

# **Update on Biofuels Adoption**

## **NYC Fleet**

Keith T. Kerman NYC Chief Fleet Officer Deputy Commissioner, DCAS December 14, 2022

# **Certification Training with Lung Association**



Dawn M. Pinnock, Commissioner Keith T. Kerman, Deputy Commissioner and Chief Fleet Officer

**NYC Fleet Newsletter** 

December 2, 2022 - Issue 411

#### DCAS Partners With American Lung Association on Biofuels Training

By: Keith Kerman

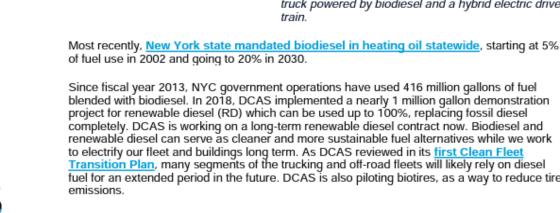
In 2005, the City's fleet began the use of biodiesel fuel in City trucks at the NYC Department of Parks and Recreation. Since then, biodiesel use has been adopted for all fleet units and is also used in all heating oil systems in NYC, public and private. NYC has passed local laws requiring biodiesel use in City fleet units and government and private buildings.



NYC Department of Parks and Recreation garbage truck powered by biodiesel and a hybrid electric drive

of fuel use in 2002 and going to 20% in 2030.

blended with biodiesel. In 2018, DCAS implemented a nearly 1 million gallon demonstration project for renewable diesel (RD) which can be used up to 100%, replacing fossil diesel completely. DCAS is working on a long-term renewable diesel contract now. Biodiesel and renewable diesel can serve as cleaner and more sustainable fuel alternatives while we work to electrify our fleet and buildings long term. As DCAS reviewed in its first Clean Fleet Transition Plan, many segments of the trucking and off-road fleets will likely rely on diesel fuel for an extended period in the future. DCAS is also piloting biotires, as a way to reduce tire







# **NYC Fleet: Clean Fleet and Sustainability**

**Updated NYC Clean Fleet Plan** 

**HERE** 

**EO 53: All Electric and Safe Fleet** 

**HERE** 

**EO 90: Accelerating Electric Fleet Adoption** 

**HERE** 







September 2021









## **Local Laws and Biodiesel**

# LOCAL LAWS OF THE CITY OF NEW YORK FOR THE YEAR 2013

No. 73

Introduced by Council Members Gennaro, Levin, Eugene, Fidler, Mark-Viverito, Mendez, Palma, Richards, Chin, Gentile, Vallone and Brewer.

#### A LOCAL LAW

To amend the administrative code of the city of New York, in relation to reducing the emissions of pollutants from vehicles used by or on behalf of the city of New York.

# LOCAL LAWS OF THE CITY OF NEW YORK FOR THE YEAR 2013

No. 107

Introduced by Council Members Gennaro, Arroyo, Barron, Brewer, Comrie, Eugene, Fidler, James, Koo, Koppell, Mark-Viverito, Mendez, Richards, Rose, Williams, Wills, Rodriguez, Levin, Gentile, Lander and Ulrich.

#### A LOCAL LAW

To amend the administrative code of the city of New York, in relation to increasing the use of biofuel in city-owned buildings.

## THE CITY OF NEW YORK FOR THE YEAR 2016

No. 119

Introduced by Council Members Constantinides, Gibson, Kallos, Koo, Rose, Wills, Mendez, Rodriguez, Rosenthal, Johnson, Espinal, Levine, Koslowitz, Richards, Vacca, Williams, Garodnick, Dromm, Reynoso, Maisel, Crowley, Chin, Van Bramer, Levin, Torres, Menchaca, Palma, Lancman, Cohen, Barron, Cornegy, Ferreras-Copeland, Treyger, Lander and Vallone.

#### A LOCAL LAW

To amend the administrative code of the city of New York, in relation to the use of clean heating oil.

Be it enacted by the Council as follows:

Section 1. Section 24-104 of the administrative code of the city of New York is amended by adding a new definition for "feedstock" in appropriate alphabetical order to read as follows:

"Feedstock" means soybean oil, oil from annual covercrops, algal oil, biogenic waste oils,

