T&E/GO COMMITTEE #1
October 14, 2019

Briefing

MEMORANDUM

October 9, 2019

TO: Transportation, Infrastructure, Energy and Environment (T&E) Committee
Government Operations & Fiscal Policy (GO) Committee

FROM: Keith Levchenko, Senior Legislative Analyst

SUBJECT: **Briefing: Property Tax Credit - Energy & Environmental Design**[1]

The following officials and staff are expected to attend this briefing:

- **Executive Branch Staff**
  - Adriana Hochberg, Assistant Chief Administrative Officer (and Director of County Climate Policy)
  - Stan Edwards, Chief, Environmental Policy and Compliance, Department of Environmental Protection (DEP)
  - Lindsey Robinett Shaw, Energy and Sustainability Programs Manager, DEP
  - Mark Nauman, Senior Specialist, Energy & Green Building, Department of Permitting Services (DPS)
- **Stakeholder Work Group Members**
  - Jonathan Bauer, LEED AP® O+M, Fitwel Ambassador, Sustainability Manager, The Tower Companies
  - Mike Babcock, CEM, LEED AP BD+C, O+M, Sustainable Building Partners
  - Chet Knaup, PE, LEED AP BD+C, BEMP, General Manager, SPECTRUM ENERGY, LLC

Attachments to this memorandum include:

- County Executive Transmittal Letter (©A)
- Stakeholder Work Group Report (©B-26)

NOTE: DEP's Presentation Slides for the briefing will be forwarded to the Committee when received.

On October 14, the Joint T&E/GO Committee will receive a briefing from DEP staff on the Stakeholder Work Group's "Recommendations on Montgomery County High-Performance Building

[1] Key words: #EnergyEfficiency, Property Tax Credit, Green Buildings

Incentives" Report, as well as the Executive's comments. Several Stakeholder Work Group members will also be available to discuss the Work Group's recommendations.

In March 2018, the Joint T&E/GO Committee under the prior Council requested that the Executive convene a stakeholder work group to discuss whether the current property tax credit for energy and environmental design is still needed and, if so, what changes to the credit should be made. An update on the work group's progress was provided to the Joint Committee on July 19, 2018.[2]

The Work Group[3] first met in April 2018. The Work Group's report was completed in March 2019. On June 19, the Executive transmitted the Work Group report to the Council, along with his recommendations.

Other County Green Building Incentives

In addition to the property tax credit up for discussion by the Joint Committee, the County currently provides a residential building property tax credit of up to $250 per property per year for eligible conservation devices/improvements. Total credits awarded annually are capped at $100,000.

The County used to have a larger tax credit (up to $5,000 per project, with total credits capped at $400,000 per year) for residential solar and geoexchange systems. This program was closed to new applicants in FY12 due to oversubscription.

At its July 2018 meeting, the Joint Committee under the prior Council expressed support for incentivizing residential green buildings or high-performance homes. DEP staff noted at the time that a separate stakeholder work group was working on that topic.

Property Tax Credit – Energy & Environmental Design Background

Since 2004, the State of Maryland has allowed local governments to provide tax credits for high performance buildings (Md Code: Property Tax Section 9-242). The County's current property tax credit dates to 2007 with the passage of Bill 37-06 (Property Tax Credit – Green Buildings).

The County's credit program is administered by the Department of Finance. Eligible new high-performance buildings can receive tax credits for 5 years. Eligible existing high-performance buildings can receive credits for 3 years.

The credit is linked to the Leadership in Energy and Environmental Design (LEED) Green Building rating system. This rating system includes criteria related to sustainability of a site, water efficiency, energy efficiency, materials, and resources, and indoor environmental quality. Newly

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[2] Prior T&E/GO Joint Committee Council Staff reports on this issue are available for download at:

- September 14, 2017: https://montgomerycountymd.granicus.com/MetaViewer.php?view_id=169&clip_id=13770&meta_id=142847
- March 8, 2018 https://montgomerycountymd.granicus.com/MetaViewer.php?view_id=169&clip_id=14689&meta_id=150477
- July 19, 2018: https://montgomerycountymd.granicus.com/MetaViewer.php?view_id=169&clip_id=15322&meta_id=160028

[3] For a list of organizations represented on the Work Group, please see Appendix B of the Work Group report on ©26.

constructed or extensively modified non-residential or multi-family residential buildings are eligible as shown in the charts below:

Current Property Tax Credit for Energy and Environmental Design

"Covered"* Buildings	LEED	Credit	Duration
New Buildings	Gold	25%	5 Years
	Platinum	75%	5 Years
Existing Buildings	Gold	10%	3 Years
	Platinum	50%	3 Years

*=>10,000 sq/ft gross floor area

Other Buildings	LEED	Credit	Duration
New Buildings	Silver	25%	5 Years
	Gold	50%	5 Years
	Platinum	75%	5 Years
Existing Buildings	Silver	10%	3 Years
	Gold	25%	3 Years
	Platinum	50%	3 Years

The County law limits the total value of credits provided annually to $5.0 million. Of that total, a maximum of $1.5 million can be provided annually to LEED silver or equivalent buildings and a maximum of $2.5 million can be provided annually to LEED gold or equivalent buildings. Projects that do not receive their full credit in a given year because of the cap are eligible to receive the balance of their credit in the next year.

The Stakeholder Work Group report (see ©3) notes that since its inception in March 2008 through calendar year 2018, a total of $33.4 million in tax credits was awarded across 62 applications. The annual $5.0 million cap was first reached in 2016 and then again in 2017 and 2018.

Reconsideration of the Current Tax Credit

In September 2017, the Council adopted the International Green Construction Code (IgCC) 2012, and Executive Regulation 21-15 AMII (which implemented the new code) became effective in December 2017. This code makes mandatory many elements covered in LEED certification. Since the intent of the property tax credit was to incentivize high-performance buildings that go beyond code requirements, the Joint Committee asked Executive staff to revisit the property tax credit's need and requirements.

At the Joint Committee's July 19, 2018 meeting, the Committee concurred with the following general policy priorities that the Stakeholder Group should seek to follow in its recommendations:

- Tax expenditures (i.e., the tax credit) should be provided for buildings that exceed the requirements of the new code.
- Tax credit eligibility should be adjusted as new versions of the IgCC are adopted (i.e., buildings need to exceed current standards to be eligible).
- As noted earlier, tax credits or other programs should incentivize residential green buildings or high-performance homes (not just commercial and multi-family buildings). *NOTE: DEP has noted that this work is being done via a separate stakeholder work group.*
- The credit should be aligned with the County's climate goals by shifting the focus from building certification to energy and/or greenhouse gas reductions.

Stakeholder Work Group Report

DEP staff will provide a summary of the Work Group report and its recommendations. Below are some key points.

New Tax Credit Structure

The Stakeholder Work Group recommends a 2-tier credit for new construction and a separate 2-tier credit for existing buildings (see ©13 and ©15 for summaries of both credits). For both types of buildings, the first tier focuses on energy reduction, with credits based on achieving energy performance goals. This approach would better align the tax credit with the County's greenhouse gas reduction efforts; a priority identified at the July 19, 2018 Joint Committee meeting.

For new construction, energy performance must be at least 10% above code (with the credit increasing at higher levels of performance above code). The second tier (which is only applicable when the applicant is eligible for credit under the first tier) requires a LEED Gold (25% credit) or LEED Platinum certification (75% credit) or equivalent.

For existing buildings, energy reductions must be demonstrated using ENERGY STAR Portfolio Manager, with the credit being higher for properties that obtain higher ENERGY STAR Score tiers. Like the new construction credit, the second tier is only applicable when the applicant is eligible for credit under the first tier. LEED Gold (25% credit) or LEED Platinum certification (50% credit) or equivalent is required.

The maximum total credit across both tiers is capped at 100%. Credits for new construction would be for four years (with a fifth year available for buildings that achieve "Living Building Certification.")[4] Credits for existing buildings would be for two years.

The Stakeholder Work Group recommended there be no overall cap in credits awarded annually for new construction projects, since these projects are increasing the County's accessible base. For existing buildings, where the County's accessible base may not be increased, the Work Group felt a cap was appropriate but that the cap should keep pace with inflation and/or be revisited on a regular cycle.

The Joint Committee may want to hear from DEP and the Stakeholder Work Group members regarding how the Work Group came to its recommendations regarding the eligibility criteria, level of credit to provide, the duration of the credit, etc.

Based on the Stakeholder Work Group's review of incentives provided by other jurisdictions (see ©7-9), high performance building tax credits are common in the region and throughout the country. However, most of these tax credits focus on 3rd party certification such as LEED for eligibility (like the County's current tax credit).

Also, given that the Departments of Permitting Services and Finance had representatives on the Stakeholder Work Group, Council Staff assumes that implementation/verification issues regarding the tax

[4] NOTE: given the four (or five) year timeframe for new construction property tax credits, the Council may want to consider whether additional energy intensity use verification is required during the multi-year credit period.

credit have been addressed. However, the Joint Committee may wish to hear from Executive Branch staff to affirm that the Stakeholder Work Group recommendations are feasible to implement.

High Performance Residences

As noted earlier, the current credit is limited to commercial and multi-family buildings. At its July 2018 meeting, the Joint Committee supported further exploration in providing tax credits or other incentives to other residential properties.

The Stakeholder Work Group report notes that this issue is under consideration under a separate review process by Executive staff, given the different stakeholders involved with this building type. Single-family residential homes are not eligible under the County's current credit since the State enabling law did not allow credits to single-family residential buildings at the time the County credit was created. The Executive has formed a separate Stakeholder Work Group to look at the issue of providing tax credits for high-performance single-family homes. DEP staff can provide an update on the status of this effort.

Other Incentives to Consider

The Work Group report (see ©20) also suggests a pilot program be considered for buildings that have never been benchmarked in ENERGY STAR Portfolio Manager and are not covered under the County's Building Energy Benchmarking Law (i.e. below 50,000 square feet). This program would provide a one-time incentive (the report suggests a $500 to $1,000 rebate) to encourage property owners to benchmark their buildings and disclose benchmarking data to the County.

Another option that has come up in prior discussions with DEP would be to amend the benchmarking law to lower the building size threshold and thus have more buildings required to benchmark and report to the County.

Sunsetting of the Existing LEED Building Incentive

The Stakeholder Work Group Report recommends phasing out the current property tax credit (assuming the new credit program is adopted) such that property owners who have made construction and business decisions based on the current tax credit should be allowed to proceed under the existing LEED building incentive. ©21-22 includes recommendations for how to phase out the current program.

