

DAQ Update – Public Meeting

- **International Tie Disposal – Project Tie Proposed Facility**
 - **Public Meeting – 2/22/21 @6pm**
 - **Audio Call in number: 1 (415) 655-0003, Access Code 178 013 3745**
 - **Webex Link - <https://bit.ly/3cbemdt>**
 - **Website: <https://deq.nc.gov/news/events/public-hearing-international-tie-disposal-llc-project-tie>**
- Application for a facility outside of Hamlet in Richmond County that will process used railroad ties and other wood through a controlled heating process known as pyrolysis to create the biochar product. The process will occur in multiple kilns on site. The emissions will be controlled by after-burners and process limitations.

DAQ Update – Public Hearing

- **International Tie Disposal – Project Tie Proposed Facility**
- **Public Hearing – 3/1/21 @6pm**
- Website: <https://deq.nc.gov/news/events/public-hearing-international-tie-disposal-llc-project-tie>

- Public comment period closes March 3rd at 5pm:
- Submit comment after hearing at: 919-707-8714
- Email to DAQ.publiccomments@ncdenr.gov
 - Please type “International Tie ” in the subject line.



Medium + Heavy Duty Zero Emission Vehicles Briefing

DEQ Environmental Justice Board Meeting

February 22, 2021

*Division of Air Quality
Mike Abraczinskas, Director*



Agenda

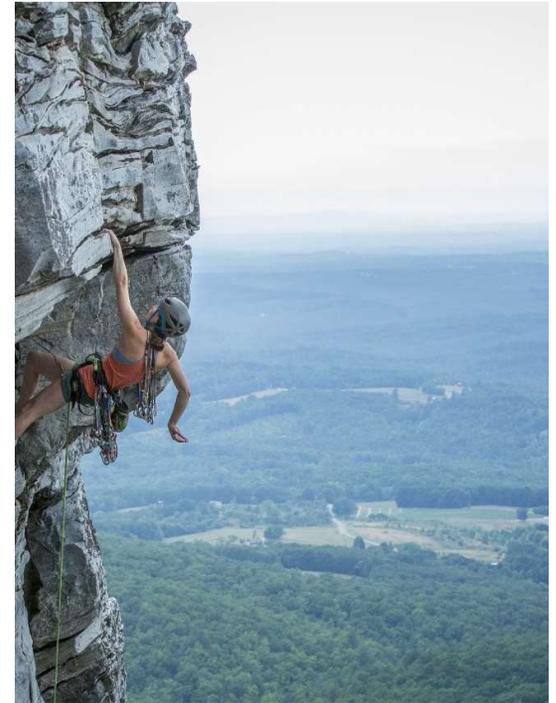
- Division of Air Quality Introduction
- Connection between Transportation & Air Quality
- Zero Emission Vehicles (ZEVs)
- Clean Transportation Initiatives
- Medium- and Heavy-duty ZEVs
- Input/Feedback from EJE Board



Division of Air Quality (DAQ)

To Protect and Improve the Outdoor Air Quality of North Carolina.

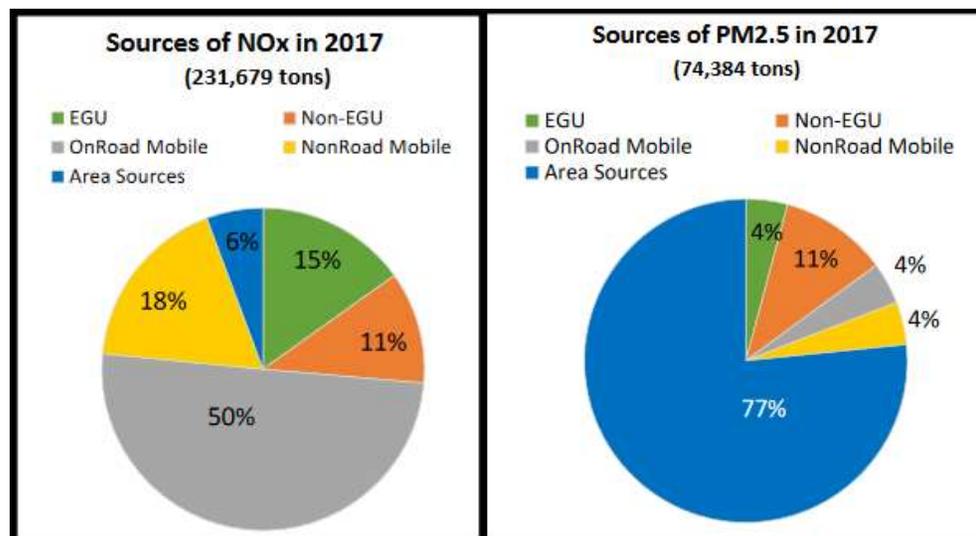
The Division of Air Quality (DAQ) works with the state's citizens to protect and improve outdoor, or ambient, air quality in North Carolina for the health, benefit and economic well-being of all. To carry out this mission, the DAQ operates a statewide air quality monitoring network to measure the level of pollutants in the outdoor air, develops and implements plans to meet future air quality initiatives, assures compliance with air quality rules, and educates, informs and assists the public regarding air quality issues.



