NGOs and Health Experts Call on New York City to Get Its Municipal Fleets Off Diesel

New report finds renewable natural gas offers best diesel alternative for NYC.

City budget process could encourage the shift.

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WASHINGTON - On the eve of executive budget hearings in the New York City Council, NGOs including Energy Vision, the New York League of Conservation Voters, WE ACT for Environmental Justice and prominent health experts called on the City to stop buying heavy-duty diesel vehicles for its municipal fleets and to adopt superior alternatives to diesel that are available today. Specifically, they are asking the City and MTA to take the following actions:

• Stop allocating funds for purchase of new heavy-duty diesel trucks and MTA diesel buses now.
• Focus new heavy-duty vehicle purchases on the best diesel alternatives. Electric models are expensive and experimental though worth piloting. Natural gas models, equipped with ultra low-emission Near Zero engines running on renewable natural gas (RNG) fuel made from organic wastes, are the cleanest, lowest carbon, and most cost-effective today.
• Make the necessary capital expenditures on infrastructure and fleet garage modifications to support implementation of these alternatives.

Diesel exhaust is a major emitter of powerful greenhouse gases that cause climate change. Its nitrogen oxide and particulate emissions are a significant threat to public health. They cause cardiovascular damage and are a major trigger for asthma attacks. New York’s childhood asthma rates have tripled in the last three decades and now afflict an astonishing 13.3% of children living in New York City.

London has already banned procurement of new diesel vehicles and other major cities worldwide are restricting or eliminating them. In the US, many heavy-duty fleets have converted to RNG. Nationwide, 60% of the refuse trucks on order today are natural gas models which can run on RNG as well as CNG.

While other major cities have adopted RNG, New York City has not. Its municipal fleets currently have few natural gas trucks and none run on RNG. NYC agencies continue to rely on diesel vehicles, and their budgets call for buying hundreds more in the years ahead.
“That deserves to end now,” said Joanna Underwood, founder and board member of Energy Vision, “and the budget process could help make it happen. The City Council could play a leadership role by framing its budget guidelines so they encourage city agencies to seize the opportunities they have to deploy better alternatives for this world-class city.”

In City Council committee budget hearings in March, Energy Vision testified on the best strategies for replacing the City’s diesel vehicles. Today, Energy Vision sent the City Council and released publicly a new report on this topic, Ending the Diesel Era: Cleaner Fleets for a Healthier New York City. It assembles the latest evidence showing why it is vital for the City to eliminate diesel heavy-duty vehicles and start adopting alternatives. Among the points it makes:

The City can’t meet its climate and air quality goals with diesel -- The City deserves credit for setting ambitious clean air and greenhouse gas reduction goals. It has pledged to achieve the best air quality of any major U.S. city by 2050 and to cut GHGs 80% from its municipal fleet vehicles by 2035. But to meet or exceed these goals will require a major, rapid shift away from diesel fuel.

Heavy-duty vehicles are the key -- Across New York City’s fleets, heavy-duty diesel trucks consume 60% of all fleet fuel and generate most of the harmful emissions, including greenhouse gases and health-damaging particulate and nitrogen oxide pollution. They are therefore the most important and urgent targets for switching to non-diesel alternatives.

RNG is the best alternative -- Natural gas vehicles equipped with the new ultra-low emission Near Zero natural gas engines, and powered by RNG offer by far the fastest, healthiest and most cost-effective way for the City to attain its climate and air quality goals. RNG is the lowest carbon fuel available. It is made by capturing and refining the methane biogases from decomposing organic wastes, which would otherwise escape into the air as powerful climate-changing gases. Compared to diesel, RNG reduces GHG emissions by 70% to 300%. It is often net carbon-negative over its lifecycle. Near Zero engines cut particulate and nitrogen oxide emissions 90% below EPA allowable limits and are 50 to 80% quieter than diesel engines. There is already sufficient natural gas refueling infrastructure in NYC to serve hundreds of natural gas trucks, which could easily deliver RNG. There are seven operational CNG refueling stations within the five boroughs, including DSNY facilities in Woodside, Queens and Greenpoint, Brooklyn. Many private sector companies are eager to expand New York’s non-diesel refueling infrastructure, and several new RNG-capable refueling stations are now coming on line.

