

## REQUEST FOR INFORMATION

### SUPPLYING NEW YORK CITY WITH SUSTAINABLE FLEET SOLUTIONS

PIN #: 85616RFI003

#### I. INTRODUCTION

The City of New York, (the “City”), acting through the Department of Citywide Administrative Services (“DCAS”), is issuing this Request for Information (“RFI”) to gather input regarding methods and technologies that can be utilized to improve the sustainability of the City’s vehicle fleet. It is the intent of the City to reduce greenhouse gas (“GHG”) emissions from its vehicle fleet 50 percent below 2005 levels by 2025 and 80 percent by 2035. **In support of this objective, the City anticipates spending up to \$6 billion in cleaner fleet acquisitions and fuel through 2035.** With information gathered as a result of this RFI, the City seeks to chart a path to create significant reductions in air emissions from its own fleet and spur the market for other municipal and privately owned fleets in and around New York City through the adoption of low-emission, clean and renewable vehicle and fuel solutions.

As outlined in Mayor de Blasio’s *One New York: The Plan for a Strong and Just City* (“OneNYC”) (<http://www1.nyc.gov/html/onenyc/index.html>) NYC has committed to reducing New York City’s overall GHG emissions 80 percent by 2050 under a 2005 baseline (“80x50”) with an interim goal of a 40 percent reduction by 2030. The City has also signed the Under2 MOU, committing the City to bringing its GHG emissions to less than two metric tons of carbon equivalent per capita by 2050. OneNYC focuses its efforts to reduce GHG emissions into four major sectors: buildings, energy supply, solid waste and transportation, and sets the goal for New York City to have the best air quality of any large U.S. city. While transportation is less GHG-intensive in New York than in most other cities in the country, thanks to our 24/7 subway system, citywide bus network, and dense, walkable communities, the transportation sector, which includes private vehicles, freight, and mass transit (subway, commuter rail, and bus), makes up 23 percent of the city’s total greenhouse gas emissions. Fossil fuels burned in passenger cars contribute 16 percent of the citywide total, while those in trucks are responsible for an additional four percent. On-road vehicles also emit particulates and other air pollutants such as nitrogen and sulfur oxides (NO<sub>x</sub> and SO<sub>x</sub>), which contribute to respiratory diseases such as asthma and to premature mortality, particularly in low-income communities.

The City actively promotes the development and use of new fleet technologies to reduce emissions and work toward the City’s GHG emissions reductions goals. Some of these efforts include:

- Nearly all of the City’s heavy-duty diesel fleet runs on biodiesel blends of either B5 or B20.
- The City operates one of the nation’s largest hybrid vehicle fleets with 6,000 units.
- The City operates over 800 plug-in units including over 300 full use EV sedans and vans.
- The City has retrofitted over 1,500 vehicles with diesel particulate filters and other diesel emissions-reducing technologies.
- The City operates one of the nation’s largest fleet share programs using internally owned units.
- The City is implementing new fuel and fleet management and tracking systems.
- The City recently introduced its first solar carport.
- NYC has been recognized by U.S. Environmental Protection Agency, New York State Department of Environmental Conservation, the National Fleet Management Association, the National Biodiesel Board and many others for its leadership in fleet sustainability.

The City operates a fleet comprising 27,152 units that burn fuel directly. The City’s fleet is made up of 124 separate types of fleet units (both on- and off-road) that run primarily on traditional internal combustion engines (“ICE”), although the City currently operates 800 electric vehicles (“EV”) along with 239 EV chargers (the largest number of EV chargers operated in New York State). The City is currently on track to replace or retrofit 90 percent of its diesel on-road vehicles, over 5200 units, to meet or exceed the U.S. Environmental Protection Agency’s 2007 heavy duty engine and vehicle emissions standards by 2017; this will result in significant reductions of harmful air emissions – estimates show that replacing or retrofitting a vehicle to the 2007 standards will reduce emissions by approximately 90 percent over the prior standard – and demonstrates the City’s commitment to improving the way it operates.

To make further strides in this area, there will need to be a major shift from traditional fossil fuel based ICEs to new technologies that eliminate or greatly reduce tailpipe emissions. As such, the City is actively seeking ways in which it can transform its fleet from engines using traditional petroleum fuels to those that are powered by electricity, hydrogen and other alternative fuels such as biofuels and renewable diesel.

Meeting these reduction goals will require the deployment and/or development of viable, fleet-worthy EV and alternative fuel options for fleet units of all classes. The City seeks to catalyze existing but nascent markets, for instance by significantly increasing the amount of the City government fleet units operating on electric power and alternative fuels. Since the consequences of mobile GHG emissions extend across economic sectors and geographic boundaries, it will be important for the City to establish effective partnerships with the private sector and other governmental and nonprofit entities in order to achieve the City’s renewable energy goals. To this end, the City is seeking information regarding how best to foster the development of EV and

alternative fuel fleet units and other fleet infrastructure to meet the City's government fleet sustainability initiative.