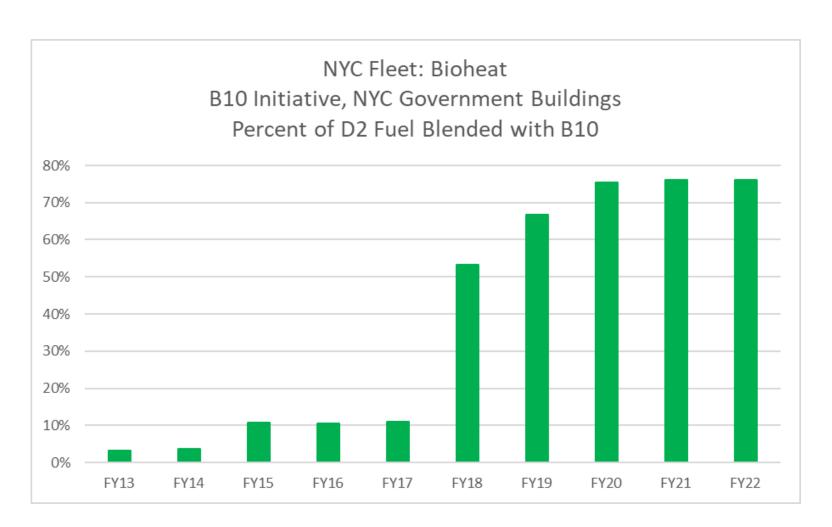


## **Total Use of Biodiesel Blends**

NYC Government Use of Biodiesel Blends				
	Blended Gallons	Blended Gallons		
	for Government	for Government		
FY	Buildings (1)	Fleet	Total	
13	31,736,530	11,925,594	43,662,124	
14	35,457,127	14,080,534	49,537,661	
15	35,554,585	15,597,826	51,152,411	
16	22,669,030	15,281,204	37,950,234	
17	23,792,071	15,780,318	39,572,389	
18	27,412,541	15,698,806	43,111,347	
19	25,955,047	14,596,581	40,551,628	
20	20,354,876	13,305,898	33,660,774	
21	23,145,725	13,792,271	36,937,996	
22	25,699,426	14,219,288	39,918,714	
Total	271,776,958	144,278,320	416,055,278	
(1) Total fuel use determined by winter temperatures; Prepared by DCAS Fleet				



# **NYC Buildings Bioheat B10 Initiative**



B10 Heating Oil Initiative				
Fiscal Year	Total D2	B10/B20	Percent	
FY22	12,971,518	9,809,703	76%	
FY21	11,107,998	8,455,586	76%	
FY20	9,321,511	7,040,263	76%	
FY19	11,697,178	7,796,793	67%	
FY18	12,853,659	6,841,902	53%	
FY17	9,725,733	1,058,160	11%	
FY16	9,368,529	993,248	11%	
FY15	16,158,605	1,721,645	11%	
FY14	15,335,152	565,036	4%	
FY13	15,166,406	489,728	3%	



# **NYC Schools Bioheat Initiatives**



## **Heating Oil Usage, FY22**

Agency	#2 B5 Fuel Oil	#4 B5 Fuel Oil	#2 B10 Fuel Oil	#2 B20 Fuel Oil	Total
Correction	17,989	0	0	0	17,989
DCAS	11,501	0	113,193	0	124,694
Education	2,088,465	12,711,018	8,355,668	5,000	23,160,151
Environmental Protection	15,457	0	9,404	2,344	27,205
Fire	178,863	0	0	0	178,863
Homeless Services	12,353	0	437,918	0	450,271
Human Resources Administration	70,142	16,890	23,631	0	110,662
Parks & Recreation	261,299	0	259,661	3,670	524,629
Police	406,195	0	28,459	0	434,655
Sanitation	97,145	0	562,655	0	659,800
Transportation	2,407	0	8,100	0	10,507
Citywide	3,161,815	12,727,908	9,798,690	11,013	25,699,426

as of 6/30/22



## **B50 Partnership with Staten Island Parks**



Bill de Blasio, Mayor Lisette Camilo, Commissioner Keith T. Kerman, Deputy Commissioner and Chief Fleet Officer

#### NYC Fleet Newsletter

October 8, 2021 - Issue 365

#### DCAS Pilots Biodiesel 50 Percent (B50) With Parks, NBB

By: Keith T. Kerman

NYC government operations are major adopters of biofuels. Since FY13, NYC has used over 376 million gallons of biodiesel blended fuel for its fleet operations and heating oil. Both initiatives began at NYC Parks and are now codified in Local Law.

Throughout this period, the City has used blends of 5%, 10%, or 20% of biodiesel. The remaining fuel has been ultra-low sulfur diesel (ULSD). On September 2, the City received its first delivery of 1,610 gallons of B50, (50% biodiesel), at the Cloves Lake Park fueling site at NYC Parks. A DOT van was the first to use the B50 fuel, as part of our shared services for fueling.



