T&E ITEM 2
March 17, 2014
Worksession

MEMORANDUM

TO: Transportation, Infrastructure, Energy and Environment Committee

FROM: Amanda Mihill, Legislative Attorney
Michael Faden, Senior Legislative Attorney

SUBJECT: **Worksession:** Bill 8-14, Buildings – County Buildings – Clean Energy Renewable Technology

Bill 8-14, Buildings – County Buildings – Clean Energy Renewable Technology, sponsored by Councilmembers Berliner, Floreen, Riemer, Elrich, Andrews, and Navarro, was introduced on January 28, 2014. A public hearing was held by the Committee on February 11. At the hearing, a representative of the Executive expressed the Executive's general support for the package of environmental initiatives (©17). Council staff will transmit any specific comments on these bills from the Executive when they are received.

Bill 8-14 would require new or extensively remodeled county buildings to generate at least 1 kilowatt of renewable energy for every 1,000 square feet of floor area. Current County law does not set specific standards for the use of renewable technology in County buildings. Bill 8-14 was modeled after a recently-enacted Prince George's County law.

Councilmember Berliner explained the purpose of this Bill in his January 14 memorandum describing his proposed energy/environmental package (©18).

The Fiscal and Economic Impact statement for this Bill will be transmitted after March 17 (see ©7).

Issues for Committee Discussion

Should Bill 8-14 be a mandate or goal? The Montgomery County Chapter of the US Green Building Council (USGBC) urged that the requirements of Bill 8-14 be a goal, not a mandate. They argued that most buildings would not be able to meet this goal with other building regulations and that the cost ratio of meeting the renewable requirement to the total project cost is high. Council staff notes the cost limit in Bill 8-14, generally speaking, is limited to 2% of the total cost of the project. The County chapter of the USGBC is correct in that funds for capital projects are limited and would compete with other County projects. This is a policy consideration for the Committee. If the Committee shares similar concerns, one option would be to provide a waiver mechanism where the Director could waive the clean renewable energy

technology requirement if the Director finds that including such technology would be cost prohibitive.

What type of renewable energy technologies should be permitted? As noted above, Bill 8-14 would require a newly constructed or extensively remodeled county building[1] to generate at least 1kw of renewable energy for every 1,000 square feet of floor area. The American Institute of Architects, Potomac Valley Chapter assumed that the bill required that renewable energy be provided by photovoltaic generation and urged that other on-site energy technologies should be permitted. As drafted, "clean renewable energy technology" would encompass more than photovoltaic generation. "Clean renewable energy technology" would be defined, in part, as "a technology or system that uses geothermal heating and cooling, solar hot water heating, wind power, solar electricity generation, or solar thermal generation.

This packet contains:	Circle #
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[1] It is not clear at this point if the County could apply Bill 8-14 to certain agencies such as Montgomery County Public Schools; Council staff continues to research this issue.

Bill No. 8-14
Concerning: Buildings – County Buildings – Clean Energy Renewable Technology
Revised: 12/12/2013 Draft No. 1
Introduced: January 28, 2014
Expires: July 28, 2015
Enacted: _____
Executive: _____
Effective: _____
Sunset Date: None
Ch. _____, Laws of Mont. Co. _____

COUNTY COUNCIL
FOR MONTGOMERY COUNTY, MARYLAND

By: Councilmembers Berliner, Floreen, Riemer, Elrich, Andrews, and Navarro

AN ACT to:

(1) require use of certain clean energy renewable technology in the construction or extensive modification of certain County buildings;
(2) require the Director of the Department of General Services to conduct a clean renewable energy technology project feasibility assessment on certain County buildings; and
(2) generally amend County law regarding building, energy, and environmental policy.

By adding
Montgomery County Code
Chapter 8, Buildings
Article VIII, Clean Renewable Energy Technology
Sections 8-54, 8-55, 8-56, 8-57, 8-58

Boldface	*Heading or defined term.*
Underlining	*Added to existing law by original bill.*
[Single boldface brackets]	*Deleted from existing law by original bill.*
Double underlining	*Added by amendment.*
[[Double boldface brackets]]	*Deleted from existing law or the bill by amendment.*
* * *	*Existing law unaffected by bill.*

The County Council for Montgomery County, Maryland approves the following Act:

Sec. 1. Article VIII (Sections 8-54, 8-55, 8-56, 8-57, 8-58) is added to Chapter 8 as follows:

Article VIII. Clean Renewable Energy Technology.

