



**Citywide Administrative
Services**

**Oversight Hearing on Energy Management and Energy Initiatives
Committee on Governmental Operations
November 28, 2017**

Good afternoon Chair Kallos and members of the Committee. My name is Anthony Fiore and I am the Deputy Commissioner for Energy Management at the Department of Citywide Administrative Services ("DCAS") and Chief Energy Management Officer for New York City. Thank you for the opportunity to testify today regarding DCAS's energy management and energy efficiency initiatives.

Background:

As part of the *One City: Built to Last* climate action plan, released in September 2014, the Mayor articulated a vision for reducing citywide greenhouse gas ("GHG") emissions 80 percent by 2050 over a 2005 baseline known as "80 x 50". In addition to the Citywide 80 x 50 goal, City government has tasked itself with leading by example, and reducing greenhouse gas emissions from municipal buildings 35 percent by 2025.

DCAS' Division of Energy Management ("DEM") serves as the hub for energy management for City government operations, including energy procurement, building retrofits, improved operations & maintenance, training, performance tracking and management of electricity, natural gas, and steam accounts, and is specifically tasked with implementing energy efficiency and long-term sustainability efforts for more than 4,000 buildings that serve 80 agencies.

Through reducing energy usage, investing in on-site clean energy generation, and increasing the supply of low carbon energy within governmental operations, DEM is working towards achieving its near-term goals and putting the City on a path toward 80 x 50. It is also important to understand the interactions – both upstream and downstream – that our energy initiatives have on other policy goals of the City including air quality, public health, economic growth, equity, and resiliency. Our energy initiatives must work in concert with and to the greatest extent possible complement the broader goals of the City.

DEM's mission and goals are advanced in partnership with the Climate Policy and Programs team within the Mayor's Office. A recent example is Executive Order 26,

which was signed by Mayor de Blasio on June 1st as a reaffirmation of the City's commitment to the Paris Climate Accord, including limiting global temperature rise to 1.5 degrees Celsius. DEM plays an instrumental role in helping to advance Executive Order 26, and we are working with City agencies to develop a priority queue of work that targets energy retrofit measures for the largest and least efficient buildings. DCAS has partnered with the C40 Global Climate Network to develop a planning tool to help agencies put together the list of measures they will need to implement to achieve their carbon emissions goals. Through sophisticated planning tools and strategic investments, we are working to bend the carbon curve down sooner by doing more, more quickly. DEM looks to both demand and supply side initiatives to accomplish our greenhouse gas emission reduction goals.

I am happy to report that as of the end of Fiscal Year 2016 GHG emissions from public buildings is down 25 percent from our 2006 baseline. In comparison, emission reductions from private buildings over the same time period was not quite 19 percent. The reductions in emissions from public buildings is the primary driver for overall reductions in municipal operations. The reduction of more than 557,500 metric tons in public buildings is the equivalent of removing almost 120,000 passenger vehicles from the road. This is a clear indication that the City's investments are making a difference.

Demand Side Programs

DEM's energy demand side programs have focused on investing in high-value projects through competitive funding programs and the implementation of deep retrofits in key City facilities stemming from energy audits and other strategic planning initiatives. DEM benchmarks the energy performance of all City government buildings 10,000 square feet and greater each year. To enable benchmarking, DEM collects property attribute data for a portfolio of nearly 3,000 agency buildings, which includes libraries, police stations, firehouses, schools, colleges, courthouses, hospitals, community centers, and government offices. Each May, DEM uploads complete building and energy usage data for the prior calendar year to the EPA Portfolio Manager web platform. In September, DEM submits a finalized report of performance metrics by building, including Energy Star scores and Energy Use Intensity, to the Department of Finance and the Mayor's Office. These reports provide DEM with some of the foundational data that allows us to direct resources based on performance and is one measure of how we are progressing. The average Energy Star score for 2016 for eligible City buildings is 70.8, which is a 21% improvement from the average Energy Star score of 58.6 for 2010, the first year City government buildings were benchmarked under Local Law 84 of 2009.

Our biggest competitive funding program, the Accelerated Conservation and Efficiency (“ACE”) Program, has awarded nearly \$432 million in capital to City agencies for building and streetlighting improvements, which are expected to yield more than \$54 million in avoided annual energy costs and approximately 142,000 metric tons of avoided GHG emissions, equivalent to the removal of 30,400 vehicles from the road. The program allows for streamlined funding of energy efficient capital projects that are identified, managed, and implemented by partner agencies through their existing contracts. On the Expense side, the Expenses for Conservation and Efficiency Leadership (“ExCEL”) program provides City agencies competitive funding for operations and maintenance improvements, energy-saving retrofits, diagnostic tools, studies and specialized training. More than \$48 million has been awarded for projects that are expected to yield almost \$13 million in avoided energy costs and approximately 34,300 metric tons of avoided GHG emissions, equivalent to removing 7,345 vehicles off the road.