This effort is part of a 26,000 gallon pilot that DCAS is implementing in partnership with NYC Parks, the National Biodiesel Board and United Soybean Board which funded enhancements to the Parks' fuel site to enable B50 use. This was also the culmination of a five-year effort to return to fueling B50 at Parks.

NYC Government Use of Biodiesel Blends			
FY	Blended Gallons fo Government Buildings	r Blended Gallons for Government Fleet	Total
13	31,736,530	11,925,594	43,662,124
14	35,457,127	14,080,534	49,537,661
15	35,554,585	15,597,826	51,152,411
16	22,669,030	15,281,204	37,950,234
17	23,792,071	15,780,318	39,572,389
18	27,412,541	15,698,806	43,111,347
19	25,955,047	14,596,581	40,551,628
20	20,354,876	13,305,898	33,660,774
21	23,145,725	13,792,271	36,937,996
Total	246,077,532	130,059,032	376,136,564





## **Biotires**



Bill de Blasio, Mayor Lisette Camilo, Commissioner Keith T. Kerman, Deputy Commissioner and Chief Fleet Officer

**NYC Fleet Newsletter** 

August 6, 2020 - Issue 315

#### NYC Fleet Implements Biotire Project

By: Keith T. Kerman

In the last few newsletters, we've focused on fleet sustainability, discussing our efforts to reduce the volume of liquid fuel we pour into gas tanks each year. The manufacture and operation of vehicles also greatly impacts sustainability.

Did you know that it takes approximately seven gallons of fuel to produce a single vehicle tire? In the United States alone, there were 331 million tires sold last year, adding to our fuel use and emissions.

In addition to the fuel used to produce a vehicle tire, the performance of a tire can impact fuel economy by reducing road friction and



In the last two years, NYC Fleet has implemented a project to test the effectiveness, longevity, and performance of tires made substantially of soybean oil, an extension of our 15 years of experience with soybean-based biofuel. As per the supplier Goodyear, these Assurance Weather Ready Tires reduce the use of fossil fuel by 60% and offer the promise of increased life and road performance.

Fleet has procured 1,000 biotires at six agencies. The investment of nearly \$90,000 was funded through existing maintenance

funds by replacing traditional petroleum-based tires with the biotires on a normal replacement schedule.

## NYC Fleet: Soy Tire Initiative

Agency	Tires
NYPD	1,373
Transportation	219
Correction	52
FDNY	16
Parks	61
Total	1,721

Prepared by DCAS, through June 14th 2022



## Press Release: Pollution From Tyre Wear 1,000 Times Worse Than Exhaust Emissions

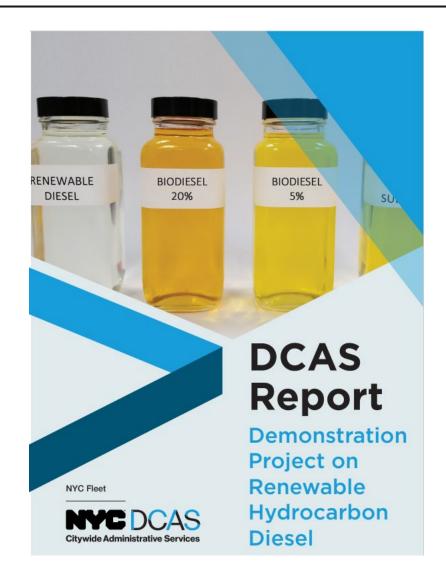
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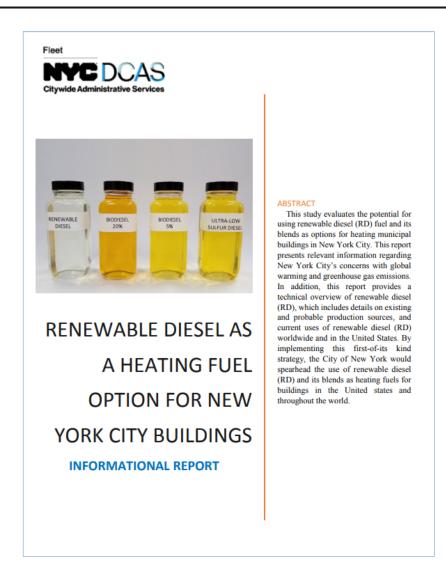


- Tight regulation of exhaust emissions by the EU has meant that new cars emit very little particle pollution
- But tyre wear pollution is unregulated and can be 1,000 times worse, finds independent real-world testing experts Emissions Analytics



