



CITY OF DETROIT
OFFICE OF THE CHIEF FINANCIAL OFFICER
OFFICE OF DEVELOPMENT AND GRANTS

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April 19, 2022

The Honorable Detroit City Council
ATTN: City Clerk Office
200 Coleman A. Young Municipal Center
Detroit MI 48226

RE: Request to Accept the Fleet Electrification Plan Grant

EV re-Fleet Inc. has awarded the City of Detroit General Services Department with the Fleet Electrification Plan Grant, valued at \$5,000.00. This is a non-cash grant. There is no match requirement. The total project cost is \$5,000.00.

The objective of the grant is to conduct a fleet electrification assessment to understand the financial, operating, and environmental impact of adopting Electric Vehicle technology. The services allotted to the department will be utilized to determine which vehicles in the City's fleet are eligible for conversion to electric and how adopting these vehicles will impact the City's long term Capital Plan, including an understanding of the energy infrastructure requirements, the financial impact to different city funds, and the impacts on repair and maintenance operations.

I respectfully ask your approval to accept and appropriate funding in accordance with the attached resolution.

Sincerely,
DocuSigned by:
Terri Daniels
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Terri Daniels
Director of Grants, Office of Development and Grants

CC:
Sajjiah Parker, Assistant Director, Grants

DocuSigned by:
Steven Watson
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Office of Budget

DocuSigned by:
[Signature]
3925B7659A3D409...

Agreement Approved as to Form
By the Law Department



Office of Development and Grants

RESOLUTION

Council Member _____

WHEREAS, the General Services Department is requesting authorization to accept a non-cash grant from EV re-Fleet Inc., valued at \$5,000.00, to conduct a fleet electrification assessment to understand the financial, operating, and environmental impact of adopting Electric Vehicle technology; and

WHEREAS, the Law Department has approved the attached agreement as to form; and

WHEREAS, this request has been approved by the Office of Budget; now

THEREFORE, BE IT RESOLVED that the Director or Head of the Department is authorized to execute the grant agreement on behalf of the City of Detroit to accept the the Fleet Electrification Plan Grant.



Fleet Electrification Assessment Agreement

Agreement between City of Detroit and EV re-Fleet Inc.
April 7th, 2022

This Fleet Electrification Assessment Agreement (“Agreement”) is entered into between the City of Detroit (“the City”) and EV re-Fleet Inc. (“Consultant”), each herein referred to individually as a “Party”, or collectively as the “Parties”. The main purpose of this Agreement is to develop a fleet electrification plan that will be incorporated into the City’s Capital Plan, due in August 2022.

Project Title:

City of Detroit Fleet Electrification Pilot Assessment

1. Purpose, Background and Objectives:

The City of Detroit desires to perform a fleet electrification assessment to understand the financial, operating, and environmental impact of adopting Electric Vehicle (“EV”) technology.

The City is looking to determine which vehicles in its fleet are eligible for conversion to Battery Electric Vehicles (“BEV”) and/or Plug-in Hybrid Electric Vehicles (“PHEV”) and how adopting these vehicles will impact the City’s long term Capital Plan – including an understanding of the energy infrastructure requirements, the financial impact to different city funds, and the impacts on repair and maintenance operations. The City also wants to understand current and future fleet CO₂ emissions as it replaces fossil fuel powered vehicles with electric vehicles. The City is undertaking this project to find cost-effective ways to electrify its fleet and reduce Total Cost of Ownership (“TCO”) as well as CO₂ emissions.

The Consultant has the capability to perform the type of assessment desired by the City and to prepare a report that identifies fleet electrification opportunities and prioritizes the replacement of different fleet vehicles according to TCO and Greenhouse Gas (“GHG”) reduction potential, based on the assessment, interviews, and relevant vehicle data in the City’s records.

The fleet electrification report will be delivered as a PDF document with an Excel spreadsheet that provides additional context. The report will include the following content:

- A breakdown of fleet vehicles eligible for conversion to BEV and PHEV including benefit-cost analysis by vehicle class, department, and operating codes
- A determination of energy infrastructure requirements to support the conversion, including high-level cost estimates



- An evaluation of current fleet CO₂ emissions and expected future fleet emissions

2. Period of Performance:

- Start Date: Effective Date, as defined in Section 9 of this Agreement
- End Date: Upon Consultant's delivery of all services defined herein, with a Target Date of July 31, 2022.