To improve building energy performance and comply with Local Law 87, DEM has also completed more than 660 energy efficiency audits. By the end of the year we will have completed all identified retro-commissioning and energy conservation measures required by law in 215 buildings. We have an additional \$87.2 million in energy conservation measures underway. These projects have a projected GHG reduction of 13,654 metric tons – the equivalent of removing more than 2,900 passenger vehicles from the road. In evaluating the effectiveness of the retrocommissioning program facilities that received retro-commissioning measures experienced an 18 percent decrease in energy use from Fiscal Year 2012 to Fiscal Year 2016, as compared to a 2 percent Citywide drop over the same period.

To ensure we continue to identify the most efficient technologies, DEM engages vendors of new and under-utilized technologies to test their solutions in City buildings through our Innovative Demonstrations for Energy Adaptability (IDEA) program. IDEA provides vendors with the opportunity to demonstrate their energy-saving solutions and the findings are then reviewed to best inform DEM’s cleantech strategy and investments. These demonstrations help address building operational challenges and develop use cases for the private sector to spur investment and share best practices. To date, 34 technologies are being tested through the program.

The Demand Response program reduces electric load during periods of high stress on the electric grid. More than 23 agencies are participating in our Demand Response program,

Thank you again for the opportunity to testify this afternoon. We would be happy to answer any questions you may have.



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Introduction

Good afternoon Chair Kallos and members of the Committee. I am Keith Kerman, Deputy Commissioner at the Department of Citywide Administrative Services (DCAS) and the Chief Fleet Officer for New York City.

New York City operates over 30,000 owned and leased vehicles, the largest municipal fleet in the United States. Of those, more than 12,000 or 40% are emergency service units assigned to NYPD and FDNY. NYC maintains fleet units at 37 dedicated fleet repair facilities and has over 400 in-house fueling locations. We utilize approximately 850 distinct locations throughout the City to park our fleet. More than 2,000 City employees work full time in fleet repair and garage dispatch operations across the ten largest fleet-operating agencies. In total, more than \$900 million was spent Citywide in FY17 on fleet-related costs including acquisitions, repair, fueling, parts, and collision claims.

DCAS leads efforts to share and improve services and safety across the ten major fleet operations involving its own and the following City agencies: NYPD, FDNY, Correction, Sanitation, Environmental Protection, Parks, Transportation, Education, and Health. In addition to these large agencies, more than 40 other agencies with smaller fleets are managed and serviced through DCAS.

DCAS leads initiatives in sustainability, performance reporting, and emergency management. DCAS manages day-to-day services on a Citywide basis, including repair, fueling, auction, parts supply, car share, and claims management. On the sustainability front, DCAS operates one of the largest alternative fuel fleets in the world, with 18,314 total units using some type of alternative fuel including electric, solar, hybrid-electric, natural gas, or biodiesel.

Clean Fleet Initiatives

Through Mayor de Blasio's NYC Clean Fleet initiative, DCAS is working to cut greenhouse gas emissions in half by 2025. As part of this effort:

- NYC currently operates 1,042 on-road electric vehicles with 150 more on order so far in FY18. This is one of the largest EV fleets in the world. In 2014, there were

only about 200 electric cars in the fleet. The City also operates 630 off-road electric and solar units including carts, forklifts, and sign-boards. The City now operates over 422 EV chargers for fleet units including our first solar carport units.

- In FY17, NYC implemented its largest ever biodiesel program with 16 million biodiesel blended gallons or 2.1 million gallon equivalents of pure biodiesel (B100). In 2018, NYC will implement a first demonstration contract for 1 million gallons of renewable hydro carbon diesel fuel (RD) which can achieve equal environmental benefits as biodiesel but without equipment compatibility issues at high blends.
- Through Local Law 38 of 2005, NYC procures the most fuel-efficient light and medium-duty units and reports annually on its fleet equivalent of CAFE, Corporate Average Fuel Economy. In FY17, the fleet achieved a record 83.7 MPG for new light and medium units. Actual average fuel economy for the entire fleet has improved 28% from FY14 to FY17. When adding in the biodiesel program, our use of fossil fuels has decreased 31% per mile since FY14.
- NYC is the largest fleet user of car share in the country through its Zipcar program. NYC agencies used more than 150,000 hours of shared Zipcars in 2016, reducing demands on City-owned fleet units. In addition, 750 City-owned fleet units are shared using Zipcar technology, enabling them to be easily pooled. Fleet continues to expand the sharing initiatives and will operate at least 1,000 shared City owned cars by the end of 2018.
- As part of Local Law 41 of 2015, the City reduced the non-emergency light duty fleet by 42 units in FY17. In FY18, DCAS is implementing a larger 118-unit reduction. This law covers about 2,100 light duty sedans and SUVs that are suitable for pooling and excludes police, emergency, inspection and enforcement units, as well as newly funded programs.
- DCAS recently rebid the Citywide car and fleet share contract. We expect to have a new long-term contract registered in FY18 which will include updated and improved sharing technology.
- NYC is also expanding use of anti-idling technology with 202 ambulances now using Stealth electric batteries to reduce emissions with 128 additional units on order.
- Last week, DCAS and Con Edison announced a partnership in which Con Edison will pay the City to Smart Charge its electric cars at night and at off-peak hours.

