

Date: June 3, 2022

To: Honorable Chairman Jose “Pepe” Diaz
and Members, Board of County Commissioners

From: Daniella Levine Cava 
Mayor

Subject: Report Regarding Electric Vehicle Charging Stations – Directive No. 212661

This report is in response to Resolution No. R-1183-21, sponsored by Commissioner Raquel A. Regalado, adopted by the Board of County Commissioners (Board) on December 1, 2021, directing the County Mayor or County Mayor’s designee to (1) advise this Board of the number and location of electric vehicle charging stations currently installed within County facilities; (2) reevaluate and update the December 2016 Miami-Dade County plan to install electric vehicle charging stations to serve the general public; (3) provide an updated plan for the continued installation of electric vehicle charging stations for public use within County facilities; and (4) provide a report.

Summary

As Mayor, I have directed staff to work on many efforts to prioritize initiatives with economic, social, and environmental benefits, such as fleet electrification, the use of solar technology, and facility design that factors in anticipated sea level rise impacts resulting from climate change. Advancing resiliency and sustainability is one of the hallmarks of my administration, as outlined in Resilient305 and the Thrive 305 Action Plans. This report provides information regarding electric vehicle (EV) charging infrastructure currently installed at Miami-Dade County facilities as well as recommendations to facilitate the continued expansion of publicly accessible EV charging stations. A regional multi-sector perspective and collaborative approach must be utilized in order to strategically maximize investments and avoid duplication of efforts.. This approach must also consider that, on average, eighty percent of car charging happens at home, where costs to residents are lower compared to away-from-home charging.

These recommendations will facilitate the sustainability/resiliency goals that I have established as well as the numerous Miami-Dade County Board of County Commissioners’ resolutions, ordinances, and County Implementing and Administrative Orders that support the County’s intention to identify specific strategic County facilities to host electric vehicle chargers for public access.

Background information and the recommended / intended actions to comply with this directive are summarized below:

Background

Transportation is the largest contributor of community climate pollution (greenhouse gas emissions) in Miami-Dade County. Data gathered for Miami-Dade County’s 2019 Community-Scale Greenhouse Gas Inventory indicates that 55 percent of community climate pollution emissions are linked to transportation and mobile sources. These and other climate pollution sources are targeted for reductions as part of the County’s Comprehensive Development Master Plan (CDMP). The CDMP contains unleaded and diesel fuel reduction targets as well as a target of 80% reduction of community-wide emissions by 2050 (using a baseline year of 2008) and additionally articulates a goal to expand the availability of electric vehicle charging infrastructure throughout the County. In addition, Miami-Dade County’s Climate Action Strategy, also outlines the County’s goal of reducing climate pollution, with a goal of net-zero by the year 2050. Accordingly, the recommendations in this updated report will help ensure strategic deployment of publicly accessible EV charging stations at County facilities in priority areas of the County as determined by future analysis.

The installation of essential EV charging stations, also called electric vehicle supply equipment (EVSE), is an industry-recognized best-practice strategy being implemented worldwide to lower climate pollution

and other air pollutants linked to traditional internal combustion engine (ICE) vehicle use. EVSE installations are anticipated to continue rapidly progressing locally, nationally, and globally. The benefits gained from vehicle electrification include economic advantages such as lower fuel, operating, and maintenance costs; environmental and health benefits from reduced air pollution; reduced climate pollution leading to eventual reductions in adverse climate impacts such as sea level rise, extreme heat, intensification of hurricanes; and improved energy security due to lower reliance on foreign fuels and price volatility. The transition to electric vehicles is rapidly evolving and County policies and procedures will likewise have to evolve and remain flexible to adapt to new considerations and opportunities.

The County's December 2016 plan/report regarding charging stations to serve the general public at County facilities was presented to the Board pursuant to Resolution No. R-1101-15, which I sponsored and Commissioner Heyman co-sponsored. The December 2016 report included an evaluation of potential public charging locations, considerations of fees and costs, a review of charging equipment options, and many other details. The recommended Action Items below serve to update this earlier report as directed by Resolution No. R-1183-21 (see Attachment A).

In addition, as requested by R-1183-21, OOR gathered data from department representatives regarding the number and location of electric vehicle charging stations currently installed at County facilities. As of March 2022, a total of 61 charging ports at 13 different County facilities were identified, as presented in Attachment B. Currently, there are 37 ports available for public charging and 24 for County fleet charging. Each County charging station has either one (1) or two (2) charging ports. Charging stations with two (2) charging ports can charge two (2) EVs concurrently.

