Renewable Diesel
use by the
City of Oakland, CA

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City of Oakland’s recent notable Achievements

- 2019 – Ranked 3rd in Top 50 Green Fleets North America
- 2018 – Ranked 15th in Top 50 Green Fleets North America
- 2017 – Featured in Government Fleet Magazine
- 2017 – Ranked 19th in 100 Best Fleets North America
- 2017 – Clean Air Champion Award recipient – Bay Area Clean Cities
Sustainability measures in the City of Oakland

Green Fleet Policy

- Resolution No. 77842 C.M.S-
  May 29, 2003
- Purchase vehicles powered by alternative fuels
- Improve energy efficiency of fleet
- Reduce emissions of fleet
- Develop performance measures

Environmental Preferable Purchasing Policy

- Enacted July 17, 2007
- Minimize environmental impacts
- Reduce greenhouse gas emissions
- Purchase re-refined lubricants
- Purchase bio-fuels
- Purchase less-polluting vehicles (liquefied natural gas, bio-based fuels, hybrids, electric batteries, and fuel cells)

City of Oakland’s Fleet

- 1545 Motorized vehicles, 175 other fueled units
- 752 Oakland Police Department units
  - 550 Patrol units
- 652 Oakland Public Works/ D.O.T. units
  - 185 Medium/Heavy Truck
- 141 Oakland Fire Department units
  - 55 Fire Apparatus
100% of non-Law Enforcement Sedans replaced by Alternatively Fueled Vehicles since 2002

City of Oakland’s Fleet By Fuel Type

- 1,019 Unleaded Gasoline
- 458 Renewable Diesel
- 110 Compressed Natural Gas
- 63 Hybrid
- 42 Battery Electric (EV)
- 16 LPG/propane
- 12 Plug in Hybrid Electric (PHEV)
- 4 Hydrogen Fuel Cell
Oakland’s Annual Fuel Consumption

- **828,000 gallons total**
  - Gasoline
    - 486,000 gallons
  - Renewable Diesel
    - 267,000 gallons
  - Compressed Natural Gas (CNG)
    - 75,000 gasoline gallon equivalents

Oakland’s Fueling Facilities

- **2 Public Works Corporation Yards**
  - Gasoline/Renewable Diesel
- **Police Lot**
  - Gasoline
- **7 Fire Stations**
  - Gasoline/Renewable Diesel
- **17 Fire Stations**
  - Renewable Diesel
- **3 Large Police Stationary Generator Locations (911 call center)**
  - Renewable Diesel
City of Oakland’s Renewable Diesel Use

- Used exclusively since October 2015
- 267,000 gallons/year, approximately 1,068,000 gallons to date
- Mobile equipment – Trucks, Vans & Automobiles
- Stationary & portable generators
- Emergency response equipment
- On-road and off-road applications

Oakland’s Renewable Diesel Experience

- **No** vehicle/equipment modifications required
- **No** fuel storage/dispensing modifications required
- **No** fuel tank emptying/cleaning required
- **No** performance issues on any equipment
- **No** issues with DPF/PM traps
City of Oakland’s Fleet Running on Renewable Diesel

Greenhouse Gas Reduction

- In 2018:
  - 79.2% GHG Reduction
  - 2,911.8 tCO2e/a Reduction

Reductions Equivalent to...

- 519 Homes
- 25 Trucks
- 622 Cars
How much does Renewable Diesel really Cost?

- City of Oakland’s pricing from most recent RFQ (August 2018):
  - Renewable Diesel 1,001 - 4,000 gallons: +$0.035 per gallon markup from previous days OPIS rack price
  - Renewable Diesel 4,001 - 10,000+ gallons: -$0.038 per gallon markdown from previous days OPIS rack price

- “On average, due to the LCFS (Low Carbon Fuel Standard) along with subsidies from the State of California, the OPIS rack price of Renewable Diesel is currently $0.02 - $0.05 per gallon lower than conventional Diesel Fuel” – Tom Burke, Western States Oil

What does Renewable Diesel mean to us?

- We now have 44% of our entire fleet alternatively fueled, including 30% by Renewable Diesel
- We now have more alternatively fueled equipment purchasing options
- We are minimizing the environmental impact when operating diesel powered equipment in the City of Oakland
- We are in 100% compliance with the City of Oakland’s Purchasing Policies and Resolutions
- We are experiencing fewer problems with DPF Systems, and longer intervals between the service of DPF particulate filters
- Our entire diesel powered fleet manufactured by Ford Motor Company is currently being analyzed for fuel related repairs and the long term effects of running exclusively on Renewable Diesel
- Sharing knowledge and experience is a benefit to everyone
Can I store it in an Underground Storage Tank?

Renewable Diesel Should Be Treated the Same as Conventional Diesel

This is a joint statement by the Air Resources Board (CARB) and the State Water Resources Control Board intended to clarify questions that have been raised regarding the status of renewable diesel. As discussed below, renewable diesel should be treated the same as conventional CARB diesel for all purposes, including storage in underground storage tanks (USTs).

Procurement Options:

- Spot bid
- RFP/RFQ
- Co-Op - State General Services, SACOG, City of Oakland
Local Retail Fuel Stations now offering Renewable Diesel

City of Oakland establishes a circular fuel economy

The City’s fleet has run on renewable diesel since 2015, and now that fuel is produced with raw materials gathered from Oakland itself, establishing a circular fuel economy and reducing greenhouse gases.

“Oakland is a proud leader in protecting our environment and practicing the highest levels of sustainability,” Mayor Libby Schaaf said. “This bold move will give our residents cleaner air, and it takes us one important step forward in our work to reduce greenhouse gas emissions.”