The City seeks responses from all entities involved in and supporting the EV and alternative fuel sector, such as developers, producers, manufacturers, financial institutions, energy and fuel brokerages, and trade groups. The City is open to receiving responses from single entities or from entities that represent multi-ventures that could provide creative solutions to deliver reliable and cost-effective projects and products to meet the City's fleet sustainability goals. Responses from both the public and private sectors will be considered.

## **II. PURPOSE OF THE RFI**

The purpose of this RFI is to gather information to assist the City in developing (at the City's sole discretion) separate, subsequent requests for proposals ("RFP") and/or competitive bids for the procurement of EV and alternative fuel fleet units and other fleet infrastructure. Respondents can provide information on projects and products that could fully satisfy the City government's fleet needs (see Section IV) or deliver units that would contribute the greatest reductions in tailpipe emissions. The City seeks responses describing units and/or fuel types that are currently in production or in the design and development phase.

The City reserves the right to consider one or more types of projects and/or products from multiple respondents in order to develop RFPs and/or bids that would achieve the City's objectives. The City envisions that the RFP and/or bid processes could result in contracts to procure fleet units, fleet infrastructure, and/or fuel procurement services. In particular, the City would like to:

- A. Understand the quantity of EV units of all types that could be economically supplied to the City in each fleet class over the next ten years and beyond.
- B. Understand the types of alternative fuel units and other fleet infrastructure that could be economically supplied to the City over the next ten years and beyond, including but not limited to:
  1. Hydrogen vehicles;
  2. Biodiesel/renewable diesel vehicles and other equipment types;
  3. Compressed natural gas ("CNG") units;
  4. Charging and fueling stations;
  5. On-board "stop-start" technologies; and
  6. Fleet design efficiencies
- C. Gather information on various contracting and financial mechanisms that could be employed to develop and implement fleet initiatives. Responses should include preferred contracting models, including terms and conditions that would be required to implement these approaches.

- D. Gather information on federal, state, and local government incentives and regulatory processes, and associated time requirements, for EV and alternative fuel fleet units, charging/fueling stations and maintenance programs and regulations related to the purposes of this RFI.
- E. Gather information on how the City can best interact with Federal and State policies and rulings to achieve its fleet sustainability goals.
- F. Gather information on medium and heavy duty vehicles (including buses), as well as marine vessels.

### **III. CITY OBJECTIVES**

The City's objectives for this RFI are:

- A. Ensuring an operationally reliable, effective and sustainable City fleet for both the near- and long-term.
- B. Improving overall air quality and reducing the City's carbon footprint by significantly reducing tailpipe emissions and related greenhouse gas emissions from City fleet vehicles.
- C. Assessing impacts on fleet affordability and cost effectiveness.
- D. Spurring new EV and alternative fuel development.
- E. Diversifying fleet fuel supply sources and creating sustainable fueling and power systems.
- F. Creating jobs in the EV and alternative fuel vehicle sectors.
- G. Creating effective partnerships with the private sector and the State and other governmental entities in order to achieve City, State and regional fleet sustainability goals.

### **IV. DESCRIPTION OF THE CITY'S CURRENT FLEET**

Over sixteen thousand units (60%) of the City's vehicle fleet are alternative fuel vehicles, which for the purposes of this RFI means any unit that is not 100% powered by either gasoline or standard diesel. The current breakdown of alternative fuel vehicles by alternative fuel type is as follows:

- Biodiesel (B5 and B20) – 9,725 units
- Gas, diesel and solar electric hybrids – 5,601 units
- Electric (EVs and plug-in hybrid electric vehicles (“PHEV”)) – 814 units
- CNG – 206 units
- Propane – 47 units

In Fiscal Year 2015, the City used 29.2 million gallons of carbon fuel for fleet fueling with 60% or 17.6 million gallons of this as diesel and 40% or 11.6 million gallons as gasoline. In Fiscal Year 15, 93% of the diesel fuel used was blended with biodiesel in blends of B5 or B20.

The City also operates almost 14,000 additional units comprised of equipment types such as snow and leaf blowers, lawn mowers, chain saws, portable salt spreaders, weed trimmers, small generators, and a large variety of other units.<sup>1</sup> The City is interested in electric and other alternatives for this 2 and 4 cycle equipment as well.

The City will utilize the information received from the issuance of this RFI to shape its future fleet procurement plans as part of its overall OneNYC strategy.

