



# Howard County

## *Internal Memorandum*

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**Subject: Testimony on Council Bill No CB 10-2020; Approving a multiyear Renewable Energy Power Purchase Agreement**

**To: Lonnie R. Robbins, Chief Administrative Officer**

**From: Joshua Feldmark, Director of Sustainability**

**Date: March 27, 2020**

This bill is authorizing the Executive to enter into a renewable energy power purchase agreement. The agreement requires the payment by the County of funds from an appropriation in a later fiscal year and therefore requires County Council approval as a multi-year agreement pursuant to Section 612 of the Howard County Charter.

The vendor for this contract was selected through a 2-step competitive process. This is a piggy back onto a Maryland Department of Transportation contract which has six qualified vendors. We opened up bidding on our specific contract to those six vendors and KDC Solar was the winning bidder.

In this agreement, the contractor (KDC Solar) will be designing and building 24 MW of solar arrays. As is the nature of a power purchase agreement, the contractor is responsible for the capital expenditures related to this project. The County is agreeing to buy the power generated from these projects.

- In total, the project will generate 24 MW of solar power, which will translate to roughly 34.5 million kWh per year
- The County will pay a fixed rate of \$0.07391 per kWh, as opposed to \$0.075 per kWh, which is the current rate we pay for power.
- Of the 24 MW, 6 MW will be generated from at least 8 County owned and operated properties.
  - The Circuit Courthouse, Carrs Mill Landfill, and The East Columbia 50+ Center will be sites for three of the projects.
  - The other five (or more) projects will be chosen from a list of facilities shown in Appendix A of the agreement.
- 18 MW will be generated on private property in Howard County (unless KDC receives written permission from the County to site the facility somewhere other than in Howard County).
- In our on-going commitment to fighting climate change, Howard County has committed to, by 2024, having renewable energy generate 20% of our total electricity usage. This project will generate close to 30% of our electricity use from locally generated solar power.



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- Using the U.S. EPA greenhouse gas equivalency calculator, we estimate this project will reduce our greenhouse gas emissions by 24,393 metric tons of Carbon Dioxide Equivalent in the first year and a total of 536,613 metric tons of Carbon Dioxide Equivalent over the life of the project.

### **Fiscal Impact**

The power purchase agreement creates no additional capital expenditure, in fact, the nature of a power purchase agreement is such that the vendor is responsible for the capital costs related to the installation. Additionally, we will see long term operating budget savings.

The County's estimated savings are calculated in the following way:

County's current electricity supplier is \$0.075/kWh

PPA rate is \$0.07391/kWh

$\$0.075 - \$0.07391 = \$0.00109$

The solar projects built through the PPA are expected to generate approximately 34,500,000 kWh per year.

$34,500,000 \times \$0.00109 = \$37,605$

The term of the agreement is 25 years and we estimate about 1% degradation per year

Additionally, the agreement includes an annual payment to the County of \$15,000 to cover the costs of renewable energy credits

Estimated total savings = \$1,202,310

Please note that these amounts are estimates and are subject to change based on the actual generation of the solar facilities.