8-54. Definitions.

In this Article, the following words have the meanings indicated:

Clean renewable energy technology means a technology or system that uses geothermal heating and cooling, solar hot water heating, wind power, solar electricity generation, or solar thermal generation. *Clean renewable energy technology* includes passive solar energy generation that reduces energy use from other sources by at least 20%.

Cost effective means where the cost of installing clean renewable energy technology on a covered County building is not projected to exceed the projected cost savings of the installation within the first 15 years after the installation of the technology begins.

County building means any building for which the County government finances at least 30% of the cost of:

(1) construction, for a newly constructed building; or

(2) modification, for a building that is extensively modified.

Covered County building means a newly constructed or extensively modified County building.

Department means the Department of General Services.

Director means the Director of the Department or the Director's designee.

Extensively modify or modified refers to any structural modification which alters more than 50% of a building's gross floor area, as shown on an application for a building permit.

Projected total cost means the estimated cost required to construct or renovate a building, including any building system, interior finish, site

28 infrastructure, connection to any existing utility, landscaping, and sidewalk
29 and parking lot built for the immediate use of occupants of the building.
30 **8-55. Clean energy renewable technology required.**
31 (a) Any contract to build or extensively modify a County building must
32 require the use of clean renewable energy technology. Except as
33 provided in subsection (b), a covered County building must have
34 installed at least 1 kilowatt of clean renewable energy technology for
35 every 1,000 square feet of gross floor area. This requirement may be
36 met by using ground mounted clean renewable energy technology on
37 or directly adjacent to the building lot.
38 (b) Each appropriation to build or extensively modify a County building
39 must include an additional amount of 2% to the projected total cost
40 funded by the County, as shown in the project description form,
41 subject to subsection (c).
42 (c) The Director must limit the size of the clean renewable energy
43 technology installation if the initial cost of the installation is projected
44 to exceed 2% of the projected total cost of the new building or
45 renovation. However, if the Director transfers expenditures to the
46 project under subsection (a), the initial cost of the installation must not
47 exceed 4% of the projected total cost.
48 **8-56. Project feasibility assessment.**
49 (a) The Director must perform a feasibility assessment to find whether a
50 covered County building can be retrofitted cost effectively to include
51 clean renewable energy technology. The Director may consider other
52 factors, including:
53 (1) the cost to the County;
54 (2) any safety or security issue;

55 (3) any cost savings from the installation;
56 (4) any clean energy job creation;
57 (5) the clean renewable energy technology capacity of the building;
58 (6) environmental benefits;
59 (7) the technological feasibility of a retrofit; and
60 (8) applicable zoning requirements.
61 (b) If the Director finds that installing clean renewable energy technology
62 on a covered County building would not be cost effective, the Director
63 must transfer expenditures from the covered County building project
64 equivalent to 2% of the projected total cost for use in another
65 applicable project, unless no applicable project is approved in the
66 Capital Improvement Program. The County Council must approve
67 any fund transfer between projects under this Section by resolution.
68 **8-57. Alternative financing.**
69 (a) An alternative financing arrangement which allows leveraging of
70 federal, state, utility, and other incentives, including any grant, lease-
71 purchase agreement, power purchase agreement, or energy savings
72 performance contract, may meet the clean renewable energy
73 technology requirement under this Article.
74 (b) The purchase of Renewable Energy Credits does not meet the clean
75 renewable energy technology requirement under this Article.
76 **8-58. Administration; reporting.**
77 (a) The Department must administer this Article using accepted principles
78 of sound accounting and fiscal management.
79 (a) The Department must submit an annual report to the County Council
80 and County Executive by April 1 each year describing:

81 (1) the added clean renewable energy technology generation by
82 each project;
83 (2) the revenues and expenditures of each project;
84 (3) each project supported by the Program; and
85 (4) the annual savings to the County's utility costs from each
86 supported project.
87 **Sec. 2. Effective date.** Article VIII, inserted by Section 1 of this Act,
88 applies to each new or major renovation public building project for which an
89 application for a building permit is filed on or after January 1, 2014.
90 *Approved:*
91
92
93 Craig L. Rice, President, County Council Date
94 *Approved:*
95
96
97 Isiah Leggett, County Executive Date
98 *This is a correct copy of Council action.*
99
100
101 Linda M. Lauer, Clerk of the Council Date

LEGISLATIVE REQUEST REPORT

Bill 8-14
Buildings – County Buildings – Clean Energy Renewable Technology

DESCRIPTION:	Would require new or extensively remodeled county buildings, to generate at least 1 kilowatt of renewable energy for every 1,000 square feet of floor area.
PROBLEM:	Current County law does not set specific standards for the use of renewable technology in County buildings/
GOALS AND OBJECTIVES:	To achieve greater use of clean renewable technology in the construction or extensive modification of County buildings.
COORDINATION:	Department of General Services, Office of Management and Budget
FISCAL IMPACT:	To be requested.
ECONOMIC IMPACT:	To be requested.
EVALUATION:	To be requested.
EXPERIENCE ELSEWHERE:	To be researched.
SOURCE OF INFORMATION:	Amanda Mihill, 240-777-7815
APPLICATION WITHIN MUNICIPALITIES:	To be researched.
PENALTIES:	Not applicable.

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ROCKVILLE, MARYLAND

MEMORANDUM

February 5, 2014

TO: Craig Rice, President, County Council

FROM: Jennifer A. Hughes, Director, Office of Management and Budget
Joseph F. Beach, Director, Department of Finance

SUBJECTS: Bill 2-14, Environmental Sustainability – Buildings – Benchmarking
Bill 3-14, Buildings – Energy Efficiency – Energy Standards
Bill 4-14, Street and Roads – County Street Lights
Bill 5-14, Environmental Sustainability – Social Cost of Carbon Assessments
Bill 6-14, Environmental Sustainability - Office of Sustainability – Established
Bill 7-14, Contracts and Procurement – Certified Green Business Program
Bill 8-14, Buildings – County Buildings – Clean Energy Renewable Technology
Bill 9-14, Environmental Sustainability – Renewable Energy – County Purchase
Bill 10-14, Buildings – Solar Permits – Expedited Review
Bill 11-14, Buildings – Electric Vehicle Charging Station Permits – Expedited Review

As required by Section 2-81A of the County Code, we are informing you that transmittal of the fiscal and economic impact statements for the above referenced legislation will be delayed because more time is needed to coordinate with the affected departments, collect information, and complete our analysis of the fiscal and economic impacts. While we are not able to conduct the required detailed analyses at this time, it is clear that a number of these bills could have significant fiscal impacts.

Due to this year's heavy workload on Executive branch staff in developing both a full capital budget and an operating budget, the fiscal and economic statements will be transmitted after March 17, 2014.

JAH:fz

cc: Bonnie Kirkland, Assistant Chief Administrative Officer
Lisa Austin, Offices of the County Executive
Joy Nurmi, Special Assistant to the County Executive
Patrick Lacefield, Director, Public Information Office
Marc P. Hansen, Office of the County Attorney
Robert Hagedoorn, Department of Finance
David Platt, Department of Finance
Alex Espinosa, Office of Management and Budget
Mary Beck, Office of Management and Budget
Naeem Mia, Office of Management and Budget
Felicia Zhang, Office of Management and Budget

AIA Potomac Valley

A Chapter of the American Institute of Architects

Date: February 11, 2014

To: Roger Berliner, Nancy Floreen, Hans Reimer
Montgomery County Council, Transportation and Energy Committee Members

From: American Institute of Architects, Potomac Valley Chapter

Subject: February 11, 2014, Public Hearing on Proposed Environmental and Energy Bills

The local American Institute of Architects, Potomac Valley Chapter (AIA-PV) is writing to provide comment on proposed environmental, sustainability, green building and energy legislation that is summarized in Attachment A.