Executive Recommendations

In his transmittal letter (see ©A) the County Executive expresses support for the Stakeholder Work Group's recommendations, except regarding the elimination of the annual cap for new construction. The Executive recommends an annual cap of $3.0 million total for both new construction and existing buildings. He also suggests reallocating $1.0 million from the tax credit program to climate initiatives beginning in FY21.[5]

[5] Since the tax credits provided annually are a "tax expenditure" or "foregone income", it is unclear how the County would formally reallocate expenditures from projected increased revenue that is obtained through a lower cap on this tax credit.

Next Steps

State Authorization

The Stakeholder Work Group report notes that the new incentives proposed appear to be unique in the State of Maryland. While arguably consistent with the intent of existing State law regarding providing property tax credits for high performance buildings, the report suggests that the County seek clarification from the State as to whether the new property tax credits would be acceptable under current State law.

Climate Change Planning

This past summer, the County Executive initiated a comprehensive climate planning effort with three technical workgroups (Clean Energy, Buildings, and Transportation), including environmental experts and advocates with staff support from DEP. These groups are developing recommendations that will be further studied and prioritized with consultant support.

The property tax credit for energy and environmental design certainly fits within the scope of issues being reviewed by the Buildings Technical Work Group in the County's Climate Change planning effort. In fact, the changes to the proposed tax credit would focus the credit more on energy performance, which would better align this credit with the County's greenhouse gas reduction efforts, as the Joint Committee sought.

However, from a process standpoint, the Council will need to consider whether it wants to give the County Executive's climate planning effort more time to prioritize potential greenhouse gas reduction actions or if it is comfortable moving forward to change the current property tax credit.

County Legislation Required

If the Council wishes to implement changes to the current property tax credit, local legislation will be needed since the current law specifically lays out eligibility requirements, the amount and duration of the credit, and annual caps on the total amount of credits that can be awarded. Other issues, such as the grandfathering of projects under the current tax credit and potential changes to the County's energy benchmarking law, will also involve legislative changes.

Attachment

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OFFICE OF THE COUNTY EXECUTIVE
ROCKVILLE, MARYLAND 20850

Marc Elrich
County Executive

June 19, 2019

Council President Nancy Navarro
Councilmember Tom Hucker
Council Office Building
100 Maryland Avenue
Rockville, Maryland 20850

Dear Council President Navarro and Councilmember Hucker:

As requested by the County Council T&E and GO Committees in 2018, the Executive convened a Stakeholder Work Group to discuss whether the current Property Tax Credit for Energy and Environmental Design is still needed and what a new program might look like. A revision of the tax credit is necessary following the adoption of the International Green Construction Code (IgCC). The current green building tax credit incentive structure for commercial buildings no longer acts as an incentive, as a building owner can earn a tax credit while meeting code for certain buildings.

The Commercial/Multi-family Stakeholder Work Group convened from March to December 2018, developed recommendations, and issued a report to the Executive in March 2019, which is included in this transmittal. The Executive supports the Work Group's recommendation to restructure the green building tax credit program using energy efficiency as the primary attribute necessary to unlock tax credit incentives. This new structure, focused on energy efficiency first, is a tool that will drive developers towards more energy efficient and sustainable buildings.

The Executive disagrees with only one of the Work Group recommendations in the report, regarding the annual incentive cap. In the current green building tax credit program, there is $5 million annual maximum cap. The Work Group recommended that there should be no annual incentive cap on new construction—at least initially to better inform a cap amount—and a revised cap that keeps pace with inflation for existing buildings. Because tax credits translate into fewer County taxes collected to pay for needed services, the Executive recommends a new, lower annual cap be set at $3 million for both new construction and existing buildings. In addition, and in support of the County's climate planning efforts, we will reallocate $1 million from the County green building tax credit program to fund climate initiatives, beginning in FY21. The specific initiatives to be funded with the $1 million will be defined in the Climate Action Plan, which is currently under development.

Sincerely,

Andrew Klein for

Marc Elrich
County Executive

ME:AH

(A)

FINAL

Recommendations on Montgomery County High-Performance Green Building Incentives

REPORT BY COMMERCIAL/MULTIFAMILY STAKEHOLDER WORK GROUP
MARCH 2019

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Executive Summary

This report details recommendations developed by key stakeholders in the commercial building sector for a revised green building incentive for newly constructed and existing commercial and multifamily buildings. The stakeholders reviewed the uptake of Montgomery County's current green building incentive, evaluated green building incentives in other jurisdictions, and developed an innovative incentive model that would encourage the construction of new buildings that perform better than building code and spur energy improvements in existing buildings.

The design of this incentive structure embodies the spirit of the ambitious greenhouse gas (GHG) emissions reduction goals in the County Council's Climate Emergency resolution, rewards deep energy savings as well as whole-building sustainability, and builds awareness in existing building owners who may have been overlooking the importance of energy conservation.

As this report details, the stakeholders believe this balanced incentive approach—paired with other County energy programs, incentives, and financing options—will maintain Montgomery County's leadership in the sustainability space while bolstering our economic base with greener commercial building stock. The stakeholders look forward to continued conversations with the Montgomery County Council on this important issue.

Background

Montgomery County, Maryland is home to more than 6,000 commercial and multifamily properties covering more than 295 million square feet of rentable building area. The county's commercial building stock is primarily made up of general retail, office, and multifamily buildings (by total number and rentable square footage; see Appendix A).[1]

The County's 2006 Green Building Law required all privately-owned newly constructed or extensively modified non-residential or multifamily residential buildings that were at least 10,000 gross square feet to achieve a minimum of LEED Certified or equivalent. County buildings of this size were required to be LEED Silver or equivalent.

In 2007, the County created a high-performance building incentive program that provides property tax credits for newly constructed and existing buildings that achieve LEED certification above and beyond code (Property Tax Credit – Energy and Environmental Design). This tax credit incentive is authorized under Maryland state law, which allows counties to credit county property taxes for high performance buildings (MD Tax-Prop Code § 9-242). Depending on the characteristics of the building and LEED level achieved, the County provides a property tax credit from 10% to 75% over 3-5 years per building, with a maximum amount of $5 million distributed annually.

Since the establishment of this tax credit program in March 2008, the County has provided nearly $33.4 million in property tax credits *(with another $1.8 million allocated for levy year 2019 for buildings in the queue)*.[2] See summary table below:

Montgomery County Property Tax Credit Awarded for						
Levy Year	**Number of New Applications Received**	**Total Number of Projects Receiving Funds Each Year**	**LEED Silver**	**LEED Gold**	**LEED Platinum**	**Total Credit Amount Provided**
2009	8	8	$ 178,068.47	$ 523,326.41	$ 594,282.16	$ 1,295,677.04
2010	3	11	$ 161,732.06	$ 738,786.20	$ 607,048.25	$ 1,507,566.52
2011	4	15	$ 218,507.75	$ 810,213.56	$ 688,502.81	$ 1,717,224.12
2012	15	24	$ 89,213.38	$ 2,004,958.50	$ 827,886.97	$ 2,922,058.85
2013	8	32	$ 226,531.77	$ 2,490,606.80	$ 1,219,915.95	$ 3,937,054.52
2014	1	28	$ 167,886.52	$ 2,424,345.87	$ 871,301.11	$ 3,463,533.49
2015	11	25	$ 149,044.92	$ 2,544,762.75	$ 841,185.42	$ 3,534,993.09
2016	4	23	$ 114,604.33	$ 2,479,096.03	$ 2,406,299.64	$ 5,000,000.00
2017	8	19	$ 112,384.39	$ 2,117,885.64	$ 2,769,729.97	$ 5,000,000.00
2018	22*	7	$ 103,001.16	$ 291,207.46	$ 4,605,791.38	$ 5,000,000.00
TOTAL	**62**	-**	**$ 1,520,974.75**	**$ 16,425,189.21**	**$ 15,431,943.65**	**$ 33,378,107.62**

[1] Source: CoStar Commercial Real Estate Information Company. Data accessed May 2018.

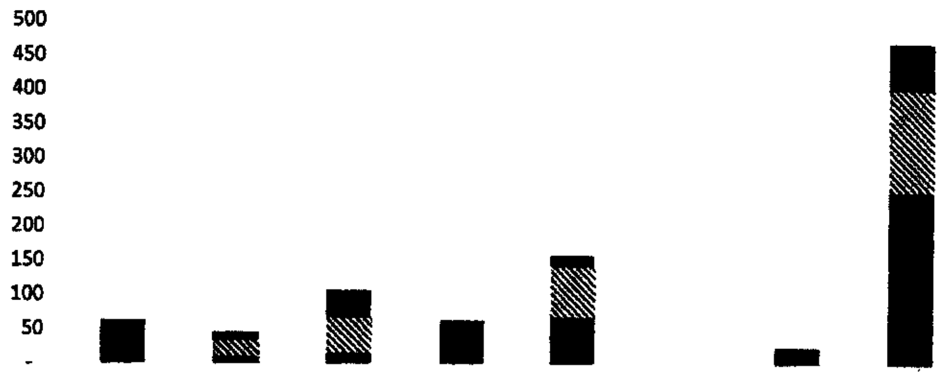
[2] The Montgomery County Department of Finance Treasury Division provided the above property tax credit data most recently on October 25, 2018.

*This number represents the total applications received by the County that are waiting in the queue for funds to be allocated to the building owner.

**This column provides insight into how many properties were receiving payment of the property tax credit each year. Because the credit for some buildings was paid out over multiple years, totaling this column would double-count properties and present a misleading figure about the number of properties that received a green building tax credit.

Comparison of LEED Certified Projects in Montgomery County, MD

All LEED Projects vs. LEED Projects Eligible for Tax Credits



	LEED-CI	LEED-CS	LEED-EB	LEED-HOMES	LEED-NC	LEED-ND	LEED-SCHOOLS	Total LEED Buildings
■ Applied for CountyTax Credit (Received or in Queue)		11	40		17			68
▧ Eligible for Tax Credit		24	51	1	74			150
■ Not Eligible for Tax Credit	64	11	17	64	68	1	26	251

Notes: A handful of buildings in Montgomery County have achieved multiple LEED certifications, as a building can receive LEED certification at different points during the construction and ongoing operations of the building. For example, a commercial building can get LEED certified under the core & shell (LEED-CS), new construction (LEED-NC), and existing buildings (LEED-EB) certifications, and tenants of the building can pursue the commercial interiors (LEED-CI) certification.