Existing Measures

Key measures that are already in place to support the electrification of vehicles within the County include the following:

- In 2019, the BCC adopted Ordinance No. 19-17, a policy requiring installation of EVSE-Ready infrastructure as part of the parking requirements for new construction. Under this section of the Code of Miami-Dade County, the minimum number of EVSE-Ready spaces is determined based on the total number of off-street parking spaces.

Recommended Action Items

Key actions to support the electrification of vehicles within the County include the following:

- Approve an update to the County's Sustainable Building Program, originally adopted by the BCC in 2007 via Ordinance 07-65 Sustainable Building Program, (originally adopted by the BCC in 2007 via Ordinance 07-65), that includes a prescriptive path requiring the installation of EV chargers at a minimum level of two percent (2%) of parking spaces for new or major renovations for County buildings and infrastructure. and is anticipated to be presented to the Board soon.
- Collaborate with municipalities, local colleges and universities, civic institutions, the Miami-Dade Transportation Planning Organization, the South Florida Regional Planning Council and Clean Cities Coalition, and private sector stakeholders to avoid duplication of efforts and ensure strategic and aligned investments in charging infrastructure deployment.
- Seek funding and partnerships to develop an EVSE gap analysis to determine underserved areas with little to no existing charging infrastructure, also known as charging deserts, and other priority areas for investment that are not likely to be targeted by commercial interests, along with an implementation plan identifying installation partners. Such analyses should align with State and regional charging station plans and installations.
- Prioritize grant applications and the installation of chargers at County facilities in low to moderate income and multifamily areas where commercial investments are not anticipated.
- Consider making additional County investments at locations where departments may want to offer charging as an amenity for customers and at locations that will facilitate reduction of traffic congestion such as public transportation hubs..

- All chargers on County property and chargers installed as part of a Public Project for which the County provides funding, financing, or any financial support shall be federally Energy Star certified to ensure energy efficiency and associated cost savings.
- Explore opportunities with electric vehicle charging service companies for no-cost charger installations, revenue-sharing installations, or other mutually beneficial programs.
- Seek grant funding for public charging stations powered by solar power with battery backup and storage at charging locations with strong solar potential (minimal shading).
- Ensure that County departments request appropriate levels of funding prior to facility design in order to ensure compliance with any County requirements for charging stations or EVSE-ready infrastructure at County facilities.
- Meet with industry representatives to understand whether improvements could be made to streamline the permitting process for Level 3 Chargers to encourage and facilitate installation of EV charging infrastructure.
- Educate County staff how to register new charger installations at County facilities with the federal Department of Energy database so that they are included in private and public sector databases, maps, and lists of available chargers.

Pursuant to Ordinance No. 14-65, this report will be placed on the next available Board agenda. Should you require additional information, please contact Alex Muñoz, Director, Internal Services Department, at 305-375-5893.

Attachments

c: Geri Bonzon-Keenan, County Attorney
Gerald K. Sanchez, First Assistant County Attorney
Jess M. McCarty, Executive Assistant County Attorney
Office of the Mayor Senior Staff
Department Directors
Alex Muñoz, Director, Internal Services Department
Jennifer Moon, Chief, Office of Policy and Budgetary Affairs
Yinka Majekodunmi, Commission Auditor
Basia Pruna, Director, Clerk of the Board
Eugene Love, Agenda Coordinator

MEMORANDUM

Agenda Item No. 11(A)(13)

TO: Honorable Chairman Jose "Pepe" Diaz
and Members, Board of County Commissioners

DATE: December 1, 2021

FROM: Geri Bonzon-Keenan
County Attorney

SUBJECT: Resolution directing the County Mayor to: (1) advise this Board of the number and location of electric vehicle charging stations currently installed within County facilities; (2) reevaluate and update the December 2016 Miami-Dade County Plan to install Electric Vehicle Charging Stations to Serve the General Public; (3) provide an updated plan for the continued installation of electric vehicle charging stations for public use within County facilities; and (4) provide a report

The accompanying resolution was prepared and placed on the agenda at the request of Prime Sponsor Commissioner Raquel A. Regalado.



Geri Bonzon-Keenan
County Attorney

GBK/jp



MEMORANDUM
(Revised)

TO: Honorable Chairman Jose "Pepe" Diaz
and Members, Board of County Commissioners

DATE: December 1, 2021

FROM: 
Gen Bonzon-Keenan
County Attorney

SUBJECT: Agenda Item No. 11(A)(13)

Please note any items checked.