Throughout 2013, the AIA-PV has been working to assist the Department of Permitting Services by providing multi-disciplinary expert review and comment on green building codes that the county is considering adopting. We have submitted detailed comments to the Department and urged them to proceed slowly and cautiously in order to give design professionals, builders, and owners time to acclimate to the requirements, especially criteria that have the potential to slow economic development in the county. We advise you to do the same before moving forward to adopt new or revised environmental and energy legislation.

In addition, we advise you to seek green building **code solutions** that are effective industry-standard tools to achieve your goals and avoid regulations that make development more time consuming and confusing.

Sincerely,

Eileen Emmet, AIA, IgCC Task Force Co-Chair, eemmet.aia@gmail.com
William (Bill) LeRoy, AIA, IgCC Task Force Co-Chair, wl70@icloud.com

cc:
Loreen Arnold, AIA-PV President 2014, larnold@ktgy.com
Scott Knudson, AIA; AIA-PV Past-President 2013, sdqknudson@gmail.com
Ralph Bennett, AIA-PV, IgCC Task Force, ralph@bfmarch.com
Dan Coffey, AIA-PV, IgCC Task Force, dcoffey@therrienwaddell.com

Attachment A: AIA-PV July 30, 2013 IgCC Executive Summary
Attachment B: AIA-PV Feb. 4, 2014 Letter to Diane Schwartz-Jones w/AIA-PV Executive Summary 7.30.2013

Attachment A

2-14: Benchmarking
Benchmarking typically means a baseline against which performance is measured. Reporting for a year is required here (reasonable given seasonal variation) using Portfolio Manager (appropriate), but continuing energy reporting is inevitable and could be addressed by the legislation.

3-14: Building Energy Efficiency - Countywide
The County adopted the International Energy Conservation Code in 2013. This proposal refers to other energy codes included in LEED, and its impact should be assessed. Assumedly, the law intends to include LEED v.3; it should specify since v.4 is more stringent. LEED addresses many more issues than energy; if energy is the concern, it may be better to use energy codes.

4-14: County Street Lights
The assumed purpose is to reduce energy costs while maintaining appropriate lighting levels. LEED may not be, and is not the only answer here. So energy performance of possible alternatives should be addressed.

5-14: Social Costs of Carbon
Good intention - Many sectors of the economy exist only by shedding externality costs onto others. This also addresses the equity leg of the three-legged stool of sustainability.

Metrics here are new, unevenly available, and contentious. As long as the measurements are for information and not used to penalize or qualify projects, this may be a useful window into real sustainability.

6-14: Office of Sustainability
Parallels such agencies elsewhere - their success should be studied before full commitment. Full inclusion of appropriate agencies should be mandated - turf wars are inherent in the placement of such an agency within DEP. Implementation expertise is in permitting. Consider attaching to the Executive.

7-14: Certified Green Business Program
Which Certification will DEP use? Without this, it is difficult to know what the impact will be. The procedures included for selection of a system or systems will take a year, at least.

8-14: County Buildings, Renewable Energy Technology
This assumes that all county buildings can feasibly provide 1kw/1000 sf by photovoltaic generation. This may not be feasible for all buildings - offsets and other on-site energy technologies should be permitted including ground source heat pumps which LEED does not recognize as on-site energy. Renewable Energy Credits be clarified in lieu of 'Offsets.'

9-14: Renewable Energy Purchase: 50% by next year; 100% by 2020
Assumedly, this addresses County government's energy use. Will this extend to quasi-government agencies like HOC? Do they know about this?

10-14: Expedited Review of Solar Permits; 50% permit fee reduction.
Good idea.

11-14: Electric Vehicle Charging Station Permits; 50% permit fee reduction
Good idea.

12-14: County Employee Telecommuting
Good idea.

AIA Potomac Valley
A Chapter of the American Institute of Architects

ATTACHMENT A

EXECUTIVE SUMMARY

AIA-PV IgCC Task Force

July 30, 2013

Start Small:

There are many reasons to start small and expand with subsequent revision cycles. This allows time for the industry to come to grips with the new requirements of green codes. It also allows the opportunity to gather real data on the costs and benefits of its implementation.

Montgomery County has diverse building types in urban, suburban and rural settings therefore allowing alternative compliance paths is helpful and necessary to address these varying conditions.