**V. SUBMITTAL PROCESS**

**A. Schedule**

The expected schedule for this RFI is shown in the table below. The City reserves the right in its sole discretion to modify the schedule at any time. Any modifications to the schedule will be communicated through the RFI Contact identified in Section D below.

<b>Schedule for RFI Issuance and Evaluation</b>	
<b>Action</b>	<b>Date</b>
Issuance of RFI	December 16, 2015
RFI Informational Session	11:00 AM, January 7, 2016
RFI Responses Due	5:00 PM. February 16, 2016

The City is open to receiving written questions submitted to the RFI Contact any time before the due date for responses. The City will conduct an informational session via the Internet to address its fleet sustainability goals and how it expects to meet those goals on January 7, 2016. Further information on the informational session will be provided to the prospective respondents

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<sup>1</sup> The City, via its Department of Parks and Recreation, operates a Zamboni for the maintenance of the City's ice rinks.

and the public in the City Record paper and via the City Record Online at [www.nyc.gov/cityrecord](http://www.nyc.gov/cityrecord). If prospective respondents wish their questions to be addressed during the informational session, they should submit their questions in writing to the RFI Contact prior to the informational session. An archived version of the session and the questions and answers will be made available to the public.

The City will evaluate the responses received and determine whether and how to proceed with its procurement of fleet units and other fleet infrastructure. It may or may not issue an RFP or bid, or take any other action it deems appropriate.

## **B. Communications**

Respondents will have the ability to submit questions regarding any aspect of this RFI to the RFI Contact identified below. The submission of all questions, and all other communications related to this RFI, should be directed to the RFI Contact.

## **C. Submission of Responses**

All responses shall be submitted electronically to the RFI Contact identified below by 5:00 pm E.S.T. on February 16, 2016. In addition, two original paper copies shall be submitted to the RFI Contact no later than February 22, 2016.

## **D. RFI Contact**

Respondents are encouraged to seek clarification as required to submit a complete and comprehensive response. Unless otherwise directed, all communications regarding this RFI should be made through the RFI Contact as follows:

Jonathon Ells, Fleet Operations Manager  
Department of Citywide Administrative Services, Office of the New York City Fleet  
1 Centre Street, 23<sup>rd</sup> Floor South  
New York, New York 10007  
T: 212-386-0547  
[jells@dcas.nyc.gov](mailto:jells@dcas.nyc.gov)

## **E. Costs and Expenses**

The City shall not have any responsibility for any costs or expenses incurred by any respondent related to its preparation of a response to this RFI. Each respondent is solely responsible for its own costs and expenses in preparing and submitting a response to this RFI and participating in the RFI process, including the provision of any additional information or attendance at meetings or interviews.

## **F. No Binding Obligation Is Created**

This document is not intended as a solicitation for the award of a contract or a prerequisite for participation in any future solicitation. No contract will be awarded as a result of this RFI and response to this RFI is not required in order to respond to any subsequent RFP. The City is under no legal, monetary, or contractual obligation to respondents to this RFI. This RFI, and any documents submitted in response thereto, do not constitute and will not give rise to any legally binding obligation on the part of the City. The City does not intend to, and shall not be, bound by the terms of this RFI. The City reserves the right to proceed in any matter that it, in its sole discretion, deems appropriate. The City also reserves the right to accept and consider any non-compliant response. All responses to this RFI shall become the property of the City.

## **G. Reservation of Rights**

The City reserves the right, at its sole discretion, to alter and/or withdraw the RFI at any time and/or not issue an RFP or bid; to choose to discuss various approaches with one or more respondents (including those not responding to the RFI); to use the ideas or approaches submitted in any manner deemed to be in the best interests of the City, including but not limited to soliciting competitive submissions relating to such ideas or approaches; and/or undertake the prescribed work in a manner other than that which is set forth herein.

## **H. Confidentiality**

The names of the respondents to this RFI shall not be confidential. However, subject to the provisions of applicable law, at the request of any respondent, the contents of the response, or any portion thereof, may be treated as confidential. Any request to treat a response or portion thereof as confidential should be accompanied by an explanation justifying the applicability of the protection sought.

## **VI. SUBMITTAL CONTENTS**

A complete response will include the following components:

### **A. Executive Summary**

Responses should include an Executive Summary which briefly describes the respondent, the major features of its response, and key highlights of the pricing and terms that the respondent would require in a contract to provide renewable power to the City.

### **B. Description of Respondent**

Responses should provide contact information, including, respondent's legal name, business address, name of contact, telephone, email address and website address. Responses also should

provide a description of the respondent's qualifications, including a list of similar prior projects and/or services, and a description of experience with providing governmental or other large-scale alternative fleet services in the United States.

