

Miami-Dade County's Office of Resilience



FUTURE READY MITIGATION ADAPTATION COMMUNICATION **BISCAYNE BAY EXTREME HEAT** address climate reduce sources engage & Implement heat protect & Implement and change impacts of climate connect risk reduction restore change plan stakeholders efforts

Race to Zero Targets



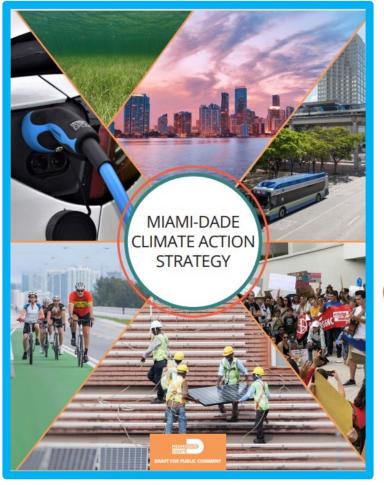
Emission reductions from 2019 levels

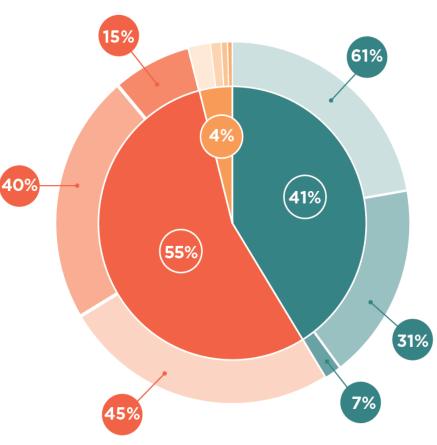
50%

by 2030

Net Zero by 2050







Communitywide Sources of Emissions

- Buildings and Energy 41%
 - Electricity 61%
 - Other Fuels 31%
 - Natural Gas **7**%
- Transportation and Land Use 55%
 - Air Travel 45%
 - Ground Gasoline 40%
 - Ground Diesel 15%
- Water and Waste 4%
 - Landfilled Waste 53%
 - Wastewater Energy 25%
 - Incinerated Waste 12%
 - Other 10%

Miami-Dade Climate Action Strategy

Federal Guidance and Funding

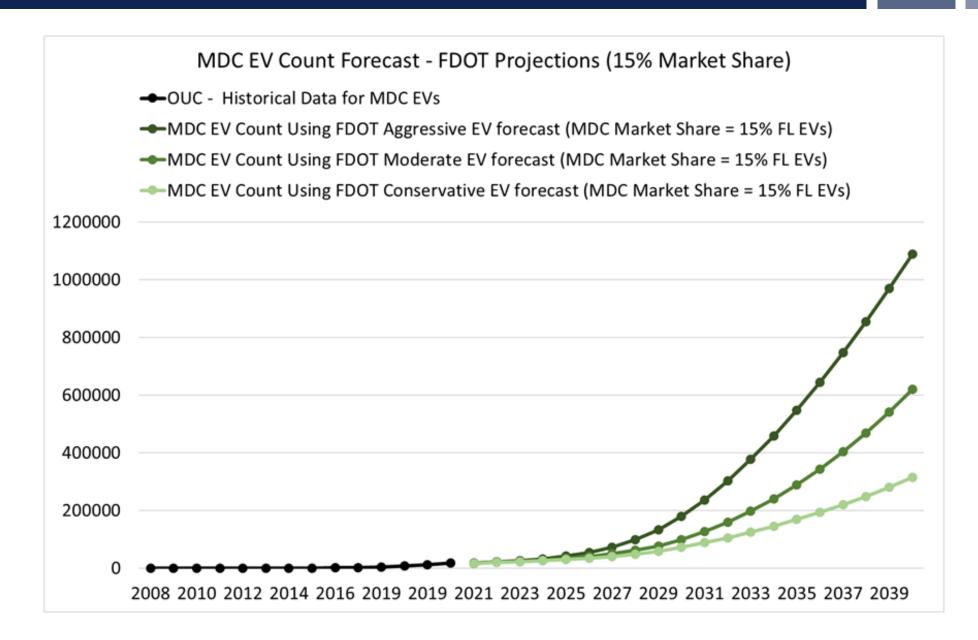
National Electric Vehicle Infrastructure (NEVI) Formula Program.