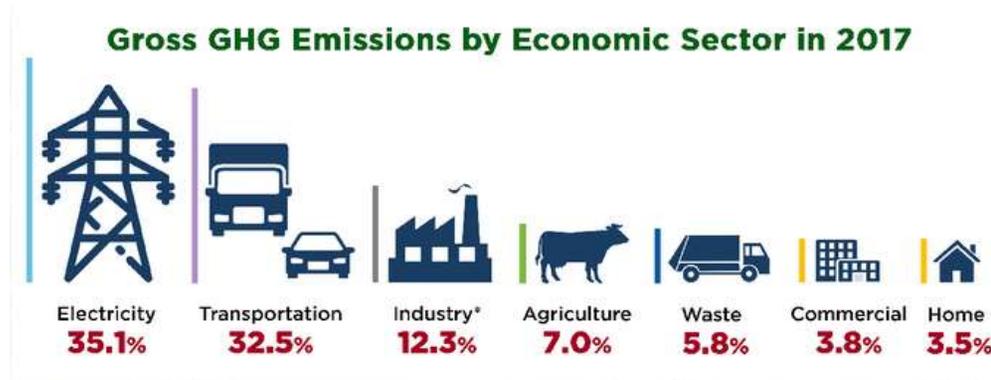
Connection Between Transportation & Air Quality

Primary air pollutants from transportation:

- Nitrogen Oxides (NOx)
- Particulate Matter (PM2.5)
- Greenhouse Gases



Source: Air Quality Trends in NC; October 2020



Source: NC Greenhouse Gas Inventory; January 2019

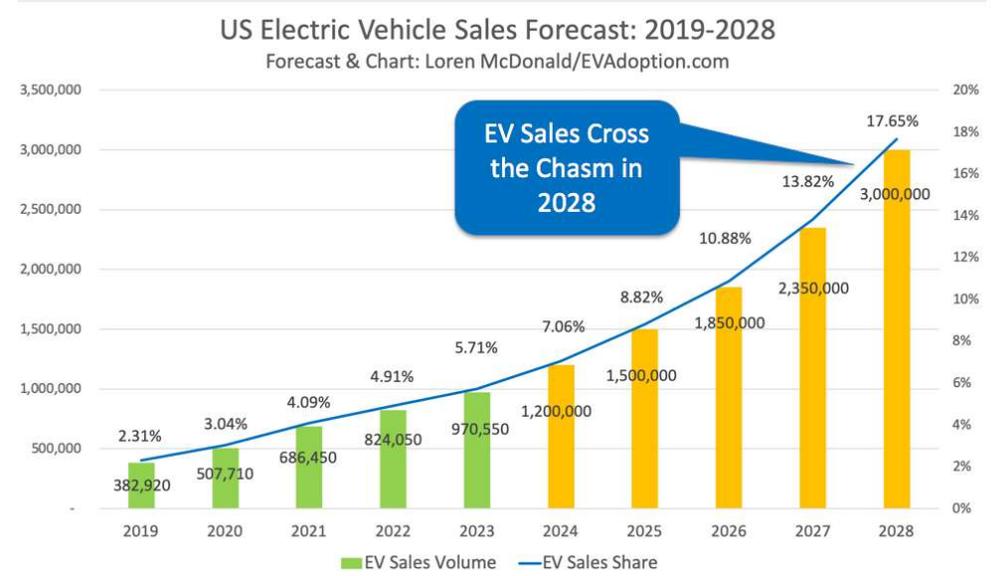
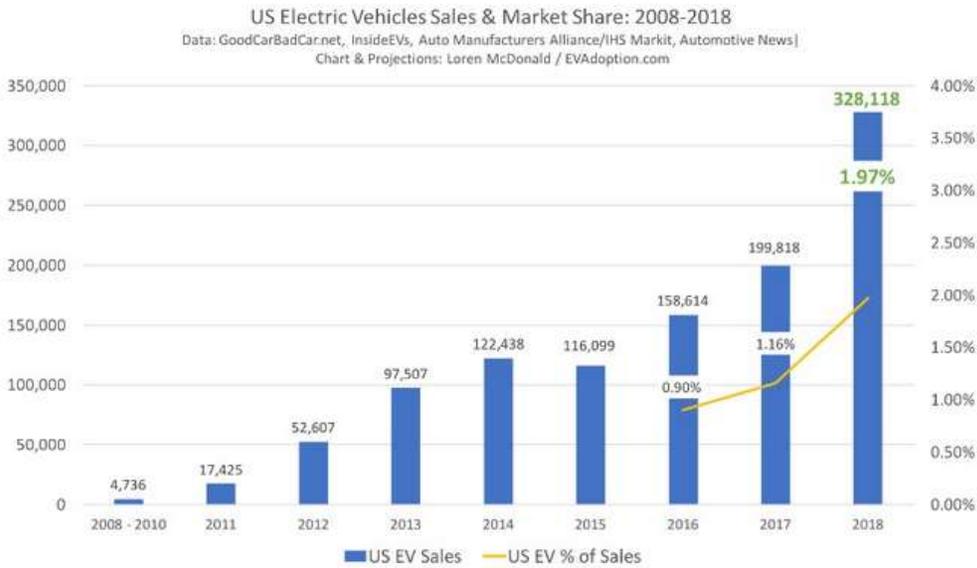