LEED-HOMES can include low- and mid-rise multifamily buildings as allowed by USGBC. The majority of LEED-HOMES certified buildings in the County are single-family homes.

Since 2008, LEED certification has grown to become synonymous with green building, and the commercial real estate market often demands LEED certifications due to financial requirements, owner sustainability initiatives, and tenant preference. Over time, additional green building certifications have also gained recognition in the commercial building marketplace. Montgomery County spurred green building innovation with this LEED-certification-focused property tax incentive and continues to build on that leadership in the commercial sector with the establishment of a Building Energy Benchmarking Law in 2014, creation of a Commercial Property Assessed Clean Energy (C-PACE) financing program in 2015, and development of the first local-level green bank financing organization in 2016.

In September 2017, Montgomery County adopted the International Green Construction Code 2012 (IgCC 2012, Executive Regulation 21-15 AMII) which became effective on December 1, 2017. The IgCC mandates many of the elements covered in LEED certification, such that LEED is often used as an alternative compliance path for meeting IgCC in local jurisdictions that have adopted the IgCC. Montgomery County's iteration of the IgCC also includes an alternative compliance path for non-residential commercials buildings if buildings achieve LEED Silver certification and a designated number of points in the Energy and Atmosphere category.

Under Montgomery County's current green building code and incentive program, select buildings (i.e., buildings 5,000 square feet up to 10,000 square feet) could both meet building code if using the LEED alternative compliance path and simultaneously be eligible for a green building property tax credit. In light of this, the Montgomery County Council's Transportation, Infrastructure, Energy and Environment (T&E) and Government Operations and Fiscal Policy (GO) committees started reviewing the green building tax credit program in September 2017. In March 2018, the T&E and GO committees directed the Executive Branch to convene a stakeholder work group to review the current green building incentive program and provide recommendations for a revised incentive structure. This report serves as the stakeholder work group's recommendations for Council consideration.[3]

Development of the Work Group

In April 2018, the Department of Environmental Protection (DEP) held a kick-off meeting for key stakeholders interested in developing recommendations for the County's green building incentives for commercial and multifamily buildings. DEP advertised this kick-off meeting in its various newsletters, as well as directly contacted stakeholders who were previously involved in DEP-led stakeholder work groups related to the County's benchmarking law and development of a County-level Green Bank.

Following the kick-off meeting, the work group established subcommittees to explore topics in-depth, including what other jurisdictions offer and technical elements of incentive options. As the conversation evolved, engaged stakeholders encouraged their peers and colleagues to attend meetings and provide their input. Organizations that were directly involved in the work group process are acknowledged in Appendix B.

Overarching Work Group Goals

During the kick-off meeting in April 2018, stakeholders determined the top priorities for the green building incentive to be:

1. Revise current LEED green building tax credit following the adoption of IgCC 2012 so that incentives are not given for buildings that meet code.
2. Shift primary incentive focus from building certification to energy and GHG reductions to align with the County's climate goals.

[3] The T&E and GO committees also requested that Executive staff engage single-family residential stakeholders about the possibility of offering an incentive for green single-family residential buildings. Due to the varied stakeholders and motivators between the commercial/multifamily and single-family residential sectors, recommendations for single-family residential high-performance building incentives will be presented in a separate report.

   a. Carbon and energy reductions are primary goals of the incentive recommendations. However, water efficiency, waste reduction, and stormwater management are also ancillary goals important to both the County and building owners.

3. Where feasible, ensure incentive programs adjust as building codes get more stringent so that incentives encourage buildings that exceed code requirements in effect when the building is built.

Review Process

The stakeholders developed recommendations through a series of 13 meetings over the course of eight months. Meeting times and information, agendas, notes, and evolving drafts of the incentives structure were distributed through the Commercial/Multifamily Stakeholders email list, which was administrated by DEP. The full work group met via webinar in early December 2018 to finalize the recommendations report; comments from this process have been incorporated into this final draft. Please note that participation in the process does not imply full stakeholder endorsement of any particular recommendation.

Montgomery County Government staff are incredibly grateful for the time, energy, and expertise the stakeholder work group provided during this process. Stakeholders not only brought their knowledge of the commercial building sector, but kept the goals of reducing GHG emissions and involving new building owners in the energy conversation at the forefront of each conversation. The work group members have contributed to an innovative proposal that meets the spirit of the County's declared climate emergency.

Other Factors in the Market

A variety of factors influence Montgomery County's green building market, in addition to the County providing green building incentives. These include:

- the state of the economy,
- energy prices,
- evolution of building codes
- advancements in green building standards,
- tenant awareness and demand for green buildings,
- available green building incentives from other sources, such as Federal and state programs, and utilities, and
- options for sustainably focused financing, such as C-PACE and the Montgomery County Green Bank.

Specific to the state of Maryland, Commercial Property Assessed Clean Energy (C-PACE) financing is available for local jurisdictions to enact at the local level. To date, 12 jurisdictions in the state have active Commercial PACE financing programs with five additional programs in development. The Maryland Energy Administration offers grants and financing to commercial building owners for energy efficiency and renewable energy projects. Maryland energy utilities also offer energy efficiency incentives through the EmPOWER Maryland program. The combination of utility incentives, grants, financing, and tax credits all contribute to the business case for commercial green buildings.

While Montgomery County's incentives may help the business case for constructing or renovating a sustainable building, these incentives alone are not the only motivator for building owners. Because of the uncertainty of how these factors interplay with one another, stakeholders found it challenging to pinpoint the exact dollar amount of incentive per project or the total amount that should be allocated to this program. Piloting this new incentive program with plans to revisit the structure, uptake, and allocated amount on a regular basis can help shape the success of this program.

Green Building Incentives in Other Jurisdictions

Before developing the revised green building incentive proposal, the work group reviewed existing green building incentives for the commercial and multifamily building sector in the state of Maryland and in other jurisdictions across the country.

At a high level, the incentives tend to be in one of three categories: subsidizing the cost of solar panel installation, driving demand for third-party green building certifications, and providing financial incentives for stretch codes that encourage going a percentage beyond current energy code. More specifically, some jurisdictions tie incentives to a per-kWh or per-kW savings for existing buildings to incentivize building performance over time. Other jurisdictions provide incentives for a building performing a percentage better than ASHRAE Appendix G. Other incentive programs reward building rating system certification with certain required credits (e.g., LEED Gold + commissioning prerequisites and at least one commissioning credit).

Maryland

The State of Maryland allows jurisdictions to provide property tax incentives for high performance buildings as defined by code [MD Tax-Prop Code § 9-242 (2016)] or energy conservation systems [MD Tax-Prop Code § 9-203 (2017)]. These can be used in conjunction with Federal investment tax credits for renewable energy systems (which is one element sustainable buildings likely include), as well as other incentives and financing options only available to sustainable buildings.

The following Maryland jurisdictions offer property tax credits for the commercial and multifamily building sector:

- **Baltimore County** offers 3-5-year property tax incentives for LEED Core and Shell, New Construction, and Existing Buildings certifications ranging from 10-80% based on the certification level achieved. Baltimore County also offers 5-year property tax credits for NGBS certified buildings ranging from 50-80% based on the certification level achieved. A dedicated low-interest loan program is also available for nonprofits and small businesses to make energy efficiency upgrades.

- **Carroll County** offers a 5-year property tax credit for LEED, Green Globes, or a county-recognized equivalent certification ranging from 25-75% based on the certification level achieved.

- **The City of Frederick** offers a 5-year property tax credit for certain LEED certifications (or equivalent standard) ranging from 25-75% based on the certification level achieved. For LEED Existing Building certifications or equivalent standard, buildings can earn a 3-year property tax credit ranging from 10-50% based on the certification level achieved.

- **Howard County** offers a 5-year property tax credit for LEED Core and Shell or New Construction certifications ranging from 25-75% based on the certification level achieved. For LEED Existing Building certifications, buildings can earn a 3-year property tax credit ranging from 10-50% based on the certification level achieved. There is also a separate, 3-year property tax credit for LEED certified buildings to offset the cost of energy conservation devices ranging from 14-20% based on the building certification level achieved.

- **Prince George's County** recently launched their ENERGY STAR® Certification and Green Leasing Grant Program for commercial and multifamily buildings, which provides grants up to $100,000 *(funded by the Pepco-Exelon merger)* for properties to earn and maintain a building's ENERGY STAR certification for 3 years, perform an energy audit, and initiate a green lease to promote energy efficiency practices.

Outside of Maryland

In addition to Maryland jurisdictions, stakeholders also found examples of green building incentives in other areas of the country. The most relevant or notable examples are listed below, highlighting the various *types* of incentives other jurisdictions offer for green commercial and multifamily buildings. The American Council for an Energy-Efficient Economy (ACEEE) provides a more comprehensive summary of goals, incentives, and requirements for sustainable buildings.[4]

- **Washington, DC** benefits from an extremely strong commercial building market—buildings usually command high rental rates and have low vacancies—and can mandate green building requirements more easily than other jurisdictions. As such, Washington, DC does not have a property tax credit for green building; any incentives for building upgrades are offered via the DC Sustainable Energy Utility (SEU).

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[4] ACEEE. Goal, Incentives, and Requirements for Energy Efficient Buildings. URL: https://database.aceee.org/city/requirements-incentives.

