THE PRINCE GEORGE'S COUNTY GOVERNMENT

Office of Audits and Investigations

June 26, 2019

MEMORANDUM

TO: Robert J. Williams, Jr.
Council Administrator

William M. Hunt
Deputy Council Administrator

THRU: David H. Van Dyke DHV
County Auditor

FROM: Josh Hamlin
Senior Policy Analyst

Inez N. Claggett INC
Senior Legislative Auditor

RE: Policy Analysis and Fiscal Impact Statement
CB-28-2019 Energy Conservation Real Property Tax Credit

Legislative Summary

CB-28-2019, sponsored by Councilmembers Glaros, Anderson-Walker, Davis, Dernoga, Franklin, Harrison, Ivey, Streeter, Taveras and Turner, was presented on June 4, 2019. CB-28-2019 would double the maximum total dollar amount of tax credits granted for the purchase of solar or geothermal energy conservation devices under Section 10-235.06 of the County Code, from $250,000 per year to $500,000 per year.

Background/Current Law

CB-11-2008 added Section 10-235.06 to the County Code, creating a new real property tax credit for residential homeowners who utilize solar or geothermal energy conservation devices. The tax credit is the lesser of 50% of eligible costs, or $5,000 for a heating system or $1,500 for a hot water supply system. Eligible costs are those incurred within the 12 months before the initial application for the credit, the cost for the solar energy or geothermal energy device including any parts, components, or accessory equipment necessary to operate the device, and reasonable costs associated with installing the device. The amount of the tax credit cannot exceed the amount of the County's property tax imposed on the property in the tax year.

The total credit amount may not exceed $250,000 per fiscal year and is granted in the order in which the Office of Finance receives the completed applications. Eligible applications exceeding the annual maximum amount of $250,000 will be granted in the next fiscal year or years and in the order received.

CB-77-2012 amended Section 10-235.06 to make homeowners who enter into a Solar Power Purchase Agreement (PPA) eligible for a real property tax credit. A PPA is an agreement in which a third-party owns, operates and maintains the photovoltaic (PV) system, and a host customer agrees to site the system on its roof or elsewhere on its property and purchases the system's electric output from the solar services provider for a predetermined period. The tax credit granted for a PPA is capped at $1,000, and the total amount of these credits must not exceed $100,000 per fiscal year.

Resource Personnel

Council District 3 Staff

Assumptions, Methodology, and Policy Analysis

CB-28-2019 proposes to increase the maximum total dollar amount of tax credits granted for the purchase of solar or geothermal energy conservation devices under Section 10-235.06 of the County Code, from $250,000 per year to $500,000 per year. Since the second year of implementation of this credit, eligible applications for the credit have exceeded the $250,000 maximum, resulting in a waiting list, or backlog, that extends to FY 2030.

Other County Solar Tax Credits in Maryland

Five other Maryland Counties have instituted some form of property tax credit for residential solar energy device installations. Both Howard and Montgomery County froze their programs in 2011. The other Maryland County programs are as follows:

- *Anne Arundel County (§4-2-313. Solar Energy).* Tax Credit is the lesser of:

  (1) Fifty percent (50%) of the cost of materials and installation or construction of the solar energy equipment, less the amount of federal and State grants or State solar energy tax credits; or
  (2) $2,500.

  No specific credit for PPAs. No limit on the annual total of all credits granted.

- *Baltimore County (§ 11-2-203.3. Property Tax Credit for Energy Conservation Devices).* Tax credit is the lesser of:

  (1) 50% of eligible costs; or
  (2) $5,000 ($1,500 for hot water).

  No specific credit for PPAs. Maximum of $750,000 in credits granted per fiscal year.

NOTE: Allocated budget for these credits has been met. New applications will be placed on a wait list that extends to at least July 2024.[1]

- *Harford County (§ 123-44. Credit for qualifying energy conservation devices).* Tax credit is "the lesser amount of up to a maximum of $2,500 per qualifying conservation energy device for the cost of materials and installation or construction of either the solar energy device or geothermal energy device . . ."

  No specific credit for PPAs. Maximum of $500,000 in credits may be granted in any one year.

