NYC Clean Truck Program Overview

May 2023
Effects of Truck Traffic on Health & Equity

- In NYC, private medium- and heavy-duty vehicles contribute 11% of transportation-related greenhouse gas emissions; 12% of PM$_{2.5}$ from traffic sources overall.

- Low-income Neighborhoods near industrial zones and highways are hit hardest; correlation with higher than average asthma and cardiovascular ED visits due to PM$_{2.5}$ local emissions; Hunts Pt studies confirm need.

- Speeding adoption of cleaner vehicle technologies (with older engine scrappage) is embraced as a policy tool to reduce traffic impacts on public health and the environment; chiefly Ports Emission Reduction Programs nationwide (i.e., POLB/LA, PANY/NJ).
Phase 1: Program Development

Goal: To retire 500 (pre-2009) Class 3-8 diesel trucks and replace with MY 2010 (and newer) EPA certified engines (new diesel, CNG/RNG, HEV, BEV); improve local air quality in Hunts Point community

- $29M total in applications submitted to FHWA
- $24M for Consultant Services in Connection with the Hunts Point Clean Truck Program
- **Vendor:**
  - Prime: Tetra Tech Inc.
  - Subcontractors: GNA (Marketing), ISR (DBE – engine scrap verification); vendor reviews and approves eligibility; processes rebates to dealers; monitors compliance; takes legal action against non-compliant applicants to protect NYC DOT and federal asset recapture
Phase 1 & 2 Program: VW Consent Decree Funding

- DOT awarded $9.8M to CTP to continue initiative; allows program to expand to other Industrial Business Zones citywide;

- Program re-launched and rebranded from Hunts Point CTP to NYC-CTP in June 2020
New York City Industrial Business Zones

The Bronx
Zerega
Port Morris
Bathgate
Eastchester
Hunts Point

Staten Island
West Shore
North Shore
Rossville*

Queens
Woodside
Maspeth
Long Island City
Ridgewood
Steinway
JFK
Jamaica
Richmond Hill*

Brooklyn
Greenpoint/Williamsburg
Brooklyn Navy Yard
North Brooklyn
Southwest Brooklyn
East New York
Flatlands/Fairfield

* Do not meet EJ requirements.
~ 63% of replacements are Heavy Duty tractors or Refuse Trucks

~ 32% are Medium Duty larger box truck, dump or rack trucks

~ 5%  MD – smaller walk-in van, city delivery, landscaper truck
Program Compliance Monitoring

- Automatic Vehicle Locators provide proof of use; quantify mileage within local-regional geofences in order to monitor program compliance
- 2x/week trips to IBZ; 70% of Vehicle Miles Travelled in Tri-State area

Vehicle Miles Traveled results for 2021 for 587 trucks *

<table>
<thead>
<tr>
<th></th>
<th>HP VMT</th>
<th>NY (5 Borough)VMT</th>
<th>NY (Other) VMT</th>
<th>NJ VMT</th>
<th>CT VMT</th>
<th>Total VMT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>396,517.40</td>
<td>1,653,574.30</td>
<td>1,575,709.40</td>
<td>1,226,708.00</td>
<td>119,475.00</td>
<td>4,971,984.10</td>
</tr>
<tr>
<td>Percent</td>
<td>7.98%</td>
<td>33.26%</td>
<td>31.69%</td>
<td>24.67%</td>
<td>2.40%</td>
<td>100%</td>
</tr>
</tbody>
</table>
Emissions Reductions Results to Date - Trucks

The NYC Clean Trucks Program and the HPCTP have reduced significant levels of NOₓ, PM₂.₅, HC, and CO annually when compared to the emissions profile of the older, diesel-fueled vehicles that were replaced.

### Truck Replacements, Retrofits, and Scrappage

<table>
<thead>
<tr>
<th>Annual Results (short tons)</th>
<th>NOₓ</th>
<th>PM₂.₅</th>
<th>HC</th>
<th>CO</th>
<th>CO₂</th>
<th>Fuel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline for Upgraded Vehicles/Engines</td>
<td>457.88</td>
<td>24.37</td>
<td>34.67</td>
<td>137.62</td>
<td>53,670.10</td>
<td>4,770,678.00</td>
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<tr>
<td>Amount Reduced After Upgrades</td>
<td>407.16</td>
<td>23.70</td>
<td>29.48</td>
<td>111.90</td>
<td>8,066.30</td>
<td>717,008.00</td>
</tr>
<tr>
<td>Percent Reduced After Upgrades</td>
<td>88.92%</td>
<td>97.27%</td>
<td>85.03%</td>
<td>81.31%</td>
<td>15.03%</td>
<td>15.03%</td>
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</tbody>
</table>

As of December 31, 2022, the NYC Clean Trucks Program and HPCTP have achieved the above emission reductions through 656 truck replacements, 6 exhaust retrofits, and the voluntary scrappage of 24 trucks.

Notes:
1) 1 short ton = 2,000 lbs.
2) Emission reductions are calculated using the U.S. EPA’s Diesel Emissions Quantifier (DEQ)
Collaborative Programming

Microhubs present an opportunity to further test strategies that promote multi-purpose improvements to freight and the public realm in partnership

Commercial Cargo Bikes

Bike Parking Initiatives

Blue Highways/Waterborne Freight

Delivering Green: A vision for a sustainable freight network serving New York City

Curb Management/Freight Decarbonization

Curb Access Initiatives

Safety & Public Realm Improvements

Better Barriers

Marine Freight (Blue Highways)

Design & Regulations

Freight Electrification

Programming Under Elevated Structures
Thank You!

Questions?