- In **Arlington, Virginia**, there is no monetary incentive for existing buildings, but a bonus density is provided for new development.
- **Charlottesville, Virginia** offers a reduced tax rate of 50% for one year if a building is built 30% better than existing code, or achieves certification under LEED or Green Globes. The city also offers a minimal incentive for solar installations and a reduced building permit fee for a green (solar or vegetative) roof.
- **Virginia Beach, Virginia** offers an unspecified reduction on building-only taxes (not the land or other improvements) for buildings that have achieve LEED, Green Globes, or ENERGY STAR certification, in addition to building 30% above state code.
- **Chicago, Illinois** *(a city with a building energy benchmarking program similar to Montgomery County)* offers expedited and possible reduced permitting fees for commercial buildings that have LEED certification along with a number of prescribed green menu features.
- **Cleveland, Ohio** offer tax abatement of up to 100% on the improvement value for LEED certified buildings.
- **Houston, Texas** provides a partial 10-year tax abatement ranging from 1-10% and expedited permitting to LEED-certified commercial buildings, as well as grants for energy retrofits.
- **New Mexico** offers a tax credit for LEED certified buildings, with a tax reduction on a tiered, per-square-foot basis. LEED Core and Shell, New Construction, Existing Buildings, and Commercial Interiors are included *(note: very few incentive programs include LEED Commercial Interiors as an eligible certification)*.
- **New York City, New York** *(where a rigorous building energy benchmarking program exists)* provides one-year tax abatement of $4.50 per square foot for green roofs and 5 to 8 ¾ percent tax relief for solar panel-related expenditures. New York State has authorizing legislation to provide significant tax credits for LEED and Green Globes certification—100% credit for the first 1-6 years based on the level achieved, and 20% each year after.
- **Toronto, Canada** has an innovative program that aims to overcome split incentives between developers and building tenants—the High Performance New Construction (HPNC) program offers up to $10,000 for modeling costs and $400-$800 for every kW in demand saved for building above Ontario Building Code requirements.
- **Boston, Massachusetts** has a number of green building requirements, and offers an innovative multifamily development opportunity. Boston donates city-owned parcels for affordable multifamily buildings (and gives subsidies to low-and-moderate income homebuyers) if the buildings are net-positive-energy buildings that are above LEED Platinum certification and supply excess energy to the grid. Some designated areas also give bonus density credits.

Proposed Recommendations on Revised Green Building Incentive

In line with the Council's climate emergency resolution, the stakeholder work group focused on GHG emission and energy reductions as key motivators for revised green building incentives. With commercial building energy use comprising more than 26% of the County's measured GHG emissions (based on 2015 data), improving the County's commercial building stock is a key strategy for achieving our climate targets.

In addition to meeting climate goals, the County's incentive program should also complement utility and state incentives and try to fill gaps where incentives do not exist or are minimal *(e.g., diminishing Federal tax credit for renewables, no incentives for solar besides financing, no water efficiency incentives)*. The proposal in this report is innovative while being realistic of our region's business climate, complementary to existing programs, and inclusive without being too generous with public dollars.

With this in mind, the stakeholder group developed a two-tiered incentive structure that offers County property tax credits for energy performance and whole-building sustainability:

- **1st Tier**: Buildings must achieve a measurable reduction in energy use to earn an incentive. This is demonstrated through a building modeling software approved by the Department of Permitting Services (DPS) that building owners already use as part of the permitting process, or by the ENERGY STAR Portfolio Manager tool.
- **2nd Tier**: Buildings can earn an additional credit by achieving a certain level of a third-party-verified sustainable building certification that exhibits sustainable building features beyond energy performance.

For each tier, the greater the performance or level of certification, the higher the incentive. Sustainable building certifications are still relevant market differentiators, but energy reductions are the primary metric used in the incentive program proposal.

Ongoing Review of the Incentive Program

Stakeholders also have a strong recommendation for regularly revisiting the incentive structure to ensure that it continues to meet the County's program objectives, provides practical motivation for building and upgrading green buildings, and produces measurable GHG emissions savings. As building codes are adopted on a 3-year cycle, the stakeholders encourage a reconvening of this work group on a similar 3-year cycle following adoption of green building or energy-related building codes.

This regular work group convening will evaluate the effectiveness of the program, provide Council with updates on the commercial and multifamily building market, and ensure transparency of the incentive process for planning purposes. These opportunities to revisit the incentive structure will continue this ongoing conversation about how the County's commercial building industry can support the County's climate goals.

Building Definitions

The following definitions help categorize whether a building is eligible for the New Construction incentive track or the Existing Building incentive track. ASHRAE 90.1 defines Existing Buildings as a building or portion thereof that was previously occupied or approved for occupancy by the authority having jurisdiction. As such, the Montgomery County green building incentive program seeks to offer additional clarification to ensure building owners follow the appropriate program between New Construction and Existing Buildings. If a project meets both conditions (e.g., major restoration of an existing building to a new building type), then the applicant should follow the New Construction program.

- New Construction Definition - A building that has completed construction such that the contractor has achieved the equivalent of substantial completion and will be receiving a formal Certificate of Occupancy (CofO) from the County, then the New Construction program would likely be the appropriate application path. If a major renovation of a building warrants bringing the entire building up to current building codes, then that building would also qualify under the New Construction incentive program.

  Within the New Construction program, stakeholders agree that Core and Shell buildings with full mechanical systems and a weather-sealed thermal envelope should be included in the incentive program—as incentivizing developers to go beyond code in the Core and Shell phase of a major construction project sets the course for a sustainably built and operated building.

- Core and Shell Definition - Project includes a complete thermal enclosure system with the primary-backbone HVAC and electrical distribution infrastructure installed. The primary HVAC system and capacity that will fully serve occupied future tenant spaces must be designed, purchased, and operational as part of this project to be eligible for participation in this program. That includes full heating, cooling, and ventilation capacity anticipated for the type of commercial tenant going into the building. Only equipment purchased by the owner as part of the base building project can be included in the analysis. All non-purchased equipment, lighting and process energy must be assumed to be current energy code compliant in the Baseline and Proposed case energy analysis.

- Existing Building Definition - A building that has received a formal CofO from the County and has achieved at minimum 50% occupancy for no less than 12 contiguous months which would also meet the minimum operational characteristics and historical utility data to achieve a valid ENERGY STAR score.

New Construction

The motivation behind sustainable new construction incentives is to encourage developers and building owners to build beyond existing code. While Montgomery County's building code is already very efficient, going beyond code creates further sustainable buildings, spurs innovation, and ensures that new buildings help the County meet its GHG emission reduction goals. The work group maintained a balanced approach, suggesting innovative ideas that would keep Montgomery County's climate goals in mind while also trying to mitigate the administrative burden of processing tax credit applications or other incentives.

The stakeholder group designed an incentive framework that prioritizes stretch goals, or percentage improvements better than current building code. With this strategy, the incentive is evergreen and always stays ahead of code as building codes evolve and improve. To be eligible for the incentive, a building must first achieve designed energy performance beyond code as outlined in the table below. Once the energy requirements are met, building owners and developers are also eligible for an additional credit for the listed building certifications. This design rewards energy efficiency decisions first, whole building sustainable second, and ultimately provides the highest incentives for buildings that reach for net-zero-energy design.

As a group, stakeholders had a desire to be inclusive of building owners who have not participated in the County's incentive programs in the past, and trying to find a program that would be motivating to them. The new construction incentive should be inclusive of all building owners (not just the ones who construct LEED-eligible buildings), but of multiple major construction phases as well (core and shell and new construction) to ensure sustainable decisions occur on day one.

New Construction Green Building Property Tax Incentive

To be eligible for a property tax credit, your commercial/multifamily property must achieve a minimum 10% performance above Montgomery County's current building code requirement as indicated in the **Energy Reduction Requirement** portion of table below.

If your property satisfies the Energy Reduction Requirement, you are is then eligible for an additional tax credit percentage for achieving an approved building certification as indicated in the **Building Sustainability Bonus** portion of the table below.

If deemed eligible for this property tax credit, the property will receive a credit granted against the county taxes owed for four (4) years, capped at 100% per year.

Energy Reduction Requirement

A commercial/multifamily property must demonstrate a minimum performance of 10% above current building code requirements using a DPS-approved modeling software.

To calculate the credit granted: *Round your building's percentage above code to the nearest whole number and multiply it by the credit factor below—this will determine the green building property tax credit you will receive.*

% Above Applicable Code	Multiplier	Property Tax Credit
10-20%	0.5	5-10%
21-30%	1	21-30%
31-40%	1.5	46.5-60%
Above 40%	2	82-100%

EXAMPLE: *Building designed **24%** above code * Multiplier **1.0** = **24%** Property Tax Credit per year for 4 years*

Building Sustainability Bonus

*If you achieve a tier in the Energy Reduction section, you can get **additional** tax credit percentage for achieving one of the following certifications or an approved equivalent.*

An Energy Reduction credit must be earned to before receiving the Building Sustainability Bonus.

To calculate the credit granted: *Add the property tax credit percentage earned from the Energy Reduction Requirement to the percentage earned from your building's certification using the most recent certification version at the time of tax credit application.*

Eligible Building Certifications	Property Tax Credit
LEED Gold, NGBS Gold, PHIUS+/Passive House, BREEAM-NC Excellent (or equivalent)	25%
LBC Petal Certification, LEED Platinum, NGBS Emerald, BREEAM-NC Outstanding, Living Building Certification* (or equivalent)	75%

EXAMPLE: *Building **24%** above code also earns LEED Platinum credit of **75%** = **99%** Total Property Tax Credit per year for 4 years*

Additional Notes about the New Construction Incentive Proposal

- Commercial or multifamily buildings (core and shell and new construction) are eligible for a one-time green building incentive per the structure above. Buildings are eligible for additional green building incentives under the existing buildings structure following the initial 3-year credit cycle under new construction.
- LEED full building certification includes all eligible rating systems for newly constructed non-single-family-residential buildings (Building Design + Construction, Core and Shell, LEED for Homes Midrise).
- * If a building earns Living Building Certification, the building owner will be able to extend their 4-year property tax credit for a 5th additional year as added recognition for this high-tier building certification.

Existing Buildings

Existing buildings in the County create a huge potential for energy and carbon reductions, and modifying an existing building to operate more efficiently can be more difficult than a green, newly constructed building. The County's current green building property tax credit provides an incentive for existing buildings that can meet the LEED Existing Buildings Operations + Maintenance (LEED-EBOM) certification. Unfortunately, for many existing buildings in the County, achieving this sustainability certification is challenging, cost-prohibitive, and out of reach. DEP has heard from a handful of building owners who are striving to be more energy efficient but cannot achieve ENERGY STAR certification, for example, which is a prerequisite for LEED-EBOM certification.

With this context in mind, along with the County's ambitious GHG emissions reduction goal, the stakeholders wanted to develop an existing building incentive framework that was more inclusive of all building owners. The group favored a program that rewards incremental steps towards saving energy, engaging building owners who may need a small incentive to get involved in the energy conversation.

Similar to the new construction building incentive proposal, this framework rewards energy efficiency before building certifications. The energy efficiency metric of using the ENERGY STAR score uses a free, Web-based, third-party system that the market is already comfortable with. Providing an incentive that relies on whole building energy performance allows the building owner to determine the best route to achieve energy savings rather than prescribing which energy conservation systems to upgrade (e.g., HVAC upgrades, building system automation, lighting, engaging tenants to change their behavior).