# Renewable Diesel Public Reports

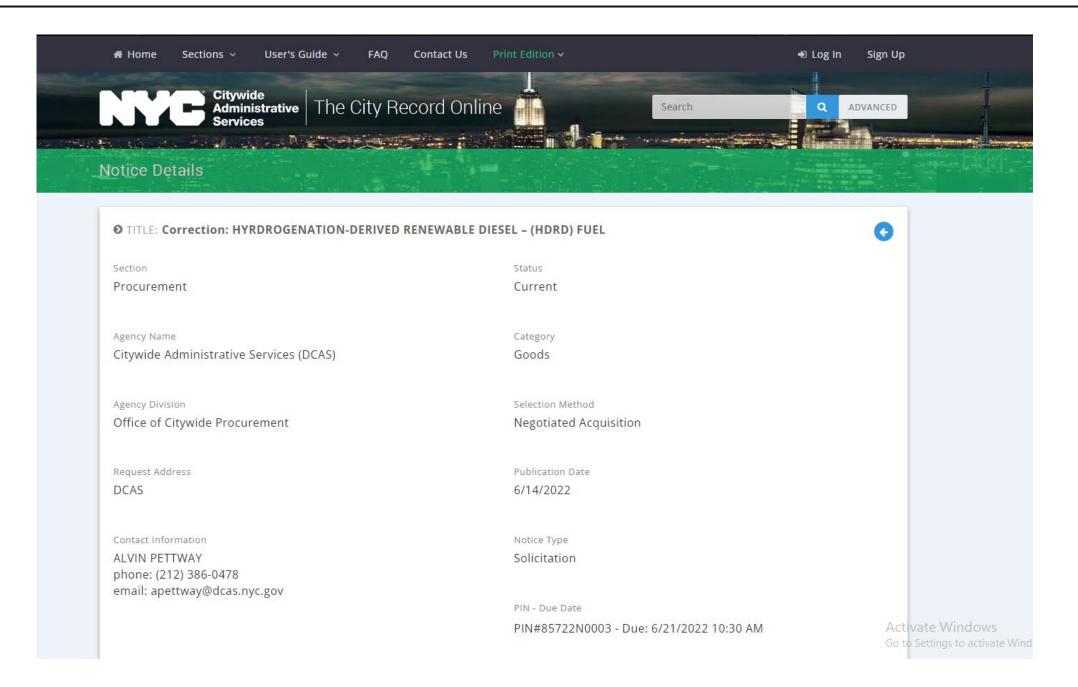






Renewable-Diesel-Report-2019.pdf (nyc.gov)

# Renewable Diesel Contracting





# Clean Fuels NY Coalition Case Study, LCFS



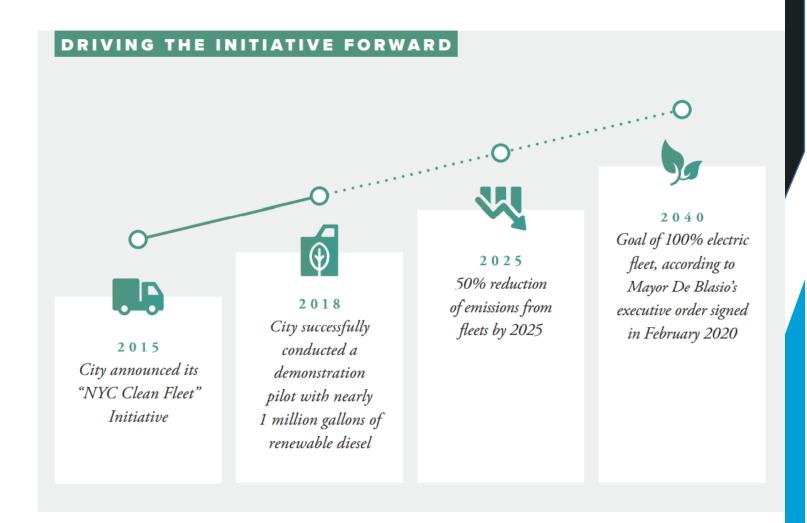


## CASE STUDY

### RENEWABLE DIESEL IN CALIFORNIA

Many cities and private companies have seen the importance and opportunity of replacing fossil diesel fuels with renewable diesel, a next stage biofuel derived from waste cooking oils, animal fat and excess soybean oils. Critically, renewable diesel can be used by a traditional engine and can immediately replace fossil diesel without investing in new or retrofit equipment. San Francisco, Oakland, Sacramento, and San Diego have successfully switched to entirely renewable diesel, and UPS, Google and Boeing have also begun to phase in RD in their fleets.







Clean-Fuels-NYC-Fleet-Case-Study.pdf

## Contact

For more information, go to the NYC Fleet website: http://www.nyc.gov/html/dcas/html/employees/fleet.shtml

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Thank You