### **C. Financial Information**

Responses should provide an overview of the financial information associated with prior fleet projects and services outlined in the responses. Responses should include an estimation of how respondent would meet the financing requirements of a project that would meet the goals set forth in this RFI.

### **D. Description of Alternative Fleet Services**

Responses should set out a general description of the alternative fleet product and/or service that could be provided, including a description of the technology, fuel sourcing, development history, and utilization in a large urban environment.

### **E. Timeline and Regulatory Approvals**

Respondents should identify all major regulatory, environmental, and local permits/approvals required to develop, procure, operate and maintain the products included in the response and provide a timeline showing all major regulatory and permitting milestones.

### **F. Other Issues to be Addressed in Responses**

1. The City understands there are fewer viable EV options at this time for fleet vehicle classes above sedans. Describe any current or proposed industry initiatives to ramp up design and production of EV SUVs, trucks, vans or other vehicle classes to enable the industry to deliver a fleet-ready EV product. Describe range and recharging characteristics for each vehicle class. What are the limitations on such development, and do these limitations stem primarily from technical or financial issues? What resources could benefit the industry in moving forward with EV options for other vehicle classes? The City is interested in piloting EV applications beyond the sedan class in the near term, with larger deployments beginning around 2020, contingent upon pilot outcomes.
2. Please describe any experience with developing and implementing charging infrastructure in an urban setting, either for a municipal or private sector client. This could include on-street charging or centrally located facilities at parking garages/lots. This can also include solar carport technology. In the municipal setting, discuss whether there is a preference for such infrastructure to be owned by the municipality or the developer who then licenses access to the municipality.

3. Discuss the development of extended range options for EV, especially in the context of driving in an urban environment.
4. Discuss how developments in hydrogen fueling could lead to a fleet-ready vehicle. Discuss hydrogen fuel sourcing developments and how these could be brought in safely to an urban environment.
5. Discuss other innovations including in EV, hydrogen, or other vehicle design, such as chassis and body materials and interior design.
6. Please discuss regulatory issues you have faced in providing EV or hydrogen vehicles, in particular regulations regarding vehicle safety and also charging/fueling safety (with a particular focus on meeting fire code standards).
7. Discuss developments in biodiesel. What issues does this sector face in implementing higher blends up to B100 fuel? What crop sources are likely to come into play over the next several years to produce an efficient fuel that can be used in a variety of climates and conditions? Can warranty, fire safety, and cold weather issues be solved to allow effective higher blends up to B100? What changes, if any, are required in ASTM, AS, or other standards?
8. What is the potential scalability of renewable diesel for use in a fleet application in the City? What do you see as the most viable technologies to develop renewable diesel? Food waste and other organics are key ingredients for the City when considering renewable diesel. The City is interested in available renewable diesel options for the NYC fleet and area.
9. Discuss the continued viability of CNG for a large urban-based fleet. What fueling infrastructure would be necessary to make CNG an attractive option for an urban-based fleet? How can this infrastructure be built in a cost-effective manner? What vehicle options are currently produced or in development? Please address any regulatory and safety issues you have faced in the CNG vehicle sector.
10. Discuss the viable alternative fuel types for off-road fleet equipment including lawn tractors, construction equipment, light towers, mobile generators and related equipment.
11. Discuss maintenance programs and issues for all types of alternative fuel vehicles proposed in response to this RFI.
12. Describe projects and products that could spur the growth of the alternative fuel vehicle industry in New York City. What are effective ways for the City potentially to combine

its fleet requirements with other entities (both public and private) to foster the growth of EV and other vehicle types in the most affordable way?

13. What current or anticipated Federal or State grants or program awards do you expect your project(s) will receive, and what is the impact if they are not received?
14. What current and/or anticipated Federal or State tax incentives or credits do you expect your project(s) will receive, and what is the impact if they are not received?
15. Describe ways in which you believe the City could streamline or otherwise assist in regulatory, permitting, financing, siting, etc. for your alternative fuel fleet vehicle project in a way that could reduce costs and/or time to delivery.
16. What would be the estimated capital needed to develop the new energy sources and transmission assets, if any, associated with each project? What would be the sources for this capital? Please include the capital or renovation requirements to City facilities for the City to implement proposed large scale EV charger, CNG, biodiesel, or other implementation.
17. What environmental benefits and environmental impacts would your project create in general and for the City and New York State (“NYS”) in particular? Please describe both quantitative and qualitative estimations and methodology.
18. Describe specific economic development aspects of your project for the City and NYS. What environmental justice benefits would your project create for the City and NYS? What are your job creation projections for the area?
19. Please discuss any specific technology challenges and approaches which would be specific to emergency services units such as police and fire response vehicles and trucks.
20. Describe any other critical information that you believe should be included in a solicitation for alternative fuel/low-emission fleet units.