3. Project Scope:

The scope of the services to be performed by the Consultant as part of the of the Fleet Electrification Pilot Assessment project is described below:

The Consultant will work with City staff to complete a systematic assessment of existing fleet vehicles of all City departments, including, but not limited to, Police, Public Works, and other department 'pool cars' (herein referred to as the "Assessment"). The Assessment will use an inventory of the overall fleet size; vehicle types and number of vehicles in each vehicle type; and the off-duty locations, routes, level of usage, and fuel consumption patterns of each vehicle, to determine EV opportunities. The Consultant will rely on City staff to provide all necessary information in a timely manner.

The deliverables for this project will cover three main areas:

1. Assess and report on the electrification potential of the City's fleet of vehicles
2. Assess and recommend vehicle charging needs
3. Evaluate current and future fleet CO₂ emissions

The Consultant will apply mathematical models and software to systematically collect and assess the electrification potential for the City's fleet. Refer to Exhibit A for background information about the Consultant.

1. Assess and report on the electrification potential of the City's fleet of vehicles

The Consultant will collect fleet inventory of the City's overall fleet size including vehicle types and number of vehicles in each vehicle type, along with information on the utilization of those vehicles - utilization data will include driving and fuel data, parking locations, and maintenance data. After compiling the relevant data sources, the Consultant will determine EV adoption opportunities. For this area of the project, the Consultant will prepare:

- i. An analysis of all City owned vehicles within each current vehicle standard, including operational needs, and other attributes that would determine potential timelines for EV adoption. These recommendations will be broken down by vehicle standard such as the City's operating codes, by customer department, and by parking location.
- ii. A fleet report and accompanying spreadsheet that identifies and summarizes fleet electrification opportunities, segmented by vehicle standard, recommended for further analysis, including



providing a prioritized list of fleet vehicles to consider for EV conversion, inclusive of vehicles already in production and planned for production within 2022 and 2023.

- a. High level cost-and-benefit estimates of purchasing EVs vs. ICE vehicles
- b. High level cost estimates of charging infrastructure and existing rebates available
- c. Integrating TCO analysis over a 5-year lifetime of each vehicle, incorporating resale potential value.

2. Assess and recommend vehicle charging needs

Consultant will use the fleet assessment to determine vehicle energy requirements and charging needs, to match-make with charging infrastructure opportunities at various municipal building locations. The Consultant will work with City staff to make reasonable assumptions about the expected charging schedule of electric vehicles adopted by different City departments. For this area of the project, the Consultant will prepare:

- i. A summary of charging profiles, showing how much electricity each vehicle needs/would need, where vehicles are parked and when and where they would or could charge tied to the prioritized EV transition plan prepared in area 1 of the project
- ii. High-level analysis of EVSE deployment plan and associated costs

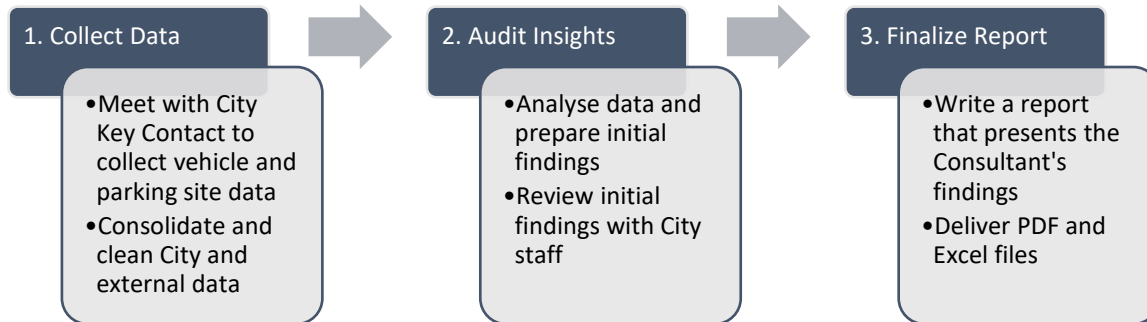
3. Evaluate current and future fleet CO₂ emissions