Clean Transportation Options

- Partial Zero Emission Vehicle (PZEV) - Hybrid
 - Clean combustion engine
 - Tailpipe
 - GHG and NOx pollutants
 - Advanced emission controls
- Zero Emission Vehicle (ZEV) - Plug-In
 - All battery powered
 - No tailpipe
 - No direct air pollutants
 - Sometimes called “Battery Electric”



US Electric Vehicle Sales (2008-2018) & Forecast (2019 – 2028)



Sales Data Source: EVAdoption.com



Initiatives to Stimulate Adoption of ZEVs

- Executive Order 80
- Diesel Emission Reduction Act (DERA)
- VW Settlement
- Medium- and Heavy-Duty (MHD) ZEV Memorandum of Understanding (MOU)

MHD ZEV Projects in NC

Diesel Emission Reduction Act (DERA)

DERA Projects	Town of Cary	City of Wilmington	City of Charlotte
Vehicle being replaced (transit bus, school bus, etc)	Refuse Truck	Refuse Truck	Transit Bus
Infrastructure included	Yes	Yes	No
Total cost of project	\$560,834.05	\$601,302.05	\$867,127.00
DERA funding provided	\$252,375.32	\$270,585.92	\$390,207.00
Location	Cary	Wilmington	Charlotte
Urban or Rural	Urban	Urban	Urban

MHD ZEV Projects in NC VW Settlement



	Organization Name	County	Funding Amount	County Classification
School Bus	Department of Public Instruction	Transylvania	372,270.00	Rural
	Department of Public Instruction	Cabarrus	360,999.00	Urban
	Department of Public Instruction	Rowan	368,564.00	Urban
	Department of Public Instruction	Randolph	277,963.00	Rural
	Department of Public Instruction	New Hanover	369,325.00	Urban
	Eastern Band of Cherokee Indians	Swain	402,810.00	Rural
Transit Bus	Durham	Durham	\$428,066.00	Urban
	Greensboro	Guilford	\$501,838.77	Urban
	Salisbury	Rowan	\$426,502.25	Urban
	Salisbury	Rowan	\$392,269.25	Urban
	Chapel Hill	Orange	\$485,000.00	Urban
	Raleigh	Wake	\$397,200.73	Urban
	Boone-Appalachian State	Watauga	\$1,001,500.00	Rural
	Fayetteville	Cumberland	\$127,750.00	Urban
	Fayetteville	Cumberland	\$127,750.00	Urban
	TOTALS			\$6,039,808.00



Class 2 - 6,001 to 10,000 lbs  Minivan Cargo Van Full-Size Pickup Step Van
Class 3 - 10,001 to 14,000 lbs  Walk-in Box Truck City Delivery Heavy-Duty Pickup
Class 4 - 14,001 to 16,000 lbs  Large Walk-in Box Truck City Delivery
Class 5 - 16,001 to 19,500 lbs  Bucket Truck Large Walk-in City Delivery
Class 6 - 19,501 to 26,000 lbs  Beverage Truck Single-Axle School Bus Rack Truck
Class 7 - 26,001 to 33,000 lbs  Refuse Furniture City Transit Bus Truck Tractor
Class 8 - 33,001 lbs & Over  Cement Truck Truck Tractor Dump Truck Sleeper

Truck Classifications

- Vehicle classes are based on gross vehicle weight rating (GVWR).
- Class 2 is subdivided into:
 - Class 2a vehicles with a GVWR of 6,001-8,500 lbs.; and
 - Class 2b vehicles with a GVWR of 8,501-10,000 lbs.
- MHDVs consist of classes 2b-8.