- "3-Day Rule" for committees applicable if raised
- 6 weeks required between first reading and public hearing
- 4 weeks notification to municipal officials required prior to public hearing
- Decreases revenues or increases expenditures without balancing budget
- Budget required
- Statement of fiscal impact required
- Statement of social equity required
- Ordinance creating a new board requires detailed County Mayor's report for public hearing
- No committee review
- Applicable legislation requires more than a majority vote (i.e., 2/3's present ____, 2/3 membership ____, 3/5's ____, unanimous ____, CDMP 7 vote requirement per 2-116.1(3)(h) or (4)(c) ____, CDMP 2/3 vote requirement per 2-116.1(3)(h) or (4)(c) ____, or CDMP 9 vote requirement per 2-116.1(4)(c)(2) ____) to approve
- Current information regarding funding source, index code and available balance, and available capacity (if debt is contemplated) required

Approved _____ Mayor
Veto _____
Override _____

Agenda Item No. 11(A)(13)
12-1-21

RESOLUTION NO. _____

RESOLUTION DIRECTING THE COUNTY MAYOR OR COUNTY MAYOR'S DESIGNEE TO: (1) ADVISE THIS BOARD OF THE NUMBER AND LOCATION OF ELECTRIC VEHICLE CHARGING STATIONS CURRENTLY INSTALLED WITHIN COUNTY FACILITIES; (2) REEVALUATE AND UPDATE THE DECEMBER 2016 MIAMI-DADE COUNTY PLAN TO INSTALL ELECTRIC VEHICLE CHARGING STATIONS TO SERVE THE GENERAL PUBLIC; (3) PROVIDE AN UPDATED PLAN FOR THE CONTINUED INSTALLATION OF ELECTRIC VEHICLE CHARGING STATIONS FOR PUBLIC USE WITHIN COUNTY FACILITIES; AND (4) PROVIDE A REPORT

WHEREAS, electric vehicles generally create a lower carbon footprint over their lifetime than do cars and trucks that use traditional internal combustion engines; and

WHEREAS, electric vehicles are an important tool to reduce the County's "carbon footprint"; and

WHEREAS, the International Energy Agency predicts that the number of electric vehicles in use is expected to hit 245 million by 2030; and

WHEREAS, on May 9, 2006, this Board adopted Resolution No. R-559-06, which among other things, supported the development of plug-in hybrid vehicles and stated that the County would strongly consider purchasing such vehicles for its own fleet and that it would seek support from the two electric utilities then servicing the County, FPL and Homestead Energy Services, to help expand support for electric vehicles; and

WHEREAS, most major auto manufacturers now offer commercially competitive hybrid-electric or entirely electric vehicles, and several completely new automakers are successfully competing in the new electric vehicle market; and

WHEREAS, one of the challenges for the increased use of electric vehicles in our community is the lack of available infrastructure to recharge the vehicles; and

WHEREAS, on December 1, 2015 this Board adopted Resolution No. R-1101-15, which set County policy to promote and encourage the expanded use of low-carbon transportation options such as battery-electric and plug-in hybrid automobiles, and in support of that policy, directed the County Mayor or County Mayor’s designee to develop a plan, guided by the Southeast Florida Clean Cities Coalition “EV Community Readiness Plan,” for the installation, operation, maintenance, and use of electric vehicle charging stations in County facilities; and

WHEREAS, the “Miami-Dade County Plan to Install Electric Vehicle Charging Stations to Serve the General Public, dated December 2016”, required by Resolution No. R-1101-15, was placed on this Board’s June 20, 2017 agenda; and

WHEREAS, this Board wishes to reaffirm its commitment to expanding the availability of electric vehicle charging stations throughout the County,

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF MIAMI-DADE COUNTY, FLORIDA, that:

Section 1. This Board in furtherance of its commitment to expanding the availability of electric vehicle charging stations throughout the County, directs the County Mayor or County Mayor’s designee to:

- (1) advise this Board of the number and location of electric vehicle charging stations currently installed within County facilities and whether those stations are open to the public and whether any fees are being charged;

(2) reevaluate and update the December 2016 Miami-Dade County Plan to Install Electric Vehicle Charging Stations to Serve the General Public, taking into consideration any advancements in the electric vehicle charging station technologies; and

(3) to provide an updated plan for the continued installation of electric vehicle charging stations for public use within County facilities. The plan shall include, but not be limited to, the evaluation of proposed locations, including potential needs, compatibility with County uses and security, a description of costs and identification of funding sources for such costs, including the identification of any fees to provide for the partial or total satisfaction of such costs, and the discussion of any potential for funding through contracting or partnerships with other public or private entities.