The Consultant will prepare an evaluation of current and expected fleet CO₂ emissions throughout the transition to an EV fleet. For this area of the project, the Consultant will prepare:

- i. Fleet emissions report detailing the current (estimated) fleet CO₂ emissions informed by the collected vehicle type, age, usage, and consumption data
- ii. Report estimating the expected fleet emissions over the course of the City's fleet EV transition (using the timeline postulated in the first area of this project - a report on the City's fleet electrification potential), using emission assumptions provided by City staff.

4. Project Phases

The Consultant will deliver its proposed Scope in three phases:



5. Deliverables

The Consultant will deliver its scope in accordance with the project phases defined in section 4 with the associated deliverable and timelines listed below.

Project Phase	Timeline*	Deliverables
1. Collect Data	2 – 4 weeks	a) Fleet map, visible in Excel, that combines inventory, fuel and driving data, parking locations, and maintenance data
2. Audit Insights	2 – 4 weeks	a) Excel file with a breakdown of information per vehicle for vehicles to be replaced in 2022 b) Draft recommendations on how to evaluate current and future fleet CO ₂ emissions
3. Finalize Report	2 – 4 weeks	a) PDF report b) Excel file with summary recommendations and vehicle breakdown for vehicles to be replaced in 2022

**Note: Timeline may vary depending on City Staff availability and the time required to collect all necessary data from the City.*

6. Project Key Persons

For this Agreement, the individuals listed in this section will be considered ‘Key Persons’ for purposes of delivery of notices or other formal communications under this Agreement.

City of Detroit Key Person	Joel Howrani Heeres Director of Sustainability	howraniheeresj@detroitmi.gov 313-224-2094
EV re-Fleet Key Persons	Adrian Gomez Co-Founder	adrian@evrefleet.com 416-885-0688
	Igor Lukac Co-Founder	igor@evrefleet.com 905-399-3671



7. Dependencies

Overall project timing is dependent on the ability for City staff to provide the necessary fleet and department data on a timely basis as well as to provide timely feedback on the deliverables prepared by the Consultant. The Parties understand that time is of the essence and will work in good faith to complete all deliverables before the Target Date stated in Section 2 of this Agreement.

8. Fees and Invoicing

The Consultant will donate its services to the City and as such will perform the services specified in this Agreement at no cost to the City. The Consultant will refrain from invoicing or imposing any fees for its services under this Agreement, which it estimates have a market value of \$5,000.

9. Miscellaneous:

It is mutually agreed upon and understood by the Parties that:

1. The Parties will work together in a coordinated fashion for the fulfillment of the Project Scope.
2. This Agreement is non-exclusive. In no way does this Agreement restrict the Parties from participating in similar agreements with other public or private agencies, organizations, and individuals.
3. This Agreement will become effective upon its execution by both Parties and its approval by the Detroit City Council, as necessary. This Agreement may be executed in multiple counterparts, which together will be considered part of a single
4. Nothing in this requires or authorizes the disposition or acceptance of any property, or the expenditure or receipt of any funds, by either Party. Any reimbursement or other transfer of funds between the Parties will be set forth in separate agreements that shall be made in writing by the Parties and shall be independently authorized by appropriate statutory authority. This Agreement does not provide such authority.
5. This Agreement is not intended to and does not create any legal Partnership or joint venture, nor any right, benefit, or trust responsibility.
6. The City agrees that this project may be promoted on both the City's and Consultant's websites and in their marketing and other public materials. Each Party agrees that the other Party may use its name, logo, and other trademarks to promote this project. Nothing in this Agreement transfers to either Party any right, title, or interest in the other Party's name, logo, or other trademarks.
7. The Consultant will treat all data shared by the City under this Agreement as private and confidential. The Consultant will (i) protect the privacy and confidentiality of all such data to the same standards that it applies to its own private and confidential information, (ii) utilize such information only for purposes of performing its services under this Agreement or as otherwise expressly authorized by this Agreement, and (iii) refrain from sharing or otherwise disbursing such information to any third party without the City's prior written consent.