Class 2b-3	Class 4-8	Class 7-8 Tractors
		
		
		
		

MHD ZEV MOU

July 14, 2020

- 15 states and the District of Columbia signed a joint memorandum of understanding (MOU)
- NC DAQ involved Sept 2020

Action

- Advance and accelerate the market for electric medium-and heavy-duty vehicles, including large pickup trucks and vans, delivery trucks, box trucks, school and transit buses, and long-haul delivery trucks (big-rigs)

Goals

- 100 percent of all new medium-and heavy-duty vehicle sales be zero emission vehicles by 2050
interim target of 30 percent zero-emission vehicle sales by 2030
- Drastically reduce greenhouse gas emissions from MHD ZEV

Health benefits

- Especially for communities burdened with higher levels of air pollution and heavy truck traffic



MULTI-STATE MEDIUM- AND HEAVY-DUTY ZERO EMISSION VEHICLE

MEMORANDUM OF UNDERSTANDING

WHEREAS, the Signatory States and the District of Columbia¹ recognize the importance of state leadership and coordinated state action to ensure national progress in the effort to reduce greenhouse gas (GHG) emissions and stabilize global warming;

WHEREAS, the Signatory States have statutory obligations or otherwise seek to significantly reduce statewide GHG emissions by 2050, consistent with science-based targets;

WHEREAS, transportation is now the nation's largest source of GHG emissions, and, after light-duty vehicles, medium- and heavy-duty trucks are the next largest source of transportation sector GHG emissions;

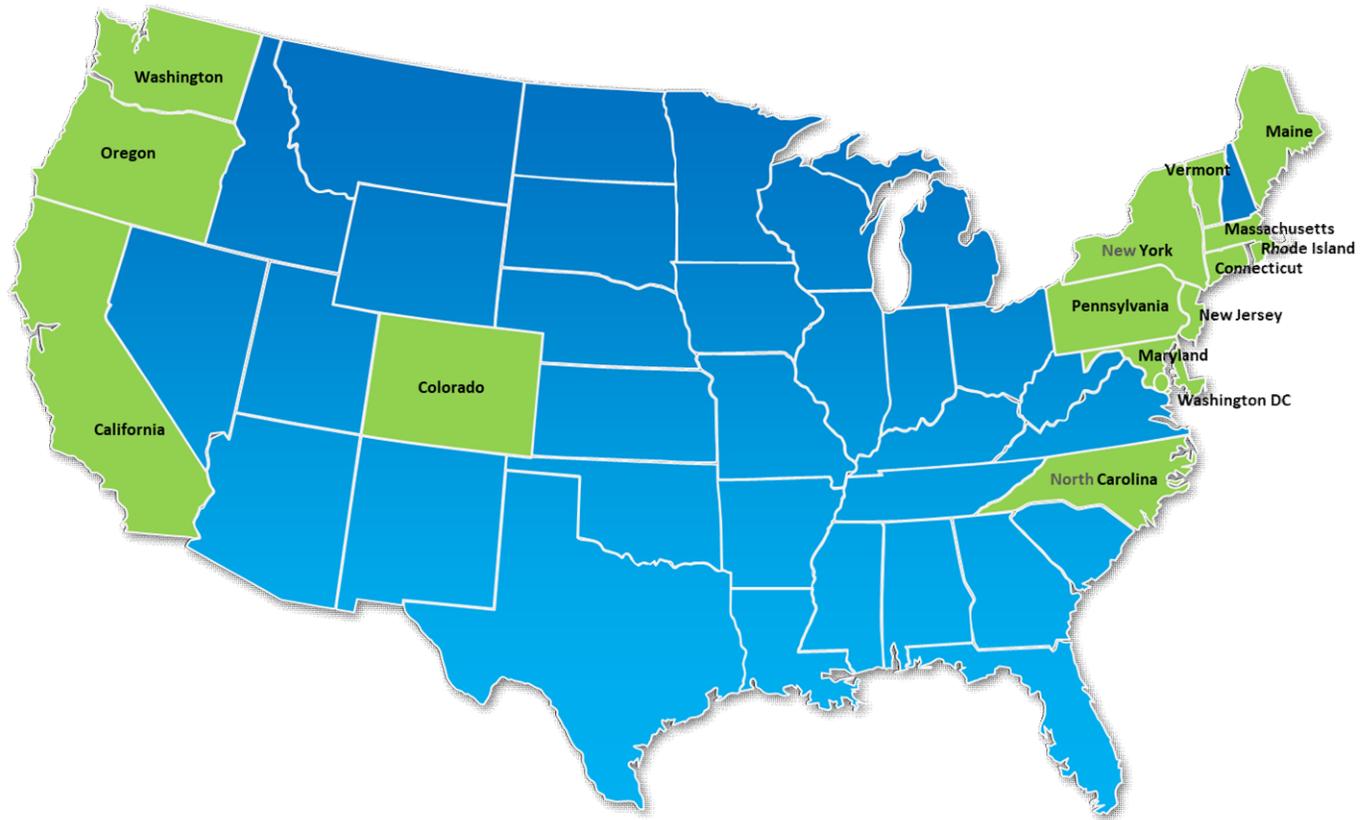
WHEREAS, the Signatory States have a statutory obligation to provide their citizens with air quality that complies with national health-based air quality standards, which are required to be protective of health and the environment with an adequate margin of safety;