Some stakeholder felt strongly that any incentive offered should reflect the bigger energy and carbon reduction opportunities in existing buildings over new construction. The stakeholders recommend a multi-year pilot of this incentive structure to see its uptake in building owners who have not previously taken advantage of County incentives, the dollar amount that sparks actions, and effectiveness in reducing GHG emissions.

Existing Buildings Green Building Property Tax Incentive

To be eligible for a property tax credit, your commercial/multifamily property must demonstrate energy reductions using ENERGY STAR Portfolio Manager as indicated in the **Energy Reduction Requirement** portion of table below.

If your property satisfies the Energy Reduction Requirement, you are then eligible for an additional tax credit percentage for achieving an approved building certification as indicated in the **Building Sustainability Bonus** portion of the table below.

If deemed eligible for this property tax credit, the property will receive a credit granted against the county taxes owed for two (2) years, capped at 100% per year.

Energy Reduction Requirement

A commercial/multifamily property must:

1) *Set a 12-month baseline in the ENERGY STAR Portfolio Manager tool*
2) *Summarize actions taken to reduce energy use*
3) *Measure improved energy performance using Portfolio Manager.*

To calculate the credit granted: *Subtract your building's improved ENERGY STAR score from your baseline ENERGY STAR score, then multiply the difference by the multiplier based on the improved ENERGY STAR score tier:*

*(Improved ENERGY STAR score – Baseline ENERGY STAR score) * Multiplier of improvement tier = Annual Credit Awarded for 2 years*

Improved ENERGY STAR Score Tiers	Multiplier
1-24	1.0
25-49	1.5
50-74	2.0
75-100	2.5

EXAMPLE: *(Improved ENERGY STAR Score **80** - Baseline ENERGY STAR score **70**) * Multiplier **2.5 = 25%** Property Tax Credit per year for 2 years.*

Building Sustainability Bonus

*If you achieve a tier in the Energy Reduction section, you can get an **additional** tax credit percentage for achieving one of the following certifications or an approved equivalent for existing buildings.*

An Energy Reduction credit <u>must</u> be earned to before receiving the Building Sustainability Bonus.

To calculate the credit granted: *Add the property tax credit percentage earned from the Energy Reduction Requirement to the credit percentage earned from your building's certification below using the most recent certification version available.*

Eligible Building Certifications	Property Tax Credit
LEED O+M Gold, BREEAM In-Use Excellent (or equivalent)	25%
LEED O+M Platinum, BREEAM In-Use Outstanding (or equivalent)	50%

EXAMPLE: *25% Property Tax Credit for energy performance + LEED O+M Platinum credit of **50%** = **75%** Total Property Tax Credit per year for 2 years.*

Additional Notes about the Existing Buildings Incentive Proposal

- Baseline and improvement 12-month time periods cannot overlap and must use the same Commercial Buildings Energy Consumption Survey (CBECS) comparison data, which is particularly important to buildings affected by the August 26, 2018 ENERGY STAR metrics change. Baseline year cannot be more than 6 years prior to the improvement time period.
- The only recognized tool for measuring energy performance under the Existing Buildings incentive is the EPA ENERGY STAR Portfolio Manager tool. If a building is not able to earn the ENERGY STAR score due to the property use type, the USGBC alternative compliance path for Energy Use Intensity (EUI) could be accepted on a case-by-case basis. This process would warrant further discussion about which agency is responsible for verifying the data.
- Applications must include the Data Verification Checklist for the ENERGY STAR score baseline and improved score, and narrative describing the energy reduction actions taken. If also applying for the building sustainability bonus, applications must include verified documentation from the certification organization.
- Buildings that earn an incentive for existing buildings may reapply twice after their initial 2-year credit cycle. The maximum number of applications a building can submit is three (3)—one initial application and two reapplications.
- Any reapplications must resubmit a new baseline year for each building and describe the improvements performed to achieve the energy reduction. Reapplications that include a building sustainability bonus must achieve a higher certification than the previous credit application to encourage continual improvement (e.g., if an initial application included LEED O+M Gold certification, a reapplication must earn LEED O+M Platinum to achieve the bonus).
- BREEAM In-Use certifications must include Parts 1 and 2 to be eligible for the incentive. The final BREEAM In-Use level achieved is an average of Parts 1 and 2; if there is a one-tier difference, the higher tier prevails.

State Authorization for Incentives Offered

The incentive proposal for Montgomery County primarily incentivizing energy efficiency and performance alongside sustainable building certifications appears to be the first of its kind in the state of Maryland. Based on the two sections of state code that authorize property tax credits for sustainable green buildings, this innovative incentive proposal may require a ruling from the state.

Under the new construction framework, the stakeholders are proposing a property tax incentive for energy performance beyond code, which is in the spirit of a high-performance building under the "comparable green building guidelines or standards approved by the State" provision [MD Tax-Prop Code § 9-242 (2016)]. This, however, may necessitate a ruling from the state as to whether these buildings would be eligible for property tax incentives under the high-performance building definition.

Under the existing buildings framework, the stakeholders propose incentivizing demonstrated energy performance on an order which would require an installed energy conservation measure [MD Tax-Prop Code § 9-203 (2017)]. The level of energy conservation required to be eligible for the property tax credit would likely require the installation of an energy conservation device, although the County's proposed program does not explicitly require this action. Using the ENERGY STAR Portfolio Manager tool is the primary energy tracking method for this tax credit, but earning the ENERGY STAR label for the building (awarded at 75 and above) is not required.

Additionally, the building sustainability bonus incentive under both proposed frameworks is also in accordance the state code. If action is needed at the state level, stakeholders offer their support to the Montgomery County Council and County Attorney as needed.

Justification for Certifications Included

Within the existing commercial building sector, a number of third-party certifications exist that signal a building's sustainability elements to the marketplace. In line with the intent of this incentive, the work group prioritized energy reductions as a first step to receiving an incentive with third-party building certifications being recognized for their whole-building sustainability approach (e.g., building operations, water efficiency, waste management, indoor environmental quality, green transit).

Stakeholders agreed that market differentiators of superior green building should be acknowledged and rewarded, as more building certifications can help Montgomery County stand out from other jurisdictions—but also recognizing that the market has evolved to recognize other sustainable building certification in addition to LEED.

The following building certifications were selected by the stakeholders as highly regarded, market-driving sustainability certifications:

- **LEED Certification** (https://new.usgbc.org/leed)
  LEED, or Leadership in Energy and Environmental Design, is one of the most widely used green building rating systems. LEED provides a framework to create healthy, highly efficient, and cost-saving green buildings, including new and existing commercial and multifamily buildings, homes, and neighborhoods. Whole building sustainability categories include: location and transportation, sustainable cites, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality, innovation projects, and regional priority projects.

  Buildings can be awarded Certified, Silver, Gold, or Platinum certification levels. LEED Silver plus a specific number of energy and atmosphere category points is a recognized alternative compliance pathway to meet the IgCC requirements for non-residential commercial buildings in Montgomery County. The stakeholders agreed that LEED Gold and LEED Platinum certifications are achievements above and beyond code and should be included in the green building incentive to drive greener core and shell buildings, new construction, and existing buildings' operations and maintenance.

- **National Green Building Standard** (https://www.homeinnovation.com/green)
  NGBS Green Certified buildings, also known as the ICC 700, is the only residential green building rating system approved by the American National Standards Institute (ANSI) as an American National Standard. NGBS certification applies to the design, construction, and certification of new multifamily buildings and renovations. Whole building sustainability categories include: lot and site development; resource efficiency; energy efficiency; water efficiency; indoor environmental quality; and operation, maintenance, and building owner education.

  Buildings can be awarded Bronze, Silver, Gold, or Emerald certification level, depending on the number of green practices successfully incorporated in its design and construction. NGBS Silver is a recognized alternative compliance pathway for certain building types to meet the IgCC requirements in Montgomery County. Using market-accepted equivalencies of new construction building rating systems, NGBS Gold is similar to LEED Gold certification, and NGBS Emerald is similar to LEED Platinum certification. The stakeholders agreed that NGBS Gold and NGBS Emerald are achievements above and beyond code and should be included in the green building incentive for new construction projects.

- **Passive House** (http://www.phius.org)
  Passive building comprises a set of design principles used to attain a quantifiable and rigorous level of energy efficiency within a specific quantifiable comfort level. PHIUS+ Passive Building Standard certification is a challenging standard that uses climate-specific performance metrics and comprehensive design and energy modeling review, and each PHIUS+ certification buildings also earn a HERS Index score, DOE Zero Energy Ready Home status, and EPA Indoor airPLUS label. While Passive House buildings tend to be single-family homes, the Washington DC region is seeing an uptick in the number of multifamily, school, and small commercial properties built to the Passive House standard.

  The stakeholders agreed that developers and owners should strive for the rigor of passive building not only because of its small energy footprint, but it also has high standards for indoor environmental quality and climate resiliency. Passive House principles also offer the best path to net-zero and net-positive buildings by minimizing the load that renewables need to provide, which is a design standard the County will need to explore to achieve its ambitious GHG emission reduction goals.

- **BREEAM** (https://www.breeamusa.com)
  BREEAM, or Building Research Establishment Environmental Assessment Method, is the world's longest established method of assessing, rating, and certifying a building's environmental, social and economic sustainability performance. To date,

BREEAM has been very popular internationally. In 2016, BREEAM USA was established to tailor this program to the US market, and it is starting to gain traction in the U.S. Whole building sustainability categories include: energy, health and wellbeing, innovation, land use, materials, management, pollution, transport, waste, and water. Eligible building types include multifamily and non-residential commercial buildings.

Of the available BREEAM standards, New Construction and In-Use have the most similarity to the LEED and NGBS in terms of categories and eligible building type. Buildings can be awarded one of five certification levels: Outstanding (less than the top 1% of buildings), Excellent (top 10%), Very Good (top 25%), Good (top 50%), and Pass (top 75%). The stakeholders reviewed research that provides BREEAM equivalencies to LEED certification, where BREEAM Outstanding is equivalent to LEED Platinum; BREEAM Excellent is equivalent to LEED Gold; BREEAM Very Good is equivalent to LEED Silver[5]—thus, BREEAM Outstanding and BREEAM Excellent are both included in the green building incentive for both new construction and existing buildings.

