

Smart Communities In Focus

Spotlight: Miami, FL



Miami's smart community effort is aided through its partnerships with Florida Power & Light Company (FPL), CIVIQ Smartscales, the Department of Transportation and Public Works (DTPW), Electrify America, EvGo, the Florida Department of Environmental Protection, Silver Spring Networks, the South Florida Regional Planning Council, Tesla, and the U.S. Department of Energy.

Miami's Goals

- Improve building efficiency and sustainability
- Make public and private travel faster, easier, and safer
- Expand electric vehicle access
- Encourage renewable energy adoption
- Provide highly reliable and low-cost energy

Smart communities are built on smarter energy infrastructure and leverage the power of data and technology to improve sustainability, spur economic development, help drive efficiencies, and enhance the overall quality of life for their citizens. This summary focuses on specific opportunities where communities and electric companies can collaborate to make communities smarter, including projects that advance: Smart Street Lighting, Smart Transportation, Smart Buildings, Distributed Energy Resources, and Data Analytics and Intelligent Services.

What Makes Miami Smart?



Smart Street Lighting—Saves energy, improves safety, and reduces traffic congestion.

- FPL partnered with Silver Spring Networks to install wireless mesh networking technology and management control software to 107,000 street lights in the Miami-Dade County region, as part of the electric company's efforts to deploy 480,000 smart street lights across the state of Florida.



Smart Transportation—Improves safety and mobility, reduces carbon footprint, and provides greater access to services.

- Through partnerships with FPL, Electrify America, EvGo, the South Florida Regional Planning Council, and Tesla, Miami-Dade County has deployed more than 700 EV charging stations throughout the area.
- Miami-Dade County requested funding to develop 52 new EV charging stations at county-owned facilities from Volkswagen's state mitigation funding.

- The County also requested funding to purchase 75 all-electric buses from Volkswagen's state mitigation funding as part of their initiative to replace 44% of their current bus fleet by 2019.



Smart Buildings—*Save energy and improve sustainability.*

- As part of its Sustainable Buildings Program, Miami-Dade County has 30 green building projects in planning, design, or under construction that will comply with the U.S. Green Building Council's LEED Green Building Rating System.



Distributed Energy Resources—*Improve sustainability, efficiency, and reliability.*

- FPL partnered with more than 50 commercial and governmental customers to install distributed solar projects, including deploying its new Solar Trees at Miami's Frost Museum of Science and Tropical Park.
- FPL partnered with Florida International University's College of Engineering in Miami on a clean energy research program, and installed a 1.4-megawatt commercial-scale distributed solar energy system.
- FPL launched an energy storage pilot project, repurposing batteries from 200 BMW electric vehicles for grid management during periods of high demand in a residential area of southwestern Miami.
- FPL built a mobile energy storage system to complement the FPL smart grid to avoid power interruptions or power quality issues at national televised events. The system functioned as designed during the 2017 Miami Open at Key Biscayne.



Data Analytics and Intelligent Services—*Increase efficiency, improve city services, and enhance quality of life.*

- Miami-Dade partnered with CIVIQ Smartscares to install up to 300 "WayPoint" digital interactive kiosks throughout the county, more than 1,000 Wi-Fi devices in public transit vehicles, and 51 additional Wi-Fi devices in public transit stations.
- Smart traffic signal technology installed along NW 36th Street, between 71st and 84th Avenues, as part of a \$160 million effort to improve traffic flow, signal synchronization, and reduce congestion, will give priority to buses and improve reliability for public transportation.
- FPL has invested more than \$3 billion since 2006 to build a stronger, smart, and more storm-resilient energy grid, and has installed more than 4.9 million smart meters and more than 90,000 intelligent devices across its service area. These investments have paid off, as FPL's service reliability exceeds 99.98%.

Contacts

Florida Power & Light Co.

Brian Hanrahan
 Director, Corporate Business Continuity
 brian.hanrahan@fpl.com
 561-691-2117

EEl

Becky Knox
 Senior Director, Retail Energy Policy
 bknox@eei.org
 202-508-5563



Edison Electric Institute
 701 Pennsylvania Avenue, NW
 Washington, DC 20004-2696
 202-508-5000 | www.eei.org



/EdisonElectricInstitute



@Edison_Electric



Edison Electric Institute