- *Howard County (§ 20.128A. Qualifying energy conservation devices).* Tax credit is the lesser of:

  (1) 50% of eligible costs; or
  (2) $5,000 ($1,500 for hot water).

  No specific credit for PPAs. Maximum of $500,000 in credits granted per fiscal year.

  NOTE: In 2011, Howard County (CB-21-2011) doubled the maximum ($250K to $500K) of the credit, and set out uncodified provisions that state that the credit shall not be granted for applications received after May 25, 2011 unless the property owner: (1) on or before May 25, 2011, enters into a contract for eligible costs; (2) applies for the credit on or before April 1, 2012; and (3) is determined by the Department of Finance to be eligible to receive the credit.

- *Montgomery County (§ 52-104. Property tax credit — renewable energy).* Tax credit is the lesser of:

  (1) 50% of eligible costs; or
  (2) $5,000 ($1,500 for hot water).

  No specific credit for PPAs. Maximum of $400,000 in credits for solar and geothermal energy devices granted per fiscal year. ($100,000 for other energy conservation devices).

  NOTE: Solar/Geothermal credit halted effective November 2011. The law provides that no credit can be granted for a solar or geothermal energy device with an application received after November 8, 2011, unless an individual: (1) enters into a contract for eligible costs on or before November 8, 2011; and (2) applies for the credit on or before November 8, 2012.

Prince George's County Backlog

According to the Office of Finance, the average annual number of applicants for the credit over the past four years is 147 (FY16 - 156; FY17 - 133; FY18 - 162; FY19 (est) - 138). The current funding level is $250,000. Under CB-28-2019 as presented, increasing the maximum funding level to $500,000 would reduce the existing backlog from FY30 to FY25; however, a backlog would continue to grow if more than 100 applications are approved annually.
For comparison:

- $750,000 would reduce the backlog from FY 30 to FY 23; backlog would continue to decline if average is not exceeded; and

[1] https://www.energy.gov/savings/baltimore-county-property-tax-credit-solar-and-geothermal-devices

- $1,000,000 would eliminate the backlog by FY 22; would overfund the credit thereafter if average applicant level is maintained.

The County's PPA credit is nearly completely unsubscribed, with credits over the last four fiscal years as follows:

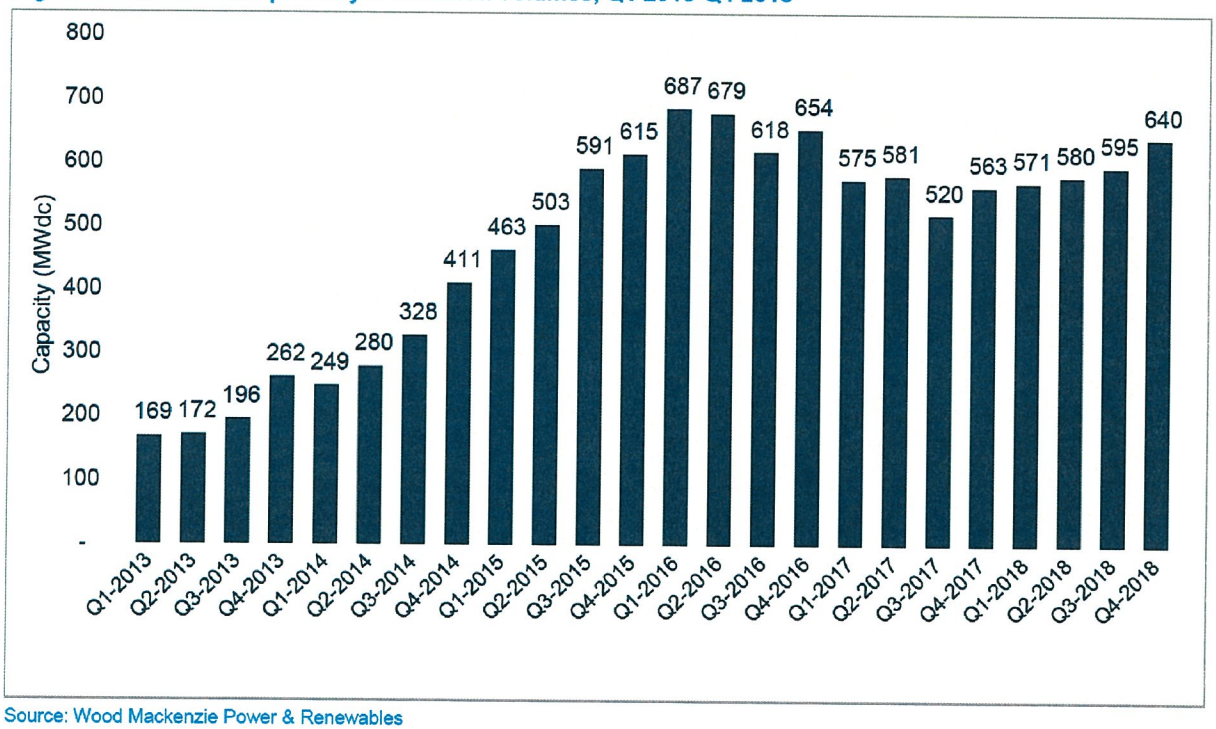
FY16 – 2 credits - $2,000 (Districts 1, 5)
FY17 – 1 credit - $1,000 (District 1)
FY18 – 1 credit - $1,000 (District 4)
FY19 – 1 credit - $1,000 (District 4)