- **Living Building Challenge** (https://living-future.org/lbc)
  Of all the building certifications presented in the green building incentive proposal, Living Building Challenge is one of the more challenging certifications to obtain. This green building certification program and sustainable design framework uses a flower metaphor for how the ideal built environment should operate in nature—cleanly and efficiently. The Living Building Challenge is built on 20 imperatives organized into seven categories: place, water, energy, health and happiness, materials, equity, and beauty—which are all specific to the building's typology. Buildings eligible to receive this certification range from single-family homes to educational, institutional, and commercial properties.

  Buildings can achieve Zero Energy, Petal, or Living Building certification. In the incentive's building sustainability bonus category, Petal and Living Building are included since these certifications deal with overall building sustainability rather than solely energy. Montgomery County is not yet home to a Petal or Living Building Challenge building, and there are only a small handful in the Washington, DC region. As indicated by our stakeholders, any building built to the Petal or Living Building Challenge has extremely minimal impacts on the environment and should receive top-tier incentives achieving this certification.

BREEAM and LEED certification are the only two building certifications that have a whole building certification for existing buildings (Note: NGBS certification for existing buildings

[5] Suzer, Ozge. "Analyzing the compliance and correlation of LEED and BREEAM by conducting a criteria-based comparative analysis and evaluating dual-certified projects." Building and Environment 147 (2019) 158-170.

applies only to remodeling projects, and Passive House and Living Building Challenge tend to be new construction projects only).

If a building owner pursues a building certification not on this list, but would like to apply for a financial incentive, DPS or DEP may be able to evaluate the equivalency of that building certification to the list adopted in the County Code.

New Rebate Program/Pilot Proposed for Existing Building

During discussions about the green building incentive for existing buildings, the stakeholders identified a gap in the market that a County green building incentive could address: buildings not subject to the Benchmarking Law may not be monitoring their energy use patterns and not participating in other energy programs. A variety of factors may cause a building owner to be disengaged from their energy use, but the stakeholder group felt it was important to provide a gateway incentive program to bring these building owners into the carbon reduction conversation. This idea could be developed as a short-term pilot to gauge success before establishing a new program.

Buildings that have never been benchmarked in ENERGY STAR Portfolio Manager and are not covered under the County's Building Energy Benchmarking Law would be eligible for a one-time incentive to benchmark their buildings and disclose benchmarking data to the County voluntarily for a certain number of years. This direct rebate could serve as a catalyst in the market to engage buildings owners, first to understand and manage their energy use, then learn about other energy programs and incentives available to improve their buildings. DEP could develop communications summarizing other programs and incentives that the building owner might be eligible for that would accompany the rebate check.

The stakeholder group suggested that $500-$1,000 would be an appropriate rebate value (or a dollar-per-gross-square-foot factor that could be applied) that would both incentivize building owners to engage in the energy conversation, as well as energy contractors to grow the green jobs market in Montgomery County. Additionally, some building owners suggested that this rebate program be a dedicated fund separate from the green building property tax credit.

Other Incentive Considerations

The work group discussed a number of different elements that were not fully resolved or incorporated into the incentive proposal for Council's consideration:

- Under the existing building incentive framework, the stakeholders discussed an alternative eligibility path for buildings that are not able to earn the ENERGY STAR label—using USGBC's energy use intensity (EUI) calculation for LEED certification. However, the stakeholders did not perform the analysis required to determine what percentage reduction would be equivalent to the ENERGY STAR score improvements in the incentive framework. If Council approves this approach, USGBC staff could advise the County on the appropriate equivalency.

- Consider piggybacking off the County's existing benchmarking and disclosure requirement to capture ongoing energy performance measurements for buildings that take advantage of the green building incentive.
- Develop an intergovernmental Technical Advisory Group (TAG) consisting of DEP, DPS, and other departments as needed to answer questions about eligibility, documentation requirements, and other matters related to this green building incentive. The TAG could consult with outside expertise as needed.
- Consider providing a new green building incentive for commercial and multifamily buildings to install renewable energy systems on their buildings since the low solar renewable energy certification (SREC) prices in Maryland make it challenging for solar installations to make financial sense. Since the solar stakeholders have not been involved in this work group iteration, the stakeholders suggest that the County lead a second work group around this proposal if Council agrees.
- Create a new incentive program for commercial building tenants to pursue LEED-Commercial Interiors (LEED-CI). More often than not, tenant build-outs are not performed with sustainable building in mind, and building owner requirements for LEED-CI or other sustainability measure may result in losing the tenant to another space without additional requirements. Providing an incentive may increase demand for more energy efficient tenant build-outs, which will result in green jobs for the County and lower energy bills for the tenant.

Proposed Sunsetting of Existing LEED Building Incentive

Many projects planned or underway at this point in time have made construction and business decisions based on the current Property Tax Credit –Energy and Environmental Design incentive. Developing a realistic sunset plan ensures that building owners receive the credit that incentivized their planned green building project. With this in mind, stakeholders have put forth suggestions on closing out the current LEED building incentive with thoughtful dates that align with typical permitting and constructions timelines.

As part of this recommendations report, the stakeholders propose a two-step process for closing out the current incentive program that includes:

1) An **application of intent to apply** for the current incentive program by a certain date (e.g., March 31, 2019) with ample time to advertise this sunsetting program to stakeholders.
    - Both New Construction and Existing Building projects must apply to be included in the current program. This list of potential green building projects will be maintained by the County (i.e., DEP, DPS, Treasury), serving as assurance that the current program credits will be available to those building owners when their projects are completed.

- Applications must include a signed contract for LEED-NC buildings or LEED-EB: O+M project registration to illustrate intent.

2) A **building permit** awarded by DPS **OR** a **LEED-EB: O+M project certification date** within a certain amount of time.
    - New Construction projects must have their permit within 3 years of the "Intent to Apply" list closing date (i.e., March 31, 2022 based on a March 31, 2019 application date).
    - Existing Building projects must submit their completed LEED tax credit application and LEED-EB: O+M documentation to Treasury within 2 years of the "Intent to Apply" list closing date (i.e., March 31, 2021 based on a March 31, 2019 application date).

If a building owner is on the "Intent to Apply" list and obtains the permit/O+M certification within the eligible time allotted, then he/she is able to apply for the current incentive program and will be added to Treasury's queue for the current credit program once the completed application is received.

Any building owner who applies for the current credit but does not appear on the "Intent to Apply" list will be referred to the new green building incentive program. Buildings that appear on the "Intent to Apply" list are not required to participate in the old incentive program, and can elect to participate in the new green building incentive program.

Perspectives on the Annual Incentive Amount

Under the current LEED incentive program, the $5 million annual maximum cap was set in 2006 and has not been adjusted for inflation or the increasing cost of doing business/construction. Using the Consumer Price Index, $5M in 2006 had the same buying power as $6.3M in 2018.[6]

New Construction

Some stakeholders noted that in new construction projects, the County's tax base is going from "zero" to a higher commercial property tax rate once the project is completed. After the multi-year green building incentive has been fully awarded, the County still has a taxable real estate asset for many years to come. With this thought in mind, most private stakeholders recommend that there should be no annual incentive cap on new construction incentives.

Understanding that this may not be feasible, stakeholders alternatively suggest a pilot without a cap to see the uptake of the program for 1-2 years to inform a to-be-determined cap in the future.

[6] Inflation calculator provided by Saving.org. https://www.saving.org/inflation/inflation.php. Accessed Aug. 2018.

Existing Buildings

For existing building upgrades, the improved value of the property may not be captured on the property tax roll. Thus, the County may award a multi-year green building incentive for a property that may not necessarily increase in taxable value. A cap should still exist on existing building incentives but should keep pace with inflation and/or be revisited on a regular cycle (e.g., annually, every 3 years).

Conclusion

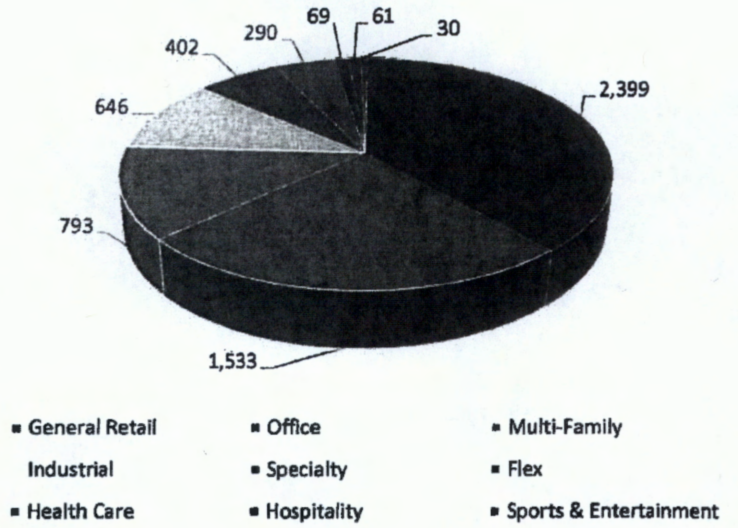
The stakeholder work group would like to thank the Montgomery County Council for their willingness to hear directly from stakeholders on the green building incentive program for commercial and multifamily properties. While this report is a compilation of varied interests, the stakeholders took a balanced approach to designing this incentive program proposal that both keeps the County at the forefront of its sustainability initiatives while encouraging economic vitality. The group looks forward to further discussion on this important issue and welcome your feedback and comments.

Appendix A: CoStar Real Estate Data Summary Tables

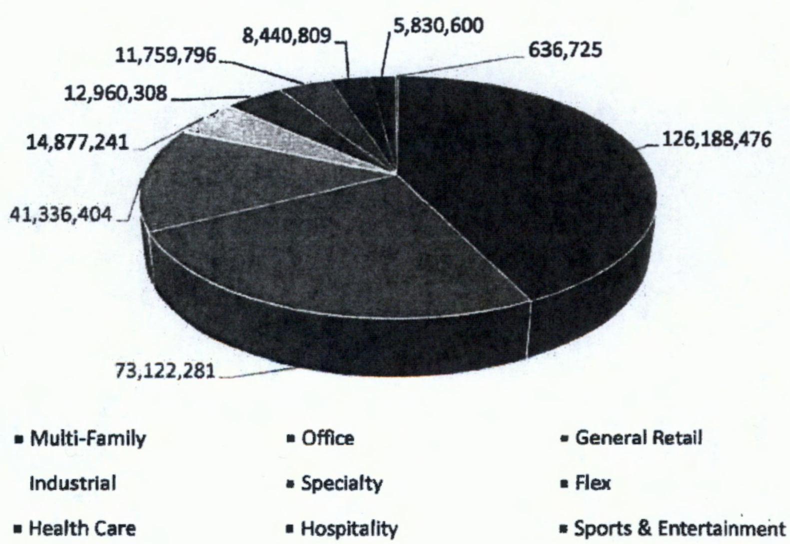
The data below represents a summary of the commercial building stock in Montgomery County, per CoStar data accessed May 2018.

