

MEMORANDUM

Agenda Item No. 11(A)(3)

TO: Honorable Chairwoman Audrey M. Edmonson
and Members, Board of County Commissioners

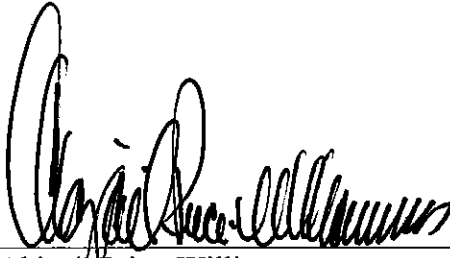
DATE: June 4, 2019

FROM: Abigail Price-Williams
County Attorney

SUBJECT: Resolution directing the County
Mayor to assess the feasibility of
developing floating solar power
plants on water bodies in Miami-
Dade County, and to provide a
report

Resolution No. R-611-19

The accompanying resolution was prepared and placed on the agenda at the request of Prime Sponsor Commissioner Daniella Levine Cava.



Abigail Price-Williams
County Attorney

APW/uw



MEMORANDUM
(Revised)

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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)(3)
6-4-19

RESOLUTION NO. R-611-19

RESOLUTION DIRECTING THE COUNTY MAYOR OR
DESIGNEE TO ASSESS THE FEASIBILITY OF DEVELOPING
FLOATING SOLAR POWER PLANTS ON WATER BODIES IN
MIAMI-DADE COUNTY, AND TO PROVIDE A REPORT

WHEREAS, Miami-Dade County has a history of supporting policies to improve energy efficiency and reduce carbon dioxide (CO2) emissions; and

WHEREAS, for example, on December 14, 1993, this Board unanimously approved a plan entitled “A Long Term CO2 Emissions Reduction Plan for Miami-Dade County,” which calls for various goals to reduce CO2 emissions countywide; and

WHEREAS, pursuant to Resolution No. R-1431-08, the County became a signatory to the National Association of Counties’ (NaCo) “Cool Counties Climate Stabilization Declaration,” and pledged to reduce countywide CO2 emissions by 80 percent by 2050; and

WHEREAS, solar energy is the most viable renewable energy source available within Miami-Dade County; and

WHEREAS, maximizing the opportunities for solar power generation through rooftop and utility scale solar will be critical to Miami-Dade County’s energy future; and

WHEREAS, floating solar power plants present a unique opportunity in Miami-Dade County, where many artificially created lakes may provide an environmentally acceptable place to offer utility scale solar solutions; and

WHEREAS, floating solar power plants are becoming increasingly popular around the world because their unique design may address multiple efficiency and urban planning issues, including protecting open space and farmland; and

WHEREAS, floating power plant systems can shade the water and reduce evaporation by up to 70 percent, meaning that a single three-acre storage pond covered with solar panels could save over four million gallons of water each year; and

WHEREAS, because the solar power plants are situated on water instead of land, the cooler air at the surface also helps to minimize the risk of solar cell performance atrophy, which is often related to long-term exposure to warmer temperatures, meaning that the solar equipment itself may enjoy a longer life; and

WHEREAS, in recent years, large-scale floating solar power plants have been brought on line and opened in Turkey and China; and

WHEREAS, floating solar power plants are also currently being installed at the utility-scale in the United Kingdom, China, Japan, Korea, and Thailand, and tested in the Netherlands, Taiwan, and Singapore, among other countries; and

WHEREAS, according to one recent report, the global floating power plant market is expected to grow from an estimated \$889.6 million in 2017 to \$1.44 billion by 2022; and

WHEREAS, a 2019 report by the US Department of Energy National Renewable Energy Laboratory, entitled "Floating PV: Assessing the Technical Potential of Photovoltaic Systems on Man-Made Water Bodies in the Continental U.S.," identified significant potential for floating solar power plants within the United States; and

WHEREAS, floating solar power plants present an emerging renewable energy opportunity for Miami-Dade County; and

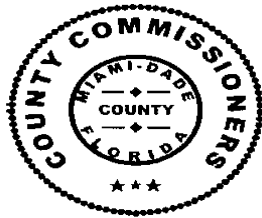
WHEREAS, accordingly, this Board wishes for an assessment to be undertaken as to the feasibility of developing floating solar power plants here,

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF MIAMI-DADE COUNTY, FLORIDA, that this Board directs the County Mayor or designee to assess the feasibility of developing floating solar power plants on water bodies in Miami-Dade County, and to provide a report. Such report shall address, at a minimum, the potential for floating solar power plants to be placed on artificially created water bodies, such as rock mine lakes and other disconnected water bodies throughout Miami-Dade County, as well as explore opportunities to streamline regulatory reviews, and foster private sector competition to facilitate the deployment of floating solar power plants here. The report shall be provided to this Board within 180 days of the effective date of this resolution, and shall be placed on an agenda of the Board pursuant to Ordinance No. 14-65.

The Prime Sponsor of the foregoing resolution is Commissioner Daniella Levine Cava. It was offered by Commissioner **José "Pepe" Diaz**, who moved its adoption. The motion was seconded by Commissioner **Rebeca Sosa** and upon being put to a vote, the vote was as follows:

Audrey M. Edmonson, Chairwoman	aye		
Rebeca Sosa, Vice Chairwoman	aye		
Esteban L. Bovo, Jr.	aye	Daniella Levine Cava	aye
Jose "Pepe" Diaz	aye	Sally A. Heyman	absent
Eileen Higgins	aye	Barbara J. Jordan	aye
Joe A. Martinez	aye	Jean Monestime	aye
Dennis C. Moss	aye	Sen. Javier D. Souto	absent
Xavier L. Suarez	aye		

The Chairperson thereupon declared the resolution duly passed and adopted this 4th day of June, 2019. 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

Linda L. Cave

By: _____
Deputy Clerk

Approved by County Attorney as
to form and legal sufficiency.

A handwritten signature in black ink, appearing to read "James Eddie Kirtley".

James Eddie Kirtley
Abbie Schwaderer-Raurell