Residential solar industry trends

Installation volume:

- After experiencing volume contraction in 2017, the residential solar market regained its footing in 2018 with steadily increasing installation volumes. The fourth quarter of 2018 was the largest quarter for the residential segment in two years. Five quarters of modest growth now suggest the market is adopting a more sustainable growth profile with a mix of local and regional installers operating alongside national installers.[2]

Figure 1.2 Residential quarterly installation volumes, Q1 2013-Q4 2018



Source: Wood Mackenzie Power & Renewables

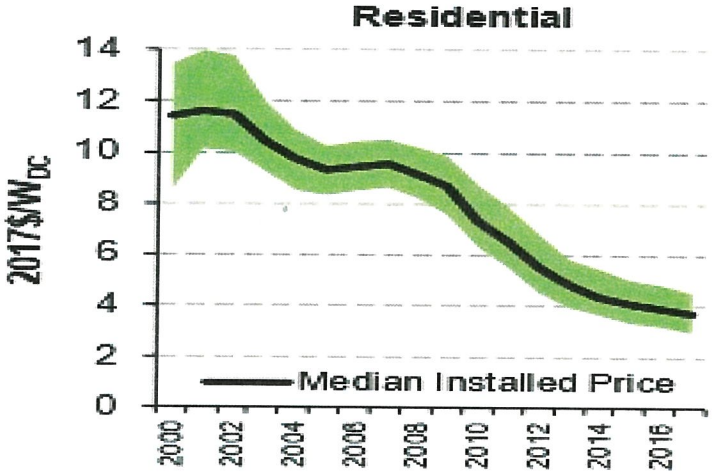
Wood Mackenzie POWER & RENEWABLES SEIA Solar Energy Industries Association® ©2019

[2] *Solar Market Insight Report 2018 Year In Review – Executive Summary.* https://www.seia.org/research-resources/solar-market-insight-report-2018-year-review

- Maryland was one of the top five *residential*[3] markets in 2017, but installations declined in 2018. However, the State remains in the top 10 both by capacity and market penetration.[4]

Installed prices:

- National median installed prices in 2017 were $3.7/W for residential systems, and have fallen dramatically over time. Over the full duration of the available time series, median installed prices for residential systems fell by roughly 6% per year on average. The trajectory, however, has not been smooth. Prices fell rapidly in the early years through 2004, followed by little price movement over the 2004-2008 period, and then a resumption of price declines in 2009. Price declines from 2009 were initially quite steep—falling by roughly $1/W each year, on average, over the 2009-2013 period—but have tapered off considerably since then.[5]



Note: Solid lines are median prices, and shaded areas are 20th-to-80th percentile ranges.