WHEREAS, fossil fuel related emissions from medium- and heavy-duty vehicles (MHDVs) are a major source of nitrogen oxides (NOx), particulate matter, and toxic air emissions, which are preventing many densely populated areas from achieving compliance with federal ambient air quality standards;

WHEREAS, emissions from MHDVs are a widely acknowledged, but unaddressed,



MHD ZEV MOU cont.



MHD ZEV Action Plan

- Action Plan:
 - Task Force will develop a multi-state action plan to identify barriers and propose solutions to support widespread electrification of medium- and heavy-duty vehicles
- Focus on Disadvantaged Communities
 - Share equitably in the benefits of truck and bus electrification
 - Provide meaningful opportunities to provide input
 - Meet community needs
 - Build long-term relationships
- Measurable Sales of MHD ZEVs
- Public Fleet Purchases and Fueling Stations
- Inter-agency Cooperation within States
- Partnerships with Key Stakeholders

EXAMPLES for Action Plan:

- Financial vehicle and infrastructure incentives;
- Non-financial vehicle and infrastructure incentives;
- Actions to encourage public transit and public fleet ZEV MHD development;
- Effective infrastructure deployment strategies;
- Funding sources and innovative financing models to support incentives and other market-enabling programs;
- Leveraging environmental and air quality benefits associated with adoption of the California Advanced Clean Trucks rule under Section 177 of the Clean Air Act;
- Coordinated outreach and education to public and private MHDV fleet managers;
- Utility actions to promote zero emission MHDVs, such as electric distribution system planning, beneficial rate design and investment in “make-ready” charging infrastructure;
- Measures to foster electric truck use in densely populated areas;
- Addressing vehicle weight restrictions that are barriers to zero emission MHDV deployment;
- Uniform standards and data collection requirements; and
- Any other initiative the Task Force deems appropriate.



Steps to Date

- Bimonthly calls with Task Force
- Stakeholder engagement will be an important part of this program:
 - Technology
 - EJ Groups
 - Utilities
 - Environmental Groups
 - Fleet Owners

EXAMPLES of Industries Adopting MHD ZEVs



Potential Barriers to Adoption

- MONEY
- Agency capacity
- Infrastructure
 - Not at the same level as light-duty vehicles
 - Existing areas to build up / out
- Utility capacity
- Vehicle availability in the state
- Capital costs for fleets
- Maintenance and support capacity

Vision for Moving Forward

- Identify and establish open two-way communication
- Share the latest information on medium- and heavy-duty ZEVs
- establish structured and unstructured opportunities to provide input
- Garner input on how Action Plan strategies can align with and support stated goals of EJ communities
- Facilitate an ongoing and constructive dialogue
- Build long-term relationships with EJ advocates and community groups
- foster community participation in clean transportation planning and decision-making



Advancing the MHD ZEV MOU Initiative: Questions for the Board

- **What are the most important transportation needs, improvements and priorities for EJ communities in NC?**
- **Do you see specific benefits or concerns regarding this project?**
- **Is there additional information you would like to have about health, safety or other impacts related to this project while considering these questions?**
- **What are the best ways in which to share this information and engage with communities?**
- **Please let us know if you would be interested and available to be a Point of Contact for NC. Or if you have anyone else you would recommend we bring into this effort, please let us know.**



Contact information

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