# CITY OF LOS ANGELES CALIFORNIA

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November 12, 2015

Honorable Members of the City Council City of Los Angeles c/o City Clerk Room 395, City Hall

## **GREENHOUSE GAS EMISSIONS REDUCTION (COUNCIL FILE 14-0907)**

The City Council directed the Department of General Services (GSD) to report back on actions the department can take to reduce the City's carbon dioxide and other greenhouse gas (GHG) emissions to at least 80% below 1990 levels by 2050. This report includes information on projects completed to date, and future actions to help achieve the reduction target.

#### **SUMMARY**

GSD has completed energy conservation and clean fuels projects that result in a reduction of GHG emissions by almost 103,000 metric tons. This report outlines the projects currently in progress and in line for future development to continue the City's efforts to reduce the effects of climate change.

#### **COMPLETED PROJECTS**

Energy Conservation – 22,700 metric tons of GHG emissions reduced

GSD has completed 263 energy retrofit projects, thereby allowing the City to decrease annual energy consumption by 112 million kBtus or 22,700 metric tons of GHG emissions reduced. The retrofits included replacing old systems with the most energy efficient fixtures and systems for HVAC (heating, ventilation, air conditioning), lighting, lighting control, roofing systems and building automation.



Beginning in 2014-15, GSD worked in partnership with LADWP's Energy Efficiency Technical Assistance Program to conduct energy audits at facilities. The audits include an analysis of electrical, gas and water consumption and a list of potential energy conservation measures that can be implemented. Recent energy retrofits performed by GSD have been selected from audit recommendations.

Clean Fuels Program – 80,000 metric tons of GHG emissions reduced

The City Council adopted a Clean Fuels Policy (CF 00-0157) to help implement alternative fuel applications by supporting programs and regulations that balance environmental benefits and operational concerns. Among its various provisions, the policy specified that the City would "use and purchase vehicles which utilize clean fuels and/or electric propulsion based upon technology that has been determined to be reliable, durable, and cost effective" and that the City would "promote development of alternative fuel infrastructure".

To date, the City has more than 1,869 alternative fuel vehicles in service, which equals 33.5% of the City's on-road fleet. In addition, the City has developed 13 alternative fuel sites, with a 14<sup>th</sup> under construction. These efforts have resulted in the displacement of nearly 22 million gallons of diesel and unleaded fuel since 2001. In turn, nearly 80,000 metric tons of GHG emissions have been eliminated through the use of alternative fuels.

### **FUTURE ACTIONS TO REDUCE GHG EMISSIONS**

The following are actions GSD can take to continue reducing GHG emissions and help the City achieve its emission reduction goals. Many projects are underway with existing resources budgeted this fiscal year. GSD will submit budget requests for continued or new funding in FY 2016-17 and beyond to implement many of the projects described below.

 Energy Audits and Retrofits: GSD is preparing a Five-Year Plan for energy and water conservation. The plan includes a goal to audit up to 100 buildings over the next five years. The audits will provide a basis for identifying smart, cost effective retrofits that upon completion, will provide on-going benefits through water and energy reduction. Retrofits will be selected based on project cost, payback period and other policy considerations.

- Retrocommissioning: Retrocommissioning is a systematic process for identifying less-than-optimal performance of a building's equipment, lighting and control systems, and making the necessary adjustments. While energy retrofits involve replacing outdated equipment, retrocommissioning focuses on improving the efficiency of what's already in place. This process is particularly useful in facilities where many energy retrofit projects have already been implemented, or in newer facilities. Repetition of retrocomissioning every five years is needed to ensure the operational efficiency of building equipment.
- Green Fleet Program: GSD will buy replacement vehicles that run on alternative fuel, such as sedans, street sweepers, refuse collection vehicles, and trucks. GSD aims to have 97% of street sweepers and 93% of refuse collection vehicles converted to LNG/CNG by the end of 2017, and 100% for both by 2025. Additionally, 20% of light duty cars and trucks will be converted by 2025 and 40% by 2035. And in accordance with the Sustainable City pLAn, 50% of the City's light duty vehicle purchases will be electric vehicles by 2017, 80% by 2025, and 100% by 2035.
- Electric Vehicle (EV) Infrastructure: To support the growing use of EVs by the public and the City fleet, a comprehensive EV study is being conducted to develop a plan for the purchase of EVs, installation of EV chargers, and subsequent operation and maintenance of EV chargers at City motor pool facilities and many GSD-managed employee and commercial parking lots. GSD received a grant in the current year to install 42 EV chargers. The department will also submit a budget request for additional chargers next fiscal year, in addition to pursuing grants and other funding to help the City reach its goal to install more than 1,000 publicly available EV charging stations by 2017, with more than 100 on City property.
- Alternative Fuel Infrastructure: There are 13 alternative fuel fueling sites and 9 repair facilities that have been retrofitted to accommodate the safe repair of alternative fuel vehicles. GSD is currently constructing one alternative fuel fueling station and retrofitting one vehicle repair facility. The department is evaluating the need for additional or expanded infrastructure to accommodate future vehicle purchases and deployments. GSD recognized the need for expanded CNG fueling at the City's four LNG sites as more CNG vehicles have entered the fleet, and a funding request will be submitted in the proposed budget.

Sustainable City pLAn: Additional projects are being developed under the goals and outcomes outlined in the pLAn. GSD is lead or partner in 29 pLAn initiatives, which will result in multiple projects in areas such as local power, carbon and climate leadership, waste and landfills, and air quality. The pLAn aims to reduce GHG emissions below the 1990 baseline by 45% by 2025, 60% by 2035 and 80% by 2050.

GSD is committed to doing its part to help achieve the City's emissions reduction goals. Should you have any questions, please contact Valerie Melloff, Assistant General Manager.

Tony M. Royster General Manager

c: Energy and Environment Committee
Trade, Commerce and Technology Committee
Entertainment and Facilities Committee
Matt Petersen, Mayor's Office of Sustainability