Section 2. This Board further directs the County Mayor or County Mayor’s designee to, within 120 days of the effective date of this resolution, place a report regarding the actions referenced in section 1 above on an agenda of the Board in accordance with Ordinance No. 14-65.

The Prime Sponsor of the foregoing resolution is Commissioner Raquel A. Regalado. It was offered by Commissioner _____, who moved its adoption. The motion was seconded by Commissioner _____ and upon being put to a vote, the vote was as follows:

- | | |
|---------------------------------------|------------------------|
| Jose “Pepe” Diaz, Chairman | |
| Oliver G. Gilbert, III, Vice-Chairman | |
| Sen. René García | Keon Hardemon |
| Sally A. Heyman | Danielle Cohen Higgins |
| Eileen Higgins | Joe A. Martinez |
| Kionne L. McGhee | Jean Monestime |
| Raquel A. Regalado | Rebeca Sosa |
| Sen. Javier D. Souto | |

The Chairperson thereupon declared this resolution duly passed and adopted this 1st day of December, 2021. This resolution shall become effective upon the earlier of (1) 10 days after the date of its adoption unless vetoed by the County Mayor, and if vetoed, shall become effective only upon an override by this Board, or (2) approval by the County Mayor of this resolution and the filing of this approval with the Clerk of the Board.

MIAMI-DADE COUNTY, FLORIDA
BY ITS BOARD OF
COUNTY COMMISSIONERS

HARVEY RUVIN, CLERK

By: _____
Deputy Clerk

Approved by County Attorney as
to form and legal sufficiency.



Annery Pulgar Alfonso

Miami-Dade County Facilities - Currently Active EV Charging Stations as of 3-18-22

Department	Parking Facility Unique Name	Facility Address	# of Charging Stations Installed	# of Ports per charger	Total Vehicles that can charge same time	Public Access (Yes or No)	County Fleet Access (Yes or No)	Fee to charge vehicle if public access
Aviation (MDAD)	MIA Dolphin Short Term Lot	2100 NW 42 Avenue	1	2	2	Yes	Yes	\$0.00
Aviation (MDAD)	MIA Dolphin Valet Parking	2100 NW 42 Avenue	1	2	2	Yes	Yes	\$0.00
Cultural Affairs (CUA)	Westchester Cultural Arts Center	7930 SW 40th St, Miami, FL 33155	1	2	2	Yes	Yes	\$0.00
Fire Rescue (MDFR)	Doral Headquarters, back staff parking lot	9300 NW 41st Street, Doral, FL 33178	3	2	6	No	Yes	N/A
Fire Rescue (MDFR)	Doral Headquarters, back staff parking lot	9300 NW 41st Street, Doral, FL 33178	4	1	4	No	Yes	N/A
ISD (for RER)	Overtown Transit Village Garage - 6th floor	701 NW 1st Court / Miami, Florida 33136	6	1	6	Yes	Yes	\$0.00
ISD	Overtown Transit Village Garage	701 NW 1st Court / Miami, Florida 33136	2	2	4	Yes	No	\$0.31 per kwh
ISD	Hickman Garage	270 NW 2nd Street / Miami, Florida 33128	2	2	4	Yes	No	\$0.31 per kwh
ISD	Cultural Center Garage	50 NW 2nd Avenue / Miami, Florida 33128	1	2	2	Yes	No	\$0.31 per kwh
ISD	West Lot Garage	220 NW 3rd Street / Miami, Florida 33128	2	2	4	Yes	No	\$0.31 per kwh
ISD	Lightspeed Building	11500 NW 25 Street	2	1	2	No	Yes	N/A
ISD	Lightspeed Building	11500 NW 25 Street	4	2	8	No	Yes	N/A
ISD	Downtown Motor Pool	201 NW 1 Street	2	2	4	No	Yes	N/A
ISD	Larcenia Bullard Plaza	14508 Lincoln Blvd	1	1	1	Yes	Yes	\$0.00
ITD	Info Technology Data Center	5680 SW 87 Avenue, Miami, FL 33173	1	1	1	Yes	Yes	\$0.00
Libraries	Westchester Health and Wellness Center	3445 Coral Way, Miami FL 33165	3	1	3	Yes	No	\$0.00
PROS	Tree Island Park and Preserve	SW 10th Street and SW 147th AVE	3	2	6	Yes	No	\$0.00
TOTAL EV Charging Stations					61			