Citywide Administrative Services logo and the text 'The City Record Online'. A search bar is located on the right side of the banner, with a search button and an 'ADVANCED' link. Below the banner, there is a green section with the text 'Notice Details'. The main content area displays a notice titled 'TITLE: TRUCK, 16 C.Y. ELECTRIC COMPACTING COLLECTION - DP'. The notice includes the following details:

Section	Status
Procurement	Archived
Agency Name	Category
Citywide Administrative Services (DCAS)	Goods

Parks EV Garbage Trucks



Our First Electric School Buses



Piloting Electric Pursuit Police Units

NOVEMBER 19, 2020

Tesla Model S passes test as police car for Fremont, saves \$4,000 in fuel cost

Fred Lambert - Nov. 19th 2020 5:15 pm ET [@FredericLambert](#)



EV SUVs



Rivian R1S



Hyundai Kona Electric



Kia Niro EV

Electric Pickups



Electric Vans

Ford to Launch Electric Transit Cargo Van

November 12, 2020 by Jerry Hirsch, @Jerryhirsch [↗](#)



Class 3 and 4 Electric Trucks



Piloting EV Street Sweepers

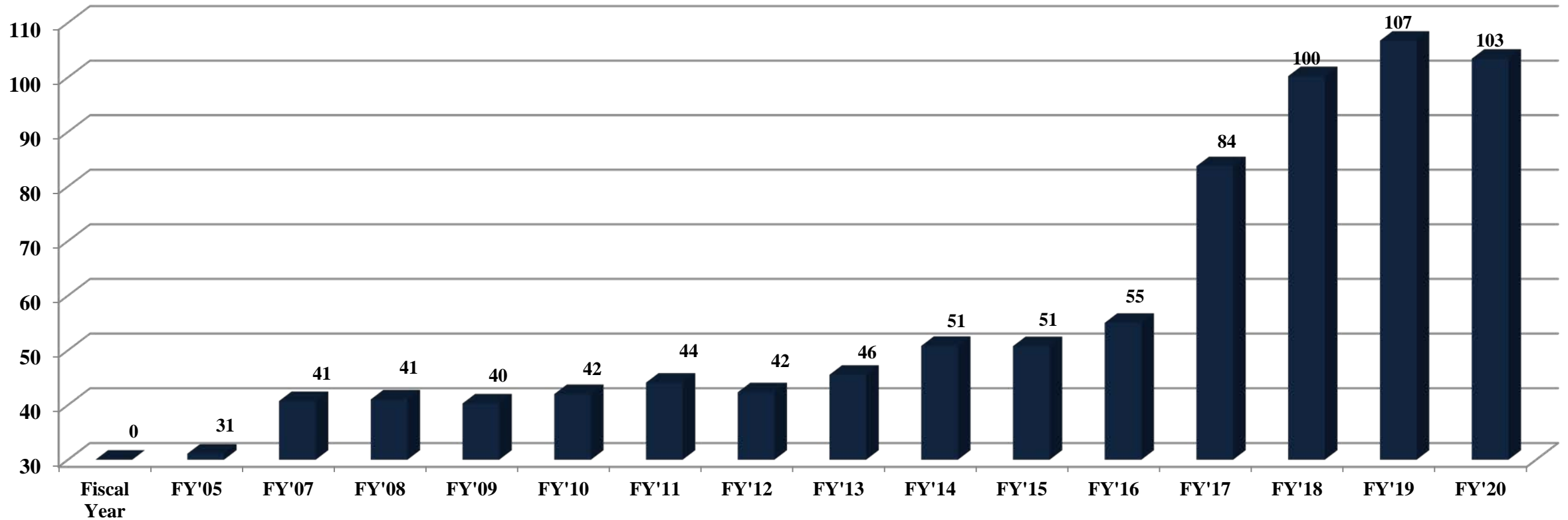


Looking at Off-Road

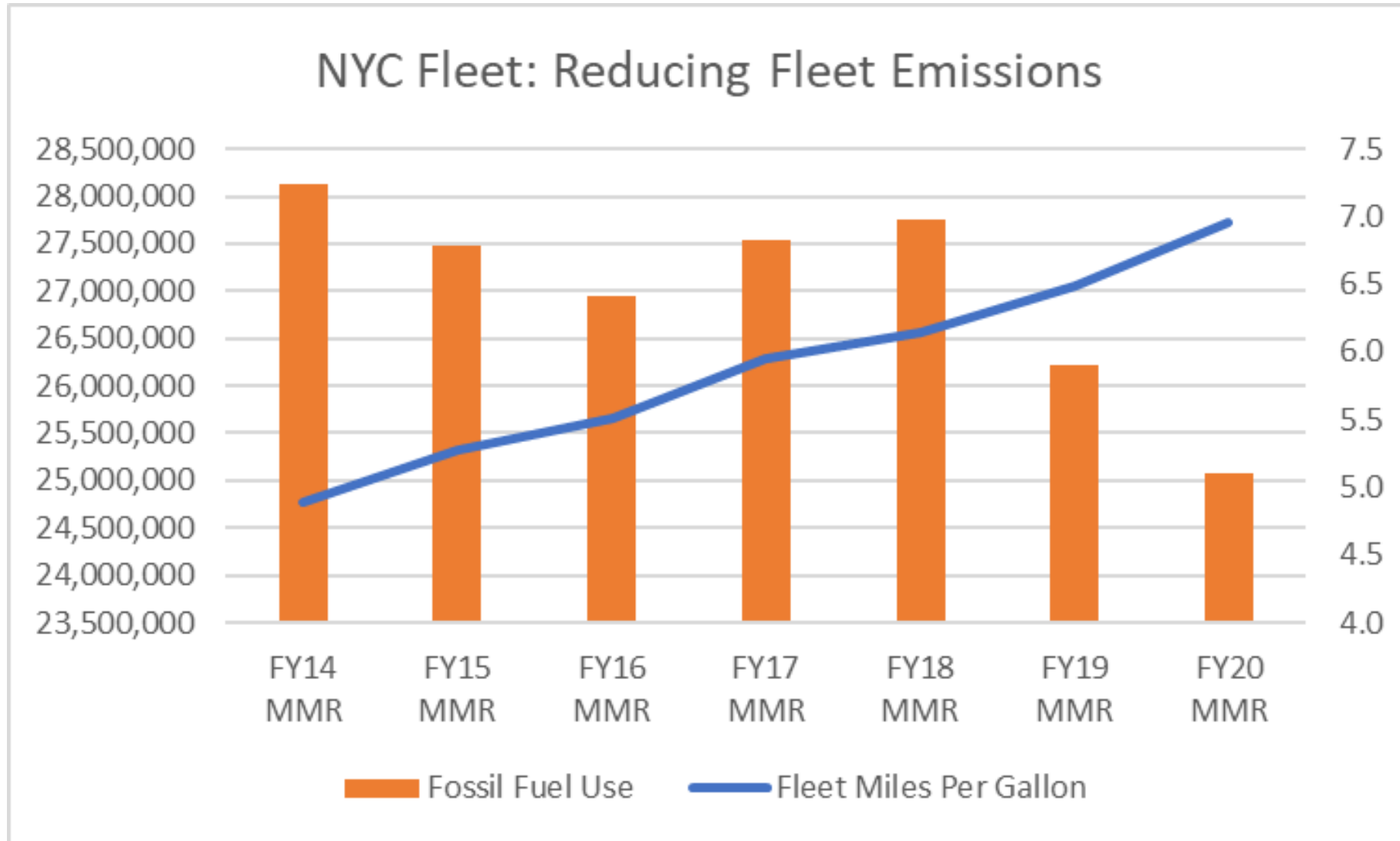


New Vehicle Fuel Economy: CAFE Equivalent

NYC Fleet: Light Duty Fuel Economy by Fiscal Year
Local Law 38 of 2005



Reducing Fuel Use



EV Challenges

- Need for strong upper-level leadership
- Managing charging for PHEVs within a fleet environment
- Charging must be in place first. Procurement of EV vehicles can outstrip install of charging.
- Upgrading electric building capacity, especially as EV projects grow in scale. There can be costly electric upgrades involved.
- Establishing technical know-how to install and then maintain EV charging. New role in fleet for building managers and electricians.
- Emergency resiliency for EV infrastructure. Need for generators, solar carports that can support charging infrastructure.
- Training mechanics, tow truck operators, and emergency response for EV including what to do in crashes.
- Matching EV vehicle range to existing duty cycle for vehicles.
- Additional up-front costs.
- Inter-operability across multiple EVSE, charging suppliers.
- Challenge of buy-in across agencies, operations, services, and cultures

EV Future



Contact

For more information, go to the NYC Fleet website:
<http://www.nyc.gov/html/dcas/html/employees/fleet.shtml>

Keith Kerman
Chief Fleet Officer
New York City
Deputy Commissioner,
Department of Citywide Administrative Services

kkerman@dcas.nyc.gov

DCAS

THANK YOU