One method for a phased approach is to make compliance optional and create incentives for complying with the code. Incentives can take the form of tax breaks, expedited permitting, or reduced permitting fees.

Another method is to make the most demanding requirements electives and specify a minimum number required. This also provides the opportunity to collect real world data. There is still skepticism about the business model for green building and energy efficient operational directives. Carefully crafted electives and pilot studies can help address that issue. This is the approach taken in the PV-Task Force's detailed recommendations in Attachment B.

Administrative Provisions:

The manner in which the DPS will manage review of projects under the green code is critical to its success. The PV-TF recommends that the DPS create standard forms, templates, and electronic submission protocols and have them in place on the date of adoption in order to administer the requirements in an efficient and effective manner. The requirements of the code also indicate a need for additional DPS review staff to avoid lengthening already long review times. DPS staff will need to be educated and fluent in the code criteria of several compliance paths because alternative compliance paths will have the best chance of a successful implementation process.

Jurisdictional Requirements:

Chapter 3 Jurisdictional Requirement 301.1.1, Scope Application: The task force recommends retaining the option of IgCC **or** ASHRAE 189.1 compliance paths, thus retaining maximum flexibility for the design team to choose the compliance path applicable to the building type and location. The task force further recommends that LEED Silver should be allowed as an alternative, non-mandatory, compliance path, because it has an established format, method of compliance, and documentation templates.

Electives:

Table 302.1, Requirements Determined by the Jurisdiction: The task force recommends striking the adoption of Table 302.1, the list of 22 additional requirements to be designated by the AHJ. The group feels that the overall number of electives required should apply to the entire code with some exceptions as noted in the Detailed Chapter Analysis and Recommendations.

Flexibility for the applicant is important. For new construction, 20% of electives are a reasonable number if the credits are spread among a minimum of four chapter categories. For existing buildings, 15% of electives are a reasonable number if the credits are spread among a minimum of two chapter categories.

Square Footage (SF) Size Thresholds:

Across-the-board square-footage size requirements will make adoption of the IgCC a hardship for many project types. The recommendation is to scale the SF thresholds based on the industry standards for type of use and energy use because the variables fall into three categories: a) applicability of the code, b) mechanical systems, and 3) envelope design. This will take more time to analyze and the PV-Task Force can assist the DPS to better define these thresholds.

Adoption in Other Jurisdictions:

While the scope of regional adoption of the IgCC was not a primary task for the PV-Task Force, the group notes the following observations in regard to green code adoption in the region:

Baltimore City Adoption

- In Baltimore City all newly constructed, extensively modified buildings that have or will have at least 10,000 square feet must be LEED-Silver certified or comply with the Baltimore City Green Building Standards (a LEED-like standard).
- Baltimore City is soon to introduce legislation expanding the options for building owners to select from a menu such that a project can be: LEED-Silver certified, or complies with the IgCC, or meets the ASHRAE 189.1 standard, or satisfies Enterprise Green Communities requirements, or complies with ICC 700. (This menu approach is similar to what DC is moving to.)
- The menu approach under legislative consideration will amend the existing Baltimore City Green Building Law whereby the listed options may be available in 4th quarter 2013 and the existing city-drafted regulatory alternative to LEED will remain available until June 1, 2015.
- The only real controversy in proposed legislation has been about the definitions for modified (i.e. the threshold for renovated buildings) structures and in the newly proposed code nearly all renovations will have to comply with the law.

Washington, D.C.

- Although typically slower than Maryland in adopting new code cycles, DC includes stakeholders in the process of code adoption. In the case of the IgCC, to date the input seems to be a great success.
- DC is considered a national green building leader. Green building standards there do not seem to be a deterrent to development.
- DC has adopted a modified approach to IgCC adoption. They moved many items to the Appendix section and recommended 15 credits be achieved, in any category, from 75 credit options.
- DC is more urban than Montgomery County, yet has several paths to compliance: IgCC, ASHRAE 189.1, LEED, and Enterprise Green Communities

Virginia Adoption

Adoption of the IgCC does not seem imminent. In conversations with VA officials, one of the main issues in adopting the IgCC is related to the land use, zoning, related impact the overlay code might have. Since the state of Virginia sets building codes, without local amendments, the IgCC might be considered too difficult to implement with such a diverse landscape, the officials stated that they do not plan to adopt at this time. If less restrictive to permit there, it could be perceived as an economic disadvantage to build or renovate in Montgomery County.

