

Deepest appreciation to the NYS Senate for finally providing an opportunity to testify on implementing the final CLCPA Scoping Plan, which the public was not allowed to comment on before the vote. We respectfully request the following funding and legislation to implement the CLCPA Scoping:

1. Please provide enough funding in CLCPA funds for the MTA-LIRR to complete Tier 4 Switch Duty Cycle repowering of LIRR and New York & Atlantic Railway locomotives, as PANY-NJ already did in 2015. This will cost-efficiently and effectively fulfill both CLCPA and NYS Executive Order No. 22 goals by measurably reducing GHG -- the NOx of a million cars (see page 2) -- from this public right of way. The CLCPA tells us that alternative fuels to power locomotives are coming sometime in the future. However, the health of children and families -- and Climate change -- are being adversely impacted by ancient freight locomotives operating within NYS Authority MTA's system today.

To add a note of reality and urgency, the fact is that LIRR just rejected the purchase of battery powered rolling stock in the summer of 2022, and hydrogen fuel cell technology is a decade or more away. Children and families who are being harmed can't wait any longer. Our communities and elected officials, including Senator Addabbo, a co-sponsor of the CLCPA, have been asking the MTA for locomotive repowering for 13 years.

The technology exists today to repower LIRR and New York & Atlantic Railway fleets to US EPA certified Tier 4 Switch Duty Cycle emissions, which will eliminate 95-99% of their toxic diesel emissions. We understand that zero emissions is the goal, but please don't let the perfect be the enemy of the good. The community has to live with this pollution day and day out and we will gratefully accept repowered near zero emissions Tier 4 diesel Switch Duty Cycle locomotives making freight moves in the yard and on tracks next to homes, schools, and parks. PANY-NJ's repowered Tier 4i Switch Duty Cycle locomotives have been operating with near zero emissions for the past 7 years, while NYS Authority MTA has continued to needlessly pollute our community air with 1970's locomotive emissions. The NYS Legislature has provided the \$20M that is in Comptroller's Contract #DR36644 for the LIRR to repower these locomotives. Please provide the additional funding required to complete the repowering of these fleets -- which has been an official NYMTC goal for years now -- and claim these measurable GHG reductions as a CLCPA success story. (See illustrations with more information on page 2).

Preliminary Data Shows Big NOx Reduction Opportunities with Locomotives Investments for New York



How to Make the Most of a \$127 million Investment for Immediate NOx Reduction

Price Per Application	# of Vehicles or Equipment placed into Service for \$127 million	Anticipated NOx Reduction per Year per Project	Total Cost to Exclusively Fund a Particular Project	Cost to Remove Each lb of NOx (\$/lb)	Total NOx Reduction (lbs) per year	
pre 1991 port truck replacement with Clean Diesel	\$110,000	1,155	1,282	\$127,000,000	\$86	1,480,127
pre 1991 port truck replacement with CNG	\$140,000	907	1,292	\$127,000,000	\$108	1,172,029
MY2000 bus replacement with Hydrogen	\$1,200,000	106	1,162	\$127,000,000	\$1,033	122,978
MY2000 bus replacement with Battery-Electric	\$880,000	144	1,162	\$127,000,000	\$757	167,698
MY2000 bus with Clean Diesel	\$370,000	343	1,062	\$127,000,000	\$348	364,524
T0 to T4 Clean Diesel switch locomotive	\$3,000,000	42	37,602	\$127,000,000	\$80	1,591,818

Source: (1) National Port Strategy Assessment: Reducing Air Pollution and Greenhouse Gases and U.S. Ports". U.S. EPA (September 21, 2016), (2) "clean Diesel Versus CNG Buses: Cost, Air Quality and Climate Impacts." Clean Air Task Force (2012). (3) "From Deceit to Transformation: How Connecticut Can Leverage Volkswagen Settlement Funds to Accelerate Progress to a Clean Transportation System. CONN PIRG. January 18, 2017. (4) "Consortium to Fund New Flyer Hydrogen Buses to ATransit", Passenger Transport, February 24, 2017. (5) Locomotive engine upgrade cost based on a range of industry estimates.



Switch Locomotive "Repowers" are a Cost Effective NOx Reduction Strategy

SWITCH LOCOMOTIVES

Replacing **1** of the oldest engines with the newest clean diesel Tier 4 engines removes **37,602 lbs of NOx / Year.** This is equivalent to...

Replacing **29** older trucks **OR** Removing **30,000** cars for 1 year

Tier 4 = Near Zero Emissions

95% Reduction

Oldest Uncontrolled Engines vs Latest Generation Tier 4 Standard

Upgrading Locomotive Switch Engines Delivers Cleaner Air Faster

By 2020, the U.S. EPA estimates that only 5% of switch engines in service will be powered by the latest clean diesel engine. The VW Environmental Mitigation Trust represents an opportunity to get the latest clean diesel technology into service faster to generate significant air quality benefits immediately.

2. Please fund DEC's grant program <https://www.dec.ny.gov/chemical/105603.html> to provide municipal infrastructure that gets organics now being shipped by rail to landfills and incinerators out of the black bag waste stream. Organics are @40% of black bag waste in NYC now and the city has composting trials underway. However, the infrastructure to do this at scale does not exist yet. Please provide funding for this infrastructure. This is justified in the CLCPA, including by this strong statement from the Waste Chapter of the CLCPA Scoping doc: *"The Climate Justice Working Group (CJWG) agrees that ending the disposal of food scraps and yard trimmings at landfills and combustors is probably the single most important action the State can take to cut emissions from this sector."*

3. Please add mandatory recycling of gypsum wallboard construction debris and CLCPA-financed project funding to the EPR legislation advocated by Judith Enck (who has been invited to give oral testimony on the 19th) **and Assembly Member Englebright and pass and fund that legislation.** This will reduce the amount of filthy C&D-by-rail that has plagued constituents from Long Island, to NYC, to Upstate communities by landfills since this new industry started in 2008. EPR is part of approved NYS policy in the CLCPA Scoping. Gypsum wallboard recycling is already happening today in other places. For further information please go to NEWMOA Gypsum Wallboard Webinar 1: Problems, Recommendations, & The Current State of Recycling. In his presentation, one speaker called out New York State for the large amount of gypsum wallboard it sends by rail to landfills in Ohio:
<https://www.youtube.com/watch?v=QBfwh64TcJA>

<https://www.newmoa.org/solidwaste/projects/gypsum.cfm>

The NEWMOA C&D Workgroup has recommended the following policy options:

- Ban the disposal of gypsum wallboard waste in landfills
- Require recycling of wallboard wastes produced by state-financed projects
- Require waste management planning
- Develop common terminology and reporting requirements
- Develop and implement extended producer responsibility approaches

4. Please pass legislation to contain all waste-by-rail blowoff, leachate, and odors completely in rail cars and containers. New York State is still allowing "C&D Residue" to be shipped in open rail gondolas that have drains in the bottom and are covered only by pervious netting (a CSX requirement). Loads are open to precipitation and wind, and contain leachate that is sopped up from the tipping floor. Thus, the rail cars emit waste blowoff, leachate, and odors in communities, including from demolition debris that may contain lead, asbestos, and other toxic material. Senator Addabbo has introduced legislation in the past to mandate hard covers on these rail cars to contain all waste and odors in the

car, and we hope both the Senate and Assembly will pass this legislation in this session, now that foreign investors are trashing our communities with these filthy loads.