Building Square Footage Range	Number of Buildings	Most Common Property Type
1 - 2,500	954	General Retail
2,501 - 5,000	1,174	General Retail
5,001 - 10,000	969	General Retail
10,001 - 20,000	869	General Retail
20,001 - 40,000	738	Office
40,001 - 60,000	389	Office
60,001 - 80,000	200	Office
80,001 - 100,000	153	General Retail
100,001 - 120,000	117	Office
120,001 - 180,000	240	Office
180,001 - 240,000	137	Multi-Family
240,001 - 320,000	102	Multi-Family
320,001 - 400,000	65	Multi-Family
400,001 - 500,000	50	Multi-Family
500,001 - 1,000,000	57	Multi-Family
1,000,001 - 2,120,000	10	Multi-Family
TOTAL	**6,224**	**General Retail**

Number of Buildings in Montgomery County, MD by Building Type



Total Commercial Building Square Footage in Montgomery County, MD by Building Type



Appendix B: List of Organizations Involved in the Stakeholder Work Group

Property Developers and Managers	
○ Bozzuto Group ○ Duffie Companies ○ Federal Realty Investment Trust ○ Grady Management	○ JBG Smith ○ Lerner Enterprises ○ The Tower Companies ○ United Therapeutics
Contractors and Consultants	
○ BOLAND ○ DVA Architects ○ EEMS, LLC ○ Energy Shrink ○ Ensight Consulting ○ HOK	○ MaGrann Associates ○ Recurrent Innovative Solutions, LLC ○ Spectrum Energy ○ Steven Winter Associates ○ Sustainable Building Partners
Non-profit and Industry Associations	
○ Apartment and Office Building Association (AOBA) ○ American Institute of Architects (AIA) Potomac Valley ○ Institute for Market Transformation	○ Montgomery County Faith Alliance ○ Montgomery County Sierra Club ○ New Ecology, Inc. ○ Urban Land Institute (ULI) ○ USGBC-National Capital Region
Government	
○ City of Rockville ○ Maryland-National Capital Park and Planning Commission ○ Montgomery County Department of Environmental Protection	○ Montgomery County Department of Permitting Services ○ Montgomery County Finance Department, Treasury Division

ADDENDUM

Montgomery County Green Building Incentives for Commercial and Multifamily Properties

Briefing on Stakeholder Workgroup Recommendations

Current County Green Building Incentive

Commercial/Multifamily Green Building Property Tax Credits

- $5 million available annually
- Within the $5 million program cap, there are caps for each LEED rating category:
  - LEED Silver buildings cannot exceed $1.5M
  - LEED Gold buildings cannot exceed $2.5M
- Amount and duration of credit for each building depends on characteristics of building and rating level achieved
  - LEED rating or equivalent standard
  - 10%-75% of County property taxes
  - 3 or 5 years
- Buildings must apply within 1 year of receiving LEED certification

2

Why are Changes Needed?

- Revision of credit eligibility necessary following adoption of IgCC 2012 *(Possible to earn a tax credit while meeting code under the alternative compliance path for IgCC)*
- More than $38 million given out to less than 50 owners/developers covering approximately 80 million square feet of commercial real estate between levy year 2009-2019
  - Not all eligible buildings submit applications for the credit
- Currently a credit backlog:
  - LEED Gold category oversubscribed starting in levy year 2015
  - LEED Platinum oversubscribed starting in 2018

3

Factors Influencing Green Building

The green building market, and resulting uptake of property tax credits, are influenced by a variety of fluctuating factors, including:

- State of the economy
- Energy and construction prices
- Regular 3-year development cycle of building codes, and evolution of building standards like LEED
- Tenant awareness/demand for green buildings, and developer awareness of availability of incentives
- Availability and amounts of other green building incentives (e.g., Maryland state grants, EmPOWER Maryland utility incentives)

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Stakeholders Involved

Commercial/Multifamily Workgroup

- Medium/Large Property Developers and Managers
  - Bozzuto Group
  - Duffie Companies
  - Lerner
  - Tower Companies
  - JBG Smith
- Government
  - DEP
  - DPS
  - Finance-Treasury
  - Planning
  - City of Rockville
- Contractors/Consultants
  - BOLAND
  - Ensight Consulting
  - MaGrann Associates
  - New Ecology
  - Spectrum Energy
  - Steven Winter Associates
- Nonprofits and Associations
  - AOBA
  - River Road UU Congregation
  - Sierra Club
  - USGBC-National Capital Region

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General Workgroup Goals

- Revise current LEED green building tax credit following the adoption of IgCC 2012 so that incentives are not given for buildings that meet code.
- Shift primary incentive focus from solely building certification to energy and GHG reductions to align with the County's climate goals.
- Build in a regular review of the incentive program to ensure program structure is still effective.
- Where feasible, ensure incentive programs adjust as building codes get more stringent so that incentives encourage buildings that exceed code requirements in effect when the building is built.

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New Construction Incentive Program Context

- In line with the Council's climate emergency resolution, stakeholders have zeroed in on **GHG emission and energy reductions** as key motivators for green building incentives.
- Building rating systems like LEED are still relevant, but energy reductions are the primary metric that should be used.
- There is a desire to spread the incentive funding allocated for property tax credits to a larger number of building owners—particularly those that are not able to apply for LEED—to engage more buildings.
- Stakeholders are suggesting innovative ideas while trying to mitigate the administrative burden of processing tax credit applications or other incentives.

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Existing Buildings Incentive Program Context

- Achieving a sustainability building rating certification is challenging, cost-prohibitive, and out of reach for many existing buildings.
- Using ENERGY STAR Portfolio Manager to measure energy performance over time uses an industry-accepted platform also required under the County's Benchmarking Law.
- Providing an incentive for energy performance allows the building owner to determine the best route to achieve energy savings—HVAC upgrades, building system automation, lighting, tenant behavior change, etc.

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Overall Concept of Revised Incentive Program

- A proposed two-tiered incentive of property tax credits:
  - **1st Tier** – Earn an incentive for a measurable reduction in energy use.
  - **2nd Tier** – Once 1st tier is met, earn additional credit for achieving a certain level of building certification.
- For each tier, the greater the performance or level of certification, the higher the incentive.
- Third-party certifications broadened beyond LEED; includes Passive House, Living Building Challenge, and other robust, third-party certification systems that strive for net-zero buildings.
- Newly constructed buildings must exceed code by 10% or more to be eligible for the incentive program.
- New construction incentive can only be earned once; limitations for existing building reapplications.

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Other Incentive Considerations

In addition to developing recommendations for a revised incentive, the stakeholders also summarized suggestions on:

- **Sunsetting the existing LEED tax credit program and grandfathering in buildings that are substantially designed.**
  - Eligibility for the current incentive should be based on a to-be-determined building permit issue date
  - This strategy accounts for the long-range planning involved in commercial real estate construction
- **Building in a sunset and/or evaluation date into a future incentive program.**
  - Allows for a regular review to ensure program effectiveness around measurable goals
  - Provides transparency to commercial industry for planning purposes

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Developments Since Final Report

The final recommendations report was completed in March 2019 and delivered to Council in June 2019.

Since then, technical climate workgroups are actively working to develop climate recommendations for buildings, clean energy, transportation, as well as adaptation/sequestration and public engagement.

Key issues being examined related to buildings include:

- A building energy performance standard for existing buildings
- Net-zero building codes for new construction
- 2018 International Green Construction Code (*DPS is currently reviewing for adoption)*

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Possible Next Steps

This incentive structure appears to be the first of its kind in Maryland, thus it may require a ruling from the state regarding:

- If buildings that exceed building code meet the "high-performance building" definition in MD Tax-Prop Code § 9-242 (2016).
- If incentivizing energy performance in existing buildings without an "installed energy conservation measure" is permissible under MD Tax-Prop Code § 9-203 (2017)

The Executive Branch is currently investigating this ruling process.

Next, draft code changes for:

- Establishing the new incentive program
- Sunsetting the previous LEED green building tax credit

DEP/FIN would develop forms/processes for the new incentive program

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Staff Contacts for More Information