AIA Potomac Valley

A Chapter of the American Institute of Architects

February 4, 2014

Ms. Diane Schwartz-Jones, Director
Department of Permitting Services
255 Rockville Pike, 2nd Floor
Rockville, Maryland 20850-4166

Copy via email to diane.jones@montgomerycountymd.gov

Dear Ms. Schwartz-Jones,

Re: AIA-Potomac Valley Chapter, IgCC/ASHRAE 189.1 Task Force Recommendations

On July 30, 2013, the AIA-Potomac Valley Chapter (AIA-PV) submitted recommendations to you in regard to possible adoption of the International Green Construction Code (IgCC). As you know, the AIA-PV has a task force group who has been working together on this subject matter for some time. The group is comprised of a multi-disciplinary group of design professionals: architects, engineers, a developer/landscape architect, a builder, and others.

This letter provides supplemental information that responds to your staff's request that our group also review and make recommendations in regard to possible adoption of the ANSI/ASHRAE/USGBC/IES Standard 189.1-2011 -- Standard for the Design of High-Performance Green Buildings, Except Low-rise Residential Buildings (also referred to as ASHRAE 189.1, 2011. ASHRAE 189.1 Is an alternative means of compliance incorporated into the IgCC 2012 codebook. We hope this additional information meets your needs:

As mentioned in our July 30, 2013 letter, the AIA-PV group still recommends that Montgomery County:

- Refer to our July 30, 2013 Executive Summary (Attachment A) and detailed recommendations previously submitted
- Proceed slowly and cautiously in order to give design professionals, builders, and owner's time to acclimate to the requirements, especially criteria that have the potential to slow economic development in the county while other nearby jurisdictions are taking a measured approach or not yet shifting to these codes.
- Adopt the IgCC and alternative compliance paths (including ASHRAE 189.1) and do away with the current Montgomery County Green Building Law.

In addition, we recommend you create an industry advisory panel to make a solid implementation plan with the Department of Environmental Protection (DEP). We feel this is important because most of the details and issues to implement the County Council's proposed green building legislation are at the direction and responsibility of the Director of DEP and because those legislations overlap with requirements in green building codes that DPS is proposing.

The following items in Attachment B summarize the detailed analysis and recommendations of the AIA-PV-Task Force in regard to ASHRAE 189.1*:

- Section 5, Site Sustainability
- Section 6, Water Use Efficiency
- Section 7, Energy Efficiency
- Section 8, Indoor Environmental Quality
- Section 9, The Building's Impact on the Atmosphere, Materials, and Resources
- Section 10, Construciton and Plans for Operation

* Unlike the IgCC, ASHRAE 189.1 does not have a chapter for historic and existing buildings so comments on those building types have been incorporated into each section's recommendations.

AIA Potomac Valley

A Chapter of the American Institute of Architects

Once you have had a chance to review our recommendations, the PV-Task Force members would be pleased to meet with you in person to answer questions, clarify our recommendations, or address any item of interest that we may have overlooked. Thank you for giving us this opportunity to assist you.

Sincerely,

Scott Knudson, AIA; AIA-PV Past-President 2013, sdgknudson@gmail.com
Eileen Emmet, AIA, IgCC Task Force Co-Chair, eemmet.aia@gmail.com
William (Bill) LeRoy, AIA, IgCC Task Force Co-Chair, wl70@icloud.com

Attachment A: AIA-PV July 30, 2013 IgCC Executive Summary
Attachment B: AIA-PV ASHRAE 189.1 Recommendations

cc DPS: Hadi Mansouri, hadi.mansouri@montgomerycountymd.gov,
Mark Nauman, mark.nauman@montgomerycountymd.gov
Hemal Mustafa, hemal.mustafa@montgomerycountymd.gov

Cc: IgCC/ASHRAE 189.1 Task Force Members:

Ralph Bennett, AIA; Bennett, Frank, McCarthy Architects
Bruce Blanchard, Senior Consultant, Polysonics Acoustics & Technology Consulting
Daniel Coffey, Vice President, Therrien Waddell, Inc., Chairman USGBC-NCR, Montgomery County Chapter
Stephen Kirk, International Code Council, Associate Member
Suketu Patel AIA LEED AP BD+C; President, Integrated Design Studio LLC
Kirill Pivovarov, AIA, LEED AP; Principal, RTKL Associates Inc.
Steven Schwartzman, AIA, LEED AP; Associate Principal, WDG ARCHITECTURE
Geoff Sharpe, ASLA
Catherine E. Sheehan, AIA, LEED AP
Adam Spatz, PE, LEED AP; Senior Mechanical Engineer, Greenman-Pedersen, Inc.
Paul Tseng, PE, CxAP, CPMP, CMVP CEM, LEED AP; President, Founder, Advanced Building Performance
Amy Upton, LEED AP BD+C; Director of Environmental Design, Senior Associate, Grimm + Parker

Montgomery County

Finding ways to better share monthly aggregated energy data with building owners/operators is critical to understanding and improving building performance across our region. But it's easier said than done, since it requires cooperation among industry stakeholders. On October 30, the USGBC-NCR Montgomery County Branch convened a group of local stakeholders, including building owners, utilities, governments and advocacy groups, to discuss ways to improve the flow of building data in Montgomery County, MD.

There are several structural constraints and obstacles that prevent utilities from providing actionable energy data to building owners. In many cases, utilities across the country do not have the technical infrastructure or staff resources in place to provide aggregate energy usage data to building owners. However, building owners have market-established tools at their disposal, like the Environmental Protection Agency's Portfolio Manager, which they can use to track building performance. Additionally, utilities must meet rules and regulations of state public utility commissions, which can unintentionally create additional barriers to how utilities are able to share data. Many of these restrictions are related to privacy concerns associated with sharing individual tenant data.

The Montgomery County Energy Summit, sponsored by the JBG Companies, Pepco and Boland, brought experts together to discuss the barriers and explore solutions for improving access to aggregated energy building data. Access to this critical data will empower building owners to make smarter energy decisions and better enable benchmarking of public and commercial properties, ultimately helping improve performance and reduce energy usage. The summit brought together local utilities and commercial real estate owners and operators, including local staff from Pepco, Baltimore Gas & Electric, The Tower Companies, Brandywine Realty Trust, Akridge, and First Potomac. Additionally, the summit drew several Maryland state and Montgomery County officials and local advocacy groups to discuss the current barriers to sharing energy data and opportunities to improve this process.

Dialogues like the one in Montgomery County show that private sector stakeholders can have a unified voice in support of improved data sharing policies. While the County is considering a benchmarking and disclosure law, USGBC-NCR's Montgomery County Branch believes proactive conversations on data access between all interested parties is the most effective way to ensure cooperation and the establishment of best practices in pursuit of energy efficiency.

For that reason, the Branch has formed a working group to continue discussing opportunities to improve access to utility data. For more information on becoming part of the group, please contact us.

Montgomery County Branch

ENVIRONMENTAL BILLS (2-14 THROUGH 14-14) RESPONSES:

The USGBC NCR Montgomery County Branch has had the opportunity to review the packet of energy and environmental measures proposed by Councilmember Roger Berliner and many of his colleagues.

We believe revised language within the thirteen proposed bills is required to provide clarity, using lessons learned from other jurisdictions, which have hastily adopted legislation without fully understanding the fiscal impact or administrative barriers. Over time those jurisdictions have been forced to correct issues and have consequently wasted resources, while frustrating residents and businesses. While some of the proposed legislation may have a small impact, others might have a much larger price tag.

The true impact on Montgomery County for implementing the proposed legislation should be assessed taking into account the diversity of our county. We have environments that range from urban to rural. The future plans for growth incorporating recommendations from organizations and agencies such as USGBC, Maryland Energy Administration (MEA), Department of Energy (DOE), and many others that are well versed in these issues. We recommend the County Council allow time for discernment and discussion of concerns among its