



*From NC DAQ*

# Electric School Buses

- EPA Clean School Bus Program-Replacement Program
  - BIL-\$5 billion over 5 years. \$500 million per year (1/2 for zero emission buses)
  - Low income and tribes-priority-funding for bus and charging equipment varies depending on priority-not enough to cover bus and infrastructure
    - New electric bus costs \$400k compared to \$130k for diesel
    - Charging equipment estimate: \$36k for 60kW fast charger, most will need new transformer
    - Potential cost per bus could be as high as \$500k with all equipment upgrades at each site
  - Grants and Rebate Programs
    - Buncombe County Schools (BCS) applied for rebate in year 1-not selected-not priority county
    - BCS Year 2: Group Application (5 bus replacements) –not Selected. 114 buses awarded to NC
    - BCS Year 2: Rebate Application (2 yellow and 2 white bus replacements)-Submitted. \$345k per bus priority self certified. Emma and Woodfin (yellow buses).
- Duke Energy Programs
  - Park and Plug Program-Vehicle to Grid (V2G pilot. \$215k per bus, charging equipment and bus are eligible (charging infrastructure first). 2 slots for BCS. Extra cost for V2G software-\$3,500. Duke installs and owns charging equipment. Left over funds can be used for bus.
  - Charger Prep Credit-can't be stacked with Park and Plug but can be used with other buses.

# Electric School Buses-Cherokee

- First Electric School Bus in NC-Cherokee (NC VW settlement funds)
  - Partnership: Cherokee Boys Club (CBC) and Eastern Band of Cherokee Indians (EBCI) Air Quality Program “Native Electric”
  - 6 Electric Buses Now
  - Range: 120-130 miles
  - Diesel vs Electric: \$800-\$1,000 per month diesel fuel per bus vs \$400 per month to charge one bus, reduced maintenance \$
  - Diesel bus is 4X the cost of electric-cost effective with grant dollars
  - Biggest challenges: Electrical equipment upgrades, supply chain
- EPA Clean School Bus Program
  - 15 additional buses awarded January 2024 (\$5.925 million from EPA, \$450k EBCI, \$100k CBC)
  - 21 Total when complete-entire fleet electric
  - Duke V2G pilot program-successfully sent energy back to grid in 2023. Ambulance, Police and Fire Departments-potential users
  - Future Plans: Solar Canopy over charging station
  - Benefits: children’s health (eliminates diesel pollution), reducing GHGs, cost savings for schools, workforce development
    - Tracking asthma data