Renewable diesel is a distant second -- This year the City announced a pilot program to use renewable diesel (RD) fuel in its existing heavy-duty vehicles. But renewable diesel (RD), not to be confused with renewable natural gas (RNG), is a distant second choice for New York. RD is made mainly from oils and residues of energy biomass crops, but it does not offer the climate and health emissions reduction benefits of RNG. RD would enable NYC fleets to keep relying on diesel engines, but that would effectively prevent adoption of better alternatives. RD is also expensive and supply reliability is uncertain. Since it is a liquid fuel, RD would have to be trucked and shipped across the country to New York, for which the City would pay a premium of $26 million a year over ordinary diesel. RNG is less expensive than ordinary diesel.

RNG could help solve the City’s waste problem -- RNG can be easily transported to New York via existing natural gas pipelines and delivered via existing natural gas refueling stations. Longer term, the City could use its own organic waste streams to produce the RNG it needs locally. Some RNG
production capacity already exists in New York and more is under development in the region. Processing the 1.2 million tons of food waste New York City generates each year would produce enough RNG fuel to power all the City’s heavy-duty vehicles, while leveraging its organic waste stream’s untapped potential as a valuable energy resource.

“New York is leaving one of its best resources for fighting climate change and improving public health on the table,” said Energy Vision president Matt Tomich, co-author of the report. “Doubling down on diesel when superior alternatives exist makes no sense. Nor does letting NYC’s organic waste stream go to ‘waste’ instead of using it to produce RNG. The City spends $400 million a year to ship its waste out of state; a third of which is organics. Instead of discarding them, New Yorkers would get powerful benefits from harnessing its organic wastes to produce RNG for its own fleets.”

“While diesel engines long had the benefits of power and fuel use efficiency, I am now convinced that they are an outmoded choice,” said Brendan Sexton, former Department of Sanitation (DSNY) Commissioner, former Chair of the City’s Procurement Policy Board and a board member of Energy Vision. “New natural gas heavy-duty engines have the power to do what NYC trucks need to do with less noise and much less pollution or carbon impact. It is time for New York’s fleets, especially its huge refuse fleet, to start aggressively phasing out diesel as many other cities and private haulers across the country are doing.”

“DSNY takes pride – and rightly so – in efficiently operating the largest refuse fleet in the US,” said Norman Steisel, CEO of EnEssCo Strategies, former DSNY Commissioner and former NYC Deputy Mayor, who is also on Energy Vision’s board. “So why is it dragging its feet in replacing its outmoded diesel trucks with the more sophisticated technology available today? The new ‘Near Zero’ natural gas engines are here now, and the trucks are affordable. RNG fuel is here now, and there are already natural gas refueling stations in place that can deliver this new fuel reliably and affordably. All DSNY has to do is do it. The health and environmental benefits cry out for responsible action.”

“For too long diesel fumes from NYC’s buses and trucks have been poisoning our children and families,” said Cecil D. Corbin-Mark, Deputy Director and Director of Policy Initiatives at WE ACT for Environmental Justice. “Energy Vision’s report shows that we no longer need to rely on diesel engine technology and fuel. Better choices are available. Its time for the City Council and Mayor to provide leadership in moving our fleets to the fuels of the future.”

“Getting rid of diesel is the right thing to do,” said Dr. Philip J. Landrigan, Dean for Global Health at Mt. Sinai. “It will improve the quality of life. It will be highly cost-effective. And it can solidify New York City’s position as an environmental leader among American cities.”

In his new book Children and Environmental Toxins, Dr. Landrigan pointed out, “Replacing diesel vehicles with safer, non-polluting alternatives will reduce rates of asthma among our children. It will reduce myocardial infarctions, cardiac arrhythmias, and strokes among New York City’s adults. It will reduce risk of lung cancer. And because it will prevent many cases of these debilitating diseases, the elimination of diesel trucks and buses from the vehicle fleets in New York will reduce health care costs and save money.”

“The disproportionate health impacts from diesel trucks is one of the most important environmental justice issues in New York City,” said Kevin R. Cromar, Ph.D., Director of the Air Quality Program at
New York University’s Marron Institute of Urban Management. “While all neighborhoods will benefit from a transition to lower emission vehicles, neighborhoods with the highest air pollution-related health impacts deserve to be prioritized as fleet conversion occurs.

“Energy Vision’s new report is just the kind of resource that New York policymakers need as they seek to address New York’s significant air pollution and climate change issues,” said Marcia Bystryn, President of the New York League of Conservation Voters.

“Our children are our future, and in one of this country’s greatest cities, we must set an example giving them a healthy environment to grow up in,” said Blythe Danner, actor and environmental advocate. “Energy Vision has long been a leader in finding solutions, and this new report on ending the diesel era has done it again.”