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Permitting Services

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Appendix Slides

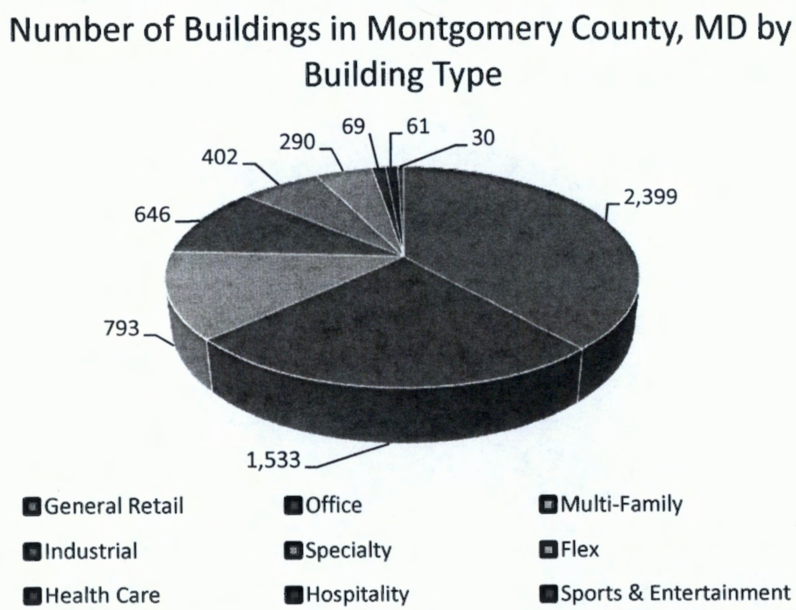
Matrix of Current LEED Incentive

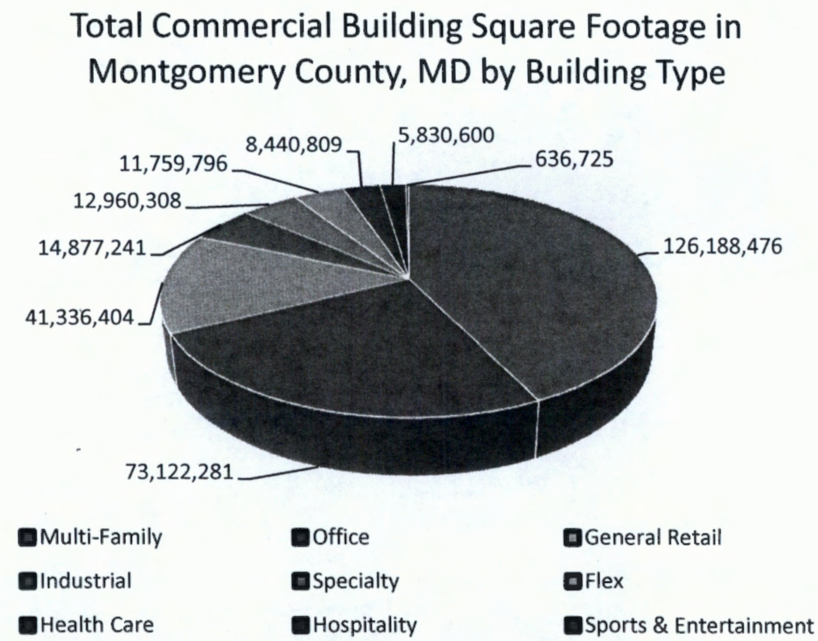
Building Type	Rating System	LEED Level	County Tax Credit	Credit Year
Covered (10,000 SF+)	LEED NC or CS	Gold	25%	5
	LEED NC or CS	Platinum	75%	5
	LEED - EBOM	Gold	10%	3
	LEED - EBOM	Platinum	50%	3
Not Covered (Under 10,000 SF)	LEED NC or CS	Silver	25%	5
	LEED NC or CS	Gold	50%	5
	LEED NC or CS	Platinum	75%	5
	LEED - EBOM	Silver	10%	3
	LEED - EBOM	Gold	25%	3
	LEED - EBOM	Platinum	50%	3

Similar Incentive Programs in the Region

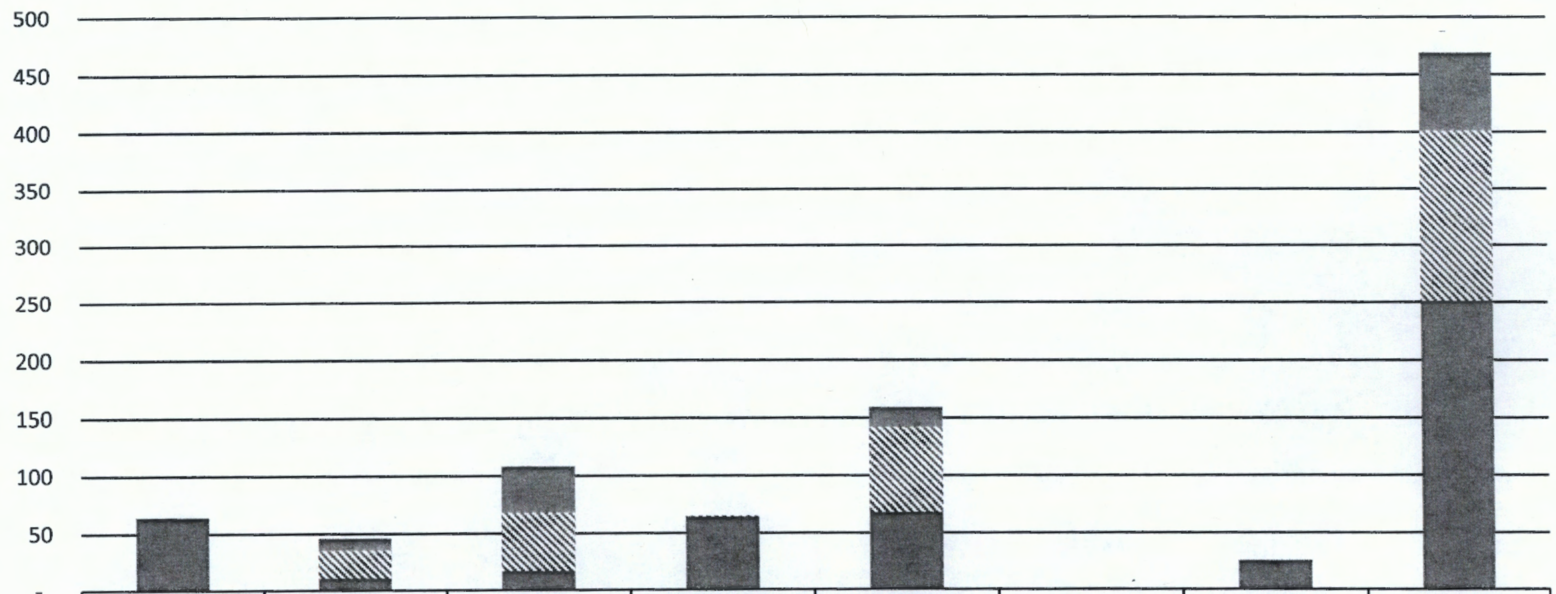
Jurisdiction	Rating System	Credit Amount	Credit Year	Notes/Other Incentives Provided
Baltimore County	LEED	10-80%	3-5 years	NGO/Small business low-interest loan for energy upgrades
	NGBS	50-80%	5 years	
City of Frederick	LEED	25-75%	3-5 years	
	LEED	10-75%	3-5 years	
Howard County	Energy conservation devices	14-20%	3 years	Only eligible for LEED certified buildings
Prince George's County	ENERGY STAR for 3 years	Up to $100K	1-time grant	An energy audit and green lease also req't
Washington, DC	N/A	N/A	N/A	Energy efficiency incentives via DC SEU
Arlington, VA	N/A	N/A	N/A	Bonus density for green features

Summary Building Data (CoStar, May 2018)





Comparison of LEED Certified Projects
in Montgomery County, MD
All LEED Projects vs. LEED Projects Eligible for Tax Credits



	LEED-CI	LEED-CS	LEED-EB	LEED-HOMES	LEED-NC	LEED-ND	LEED-SCHOOLS	Total LEED Buildings
Applied for CountyTax Credit (Received or in Queue)		11	40		17			68
Eligible for Tax Credit		24	51	1	74			150
Not Eligible for Tax Credit	64	11	17	64	68	1	26	251

Energy Reduction Requirement		
A commercial/multifamily property must demonstrate a minimum performance of 10% above current building code requirements using a DPS-approved modeling software. ***To calculate the credit granted:*** *Round your building's percentage above code to the nearest whole number and multiply it by the credit factor below—this will determine the green building property tax credit you will receive.*		
% Above Applicable Code	**Multiplier**	**Property Tax Credit**
10-20%	0.5	5-10%
21-30%	1	21-30%
31-40%	1.5	46.5-60%
Above 40%	2	82-100%
EXAMPLE: *Building designed* ***24%*** *above code * Multiplier* ***1.0 = 24%*** *Property Tax Credit per year for 4 years*		

Building Sustainability Bonus	
If you achieve a tier in the Energy Reduction section, you can get ***additional*** *tax credit percentage for achieving one of the following certifications or an approved equivalent.* *An Energy Reduction credit <u>must</u> be earned to before receiving the Building Sustainability Bonus.* ***To calculate the credit granted:*** *Add the property tax credit percentage earned from the Energy Reduction Requirement to the percentage earned from your building's certification using the most recent certification version at the time of permit application.*	
Eligible Building Certifications	**Property Tax Credit**
LEED Gold, NGBS Gold, PHIUS+/Passive House, BREEAM-NC Excellent (or equivalent)	25%
LBC Petal Certification, LEED Platinum, NGBS Emerald, BREEAM-NC Outstanding, Living Building Certification* (or equivalent)	75%
EXAMPLE: *Building* ***24%*** *above code also earns LEED Platinum credit of* ***75% = 99%*** *Total Property Tax Credit per year for 4 years*	

Energy Reduction Requirement

A commercial/multifamily property must:

1) *Set a 12-month baseline in the ENERGY STAR Portfolio Manager tool*
2) *Summarize actions taken to reduce energy use*
3) *Measure improved energy performance using Portfolio Manager.*

To calculate the credit granted: *Subtract your building's improved ENERGY STAR score from your baseline ENERGY STAR score, then multiply the difference by the multiplier based on the improved ENERGY STAR score tier:*

*(Baseline ENERGY STAR score – Improved ENERGY STAR score) * Multiplier of improvement tier = Annual Credit Awarded for 2 years*

Improved ENERGY STAR Score Tiers	Multiplier
1-24	1.0
25-49	1.5
50-74	2.0
75-100	2.5

EXAMPLE: *(Improved ENERGY STAR Score* ***80*** *- Baseline ENERGY STAR score* ***70)*** ** Multiplier* ***2.5 = 25%*** *Property Tax Credit per year for 2 years.*

Building Sustainability Bonus

If you achieve a tier in the Energy Reduction section, you can get an ***additional*** *tax credit percentage for achieving one of the following certifications or an approved equivalent for existing buildings.*

An Energy Reduction credit must be earned to before receiving the Building Sustainability Bonus.

To calculate the credit granted*: Add the property tax credit percentage earned from the Energy Reduction Requirement to the credit percentage earned from your building's certification below using the most recent certification version available.*

Eligible Building Certifications	Property Tax Credit
LEED O+M Gold, BREEAM In-Use Excellent (or equivalent)	25%
LEED O+M Platinum, BREEAM In-Use Outstanding (or equivalent)	50%

EXAMPLE: 25% *Property Tax Credit for energy performance + LEED O+M Platinum credit of* ***50% = 75%*** *Total Property Tax Credit per year for 2 years.*

Timeline of Activities

Milestone	Date
T&E/GO request for stakeholder review of the County's green building incentives	March 2018
Kick-off Meeting for Stakeholder Workgroup	April 2018
Subcommittee meetings	May-December
Provided Council with progress update	Mid-July 2018
Completed recommendations for incentive program	March 2019
Delivered recommendations report to Council	June 2019
Brief T&E/GO Committees on final report	October 2019