- The \$5 billion NEVI Formula Program will be distributed to States to establish an interconnected charging network along Alternative Fuel Corridors. When the national network is fully built out, funding may be used on any public road or in other publicly accessible locations. Final Guidance was issued on 02/15/23.
- On September 14, 2022, FHWA approved the State of Florida's Electric Vehicle Deployment Plan and made available over \$29 million in Fiscal Year 2022 funding through the NEVI program. The State is expected to receive \$198M through the program over 5 years.

Federal Guidance and Funding

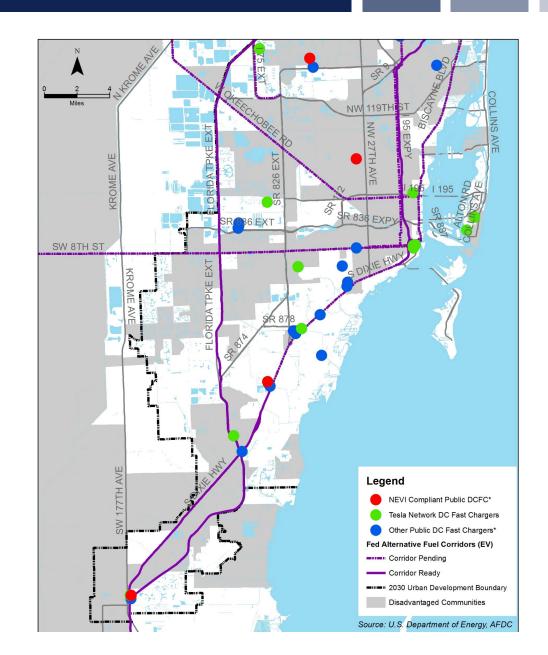
- **NEVI Ten Percent Set-Aside.** 10% of the NEVI Formula Program will be setaside to provide discretionary grants to help fill gaps in the national network. A separate process will be established in future guidance.
- Corridor Charging Discretionary Grant Program. This \$1.25B program will strategically deploy publicly accessible EV charging infrastructure and hydrogen, propane, and natural gas fueling infrastructure along designated Alternative Fuel Corridors.
- Community Charging Discretionary Grant Program. This \$1.25B program will strategically deploy publicly accessible EV charging infrastructure and hydrogen, propane, and natural gas fueling infrastructure in communities.

Electric Vehicle Projections



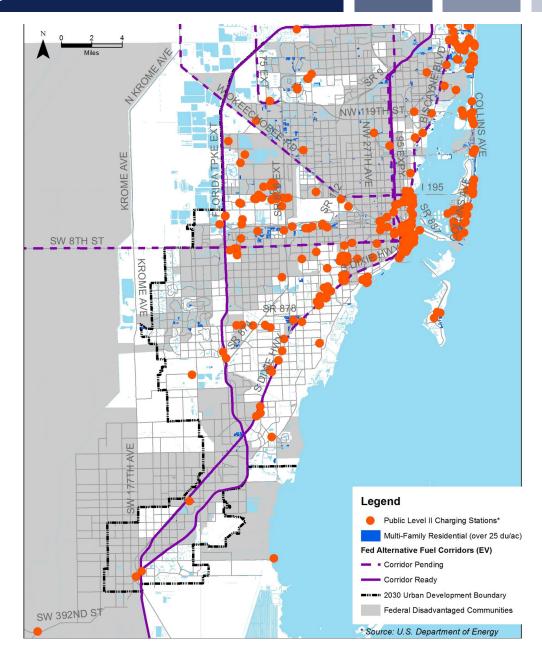
Current DCFC Network

- County will need 222 DC Fast Charging plugs to support 2030 EV projections (NREL, EV Pro-Lite)
- Currently ±204 DCFC plugs in MDC spread across 36 locations, however, many utilize proprietary hardware or software systems that are not broadly accessible to all vehicles and not integrated on a common software platform.
- Only 18 chargers spread across four locations are compliant with the Federal NEVI standards.