8. The Consultant may aggregate and anonymize the City's data for its internal business purposes, such as to further refine and advance its products, solutions, and business practices. The data shared by the City, in both its raw as well as its aggregated and anonymized forms, will remain the property of the City. The procedures, designs, software, and mathematical models developed by the Consultant, whether or not applied to the City's data, will be deemed the Consultant's intellectual property under this Agreement.
9. All Excel files, reports, and other documents constituting the deliverables as set forth in Section 5 of this Agreement will, upon their delivery to the City, become the property of the City. The Consultant may retain and utilize copies of all deliverables for its internal business purposes, but must not publish, share, or disburse any such deliverables to any third parties without the City's prior written consent.
10. Any Party may terminate this Agreement by providing 30 days' written notice to other Party.
11. This Agreement is subject to the laws of the State of Michigan, excluding its choice of laws rules. Any legal suit, action or proceeding arising out of this Agreement will be instituted in the federal courts of the United States of America or the courts of the State of Michigan, in each case located in the City of Detroit and County of Wayne.



By signing below, the Parties authorize that they have authority to enter into this agreement on behalf of their Party.

EV re-Fleet Inc.

Signature: _____

Printed Name: _____

Title: _____

Date: _____

The City of Detroit

Signature: _____

Printed Name: _____

Title: _____

Date: _____

PO Number: _____



Exhibit A – About EV re-Fleet Inc.

Adrian Gomez, MBA

Co-founder, Fleet Consulting Lead

Adrian Gomez has a decade of experience with transportation electrification through work in the utility and automotive space, as well as in the fleet industry. As a co-owner of his previous software company, he led the fleet analytics software practice and assessed over 13,000 vehicles for electrification.

Adrian also led strategy and business development efforts to grow the transportation electrification portfolio at Ontario Power Generation, one of Canada's largest electricity generators. He also developed a deep understanding of the electric vehicle industry while working in strategy and corporate development at Lucid Motors, where he was a key contributor to the company's \$1 billion USD fundraise.

Adrian applies his industry experience and extensive network to provide high value fleet electrification advice. He has worked with state, county and city government fleets in the USA and has also provided cleantech advice and support to the governments of Finland, Canada, and the State of California.

Igor Lukac, P.Eng

Co-founder, Technical Solutions Lead

Igor Lukac, a licensed professional engineer, discovered his passion for high-tech clean energy while building a solar-powered electric car with a team of engineers. Since then, his engineering firm has helped clients throughout North America to deploy renewable energy projects.

Igor holds two degrees, one in Integrated Engineering and one in Business Administration with a specialization in finance. Through collaboration with General Electric and Siemens on wind turbine projects in Canada and the United States, Igor developed a deep understanding of the challenges that coincide with rapid deployment of renewable technology.

Now, more than 14 years after building his first electric car, Igor has developed a systematic approach to deliver affordable fleet electrification assessments using robust mathematics and software algorithms.

About the EVRF Team

Over the last decade, the Consultant's engineering team has taken responsibility for critical communications systems for some of the largest Telecommunication providers in Canada, USA, and Australia and for wind power turbines for some of the largest developers in the US. Clients have trusted our team to analyse their projects, identify potential structural risks, recommend solutions, and provide engineering signoff. These analyses could include assessments of risks and potential harms to the public, environmental impact assessments in ecologically sensitive environments, potential dangers from weather calamities, and aging structures.

Our business is preventative medicine to provide confident solutions while protecting the public from as much harm as possible. Our methodology is thorough, based on sound data, engineering analysis, and



numerous quality checks before any project completion. Our team of engineers is inspired by the need for an evolving ecological consciousness. This belief has propelled us to strive for organizational change through powerful data analytics to lower the negative environmental impact of our clients' projects.

We have taken that same level of trust and critical thinking into the fleet electrification space where we developed an energy engineering approach to determine the electric vehicle feasibility of our clients' fleet. Using proprietary mathematical models and software, we prepare in-depth analyses of fleet data, with a primary focus on identifying cost-efficient ways to decrease CO₂ emissions and presenting a roadmap towards future charging infrastructure and electric vehicle deployments.