- Financial incentives provided through utility, federal, state and local programs have been a driving force for the PV market in the United States. These incentives have declined steadily and significantly over the past decade across the individual state markets. This continued ratcheting-down of incentives is partly a response to the steady decline in the installed price of PV and the emergence of other forms of financial support. At the same time, *incentive declines have also likely helped to motivate further cost and price reductions*. The continued ratcheting down of incentives has thus likely been both a cause and an effect of long-term installed price reductions.[6]

---

[3] While ranking very high in the residential market, Maryland lags in nonresidential solar installation. See *Tracking the Sun . . .*, note 6 below.
[4] See *Solar Market Insight Report, supra* note 3.
[5] *Tracking the Sun - Installed Price Trends for Distributed Photovoltaic Systems in the United States - 2018 Edition.* https://emp.lbl.gov/sites/default/files/tracking_the_sun_2018_edition_final_0.pdf
[6] *Id.*

Fiscal Impact

- Direct Impact

  Enactment of CB-028-2019 as proposed would have a negative fiscal impact on the County.

- Indirect Impact

  Enactment of CB-028-2019 as proposed may also have an unpredictable economic effect on the County which may result in, or contribute to, a fiscal impact in the future.

Appropriated in the Current Fiscal Year Budget

The proposed additional $250,000 in credit was not adopted within the Fiscal Year 2020 Operating Budget.

Issues for Committee Consideration

Other counties' tax credits:

- The only jurisdictions that continue to offer credits without a backlog are Anne Arundel and Harford County, both of which cap the credit at $2,500 (compared to the $5,000 cap in Prince George's County.
- Two Counties, Howard and Montgomery, discontinued the credits after amassing a substantial backlog.
- Baltimore County continues to accept applications, but even with an annual cap on total credits of $750,000 (compared the $250,000 annual cap in Prince George's County) has a wait list that extends to at least FY2025.

Residential solar industry trends:

- Maryland is a national leader in residential solar installations.
- The residential solar market is approaching maturity and is adopting a more sustainable growth profile.
- Consistent with the maturing market, prices for residential installations have fallen dramatically over the last 10 years. Recent trends are generally consistent with the pace of price declines since 2014, slowing from the years immediately preceding (2009-2013) when prices fell steeply.

Reducing the County tax credit backlog:

- Prince George's County has a substantial backlog of eligible applications for the tax credit for the purchase and installation of solar equipment.
- This backlog could be reduced by:
  (1) Increasing the annual maximum total amount of credits from the current $250,000;
  (2) Reducing the maximum amount of each credit from the current $5,000;
  (3) Eliminating the credit beginning in FY 2020; or
  (4) Some combination of the above.

- The solar power purchase agreement (PPA) credit offered by the County is virtually unused, and the $100,000 per year allocated to it could be shifted to the purchase/installation credit if the PPA credit is eliminated.

Increasing the maximum annual total of credits as proposed in CB-28-2019 would speed up the elimination of the existing backlog, but would not prevent a new one, assuming applications continue near the current rate. If the maximum per-household credit is reduced to $2,500 beginning in FY20, the backlog would be unchanged at the funding level ($250,000 per year). However, the backlog would not continue to grow if the average number of applicants (147) does not increase. Further:

- Increasing the annual funding level to $500,000 (as is proposed in CB-28-2019) would reduce the backlog from FY30 to FY25 and would overfund the credit thereafter if the average applicant level is maintained.
- Increasing the annual funding level to $750,000 would reduce the backlog from FY30 to FY23; would overfund the credit thereafter if the average applicant level is maintained.
- Increasing the annual funding level to $1,000,000 would eliminate the backlog by FY22; would overfund the credit thereafter if the average applicant level is maintained

If the credit is eliminated altogether beginning in FY20, nothing changes about the backlog reduction at the various funding levels:

- $500,000 would reduce the backlog from FY30 to FY25
- $750,000 would reduce the backlog from FY30 to FY23
- $1,000,000 would eliminate the backlog by FY22
- $2,700,000 would fund the entire waitlist in FY20

Effective Date of Proposed Legislation

Forty-five (45) calendar days after it becomes law.

If you require additional information, or have questions about this fiscal impact statement, please call me.