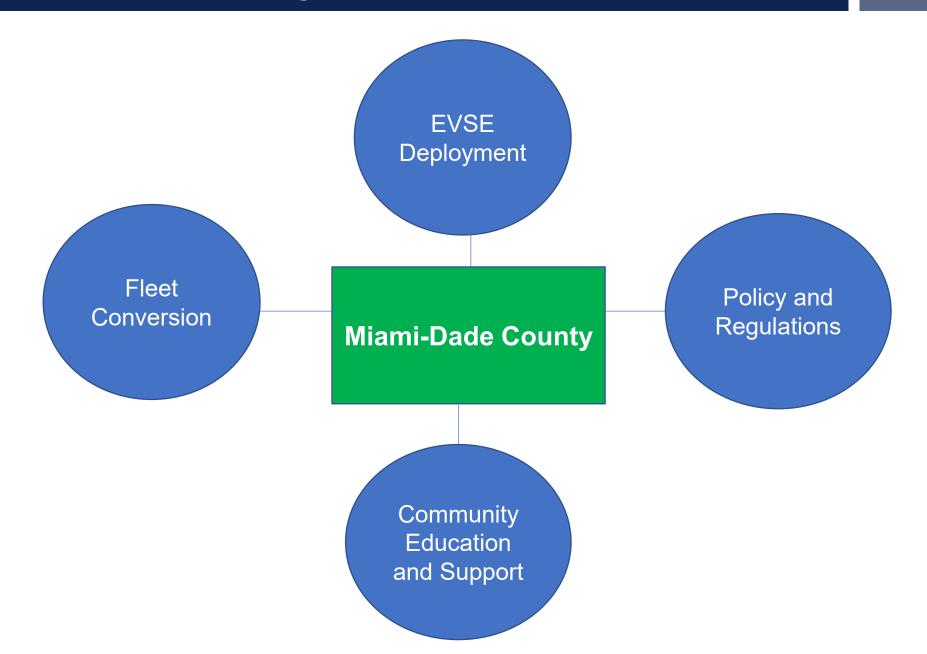


Current Level 2 Charging Network

- County will need 1,225 public Level 2 Charging plugs and 1,974 Workplace Level 2 Charging plugs to support 2030 EV projections. (NREL, EV Pro-Lite)
- There are currently approximately 1,049 public Level 2 chargers in Miami-Dade County.



Facilitating EV Adoption



Fleet Conversion

- Beginning in 2021, at least 10% of each Department's annual light fleet purchases should be battery electric and increase by an additional 10% each year or more thereafter with the goal of converting our entire light fleet by 2030.
- Fleet Chargers will be installed on 66 County sites over the next five years to support the conversion.
- MDC has 53 electric buses with 122 authorized for purchase through 2024 – 10% of County's bus fleet will be electric.

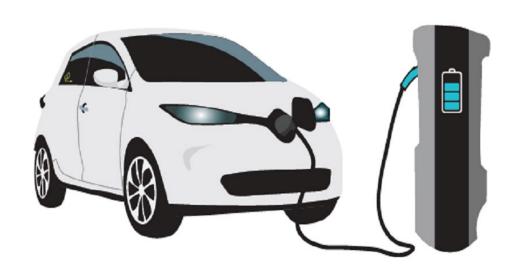




EVSE Deployment

- Sustainable Buildings Ordinance County Projects must install electric vehicle supply equipment in 2% of all parking spaces used by the project."
- 37 ports available for public charging at County facilities
- Public Private Partnerships
- Challenge is how to encourage installation in LMI Communities.





Policy and Regulations

- **Zoning Code:** Projects (other than SFR and Duplex) with 10 or more required off-street parking spaces must provide at least 20% of the required spaces as "EV-Ready" with full circuitry installed and ready for a minimum Level 2 charger to be connected.
- <u>Building Code:</u> MDC proposed two amendments to the 2024 edition of the Florida Building Code aimed at facilitating the transition to electric vehicles. These amendments were adopted as appendices. Local governments throughout the State can now adopt these through their local boards to allow for implementation within their jurisdictional boundaries.
 - 1) For one- and two-family dwellings and townhouses with garages, the amendment requires the electrical panel capacity and service capacity to be sufficient to accommodate EV charging equipment
 - 2) For new commercial construction, the amendment requires EV Capable parking spaces (requires electrical panel capacity and installation of raceways) and EV Ready parking spaces (requires extension of branch circuitry to parking space).

Community Education







Thank you!

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