- DCAS and NYPD are also working with Ford and will look to test the first pursuit rated hybrid Ford Police Interceptors in 2018.
- In December 2015, DCAS issued an RFI for ideas and proposals to improve fleet sustainability. The response has been excellent and over 130 vendors and organizations have engaged this continuing process to date.

Conclusion

Thank you again for allowing us to testify today. We look forward to a continued dialogue with you and other members of the City Council. The Administration is excited about the opportunity to work with you as we continue to push to make the City's fleet one of the cleanest and most sustainable fleets possible.



NEW YORK CITY CENTRAL LABOR COUNCIL AFL-CIO

President
VINCENT ALVAREZ

Secretary-Treasurer
JANELLA T. HINDS



Testimony on DCAS's Energy Management and Energy Efficiency Initiatives New York City Central Labor Council, AFL-CIO

New York City Council Committee on Governmental Operations

November 28, 2017

Good morning, my name is Alex Gleason, and I am the Policy Associate at the New York City Central Labor Council, AFL-CIO. Representing 1.3 million workers across 300 affiliated unions, the Central Labor Council has collaborated with our affiliated unions, environmental justice organizations, and community groups to address the dual crises of climate change and income inequality. Our coalition, Climate Works for All, has worked since 2014 to propose proactive policies aimed at making the city more environmentally resilient as well as lifting the economic floor. Climate Works for All has collaborated with members of the Council as well as the Department of Citywide Administrative Services (DCAS) to find opportunities to create well-paying jobs, as well as include the input of the community in strategic decisions.

From our institution's perspective, the City's plans to assess, install, and operate renewable resources on public buildings provides a strategic opportunity to create well-paying jobs. The initial assessment of public buildings provides an opening to train New York City public workers to conduct building audits and assessments—finding the best methods to not only to reduce carbon emissions, but to replace inefficient systems. There are multitudes of upgrades any building could make, and a master plan on what needs to be done to public buildings would create a pipeline of work opportunities for the future; this could support pathways to apprenticeships and local hire for New Yorkers, rather than outsourced job opportunities.

Leveraging public building efficiencies as a future economic development tool also sets a strong standard for buildings in the private sector. In the future, vital upgrades will be necessary for buildings to efficiently operate, but if we are thinking how those upgrades contribute to emissions—and placing a cap on them—it will serve as both good public policy and a smart long-run investment. Savings on energy can be re-invested back into the building and workforce, and most 'green' upgrades eventually pay for themselves.

The City government can use public building efficiency standards as a model for the rest of the City. It is essential for the City to have a concise plan to upgrade the public building stock; without it, there are bound to be coordination failures, inefficiency, and massive opportunity cost. A smart, coordinated plan could transform an important but otherwise siloed approach into a systemic transformation of our public infrastructure to the benefit of our neighborhoods and workforce. The Central Labor Council and Climate Works for All are prepared to help the Council and City continue to achieve its emission reduction goals and forge pathways to well-paying careers. Thank you for your time and consideration.



**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: 11/28/17

(PLEASE PRINT)

Name: Kenn Herman

Address: DCAS Fire

I represent: Centre Street

Address: Municipal Building

Please complete this card and return to the Sergeant-at-Arms

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THE CITY OF NEW YORK**

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☐ in favor ☐ in opposition

Date: 11/28/17

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Name: Alex Gleason

Address: 275 7th Ave agleason@nyccol.org

I represent: NYC Central Labor Council, AFL-CIO

Address: 275 7th Ave

Please complete this card and return to the Sergeant-at-Arms

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THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: 11/28/17

(PLEASE PRINT)

Name: Anthony Fiore

Address: _____

I represent: DCAS

Address: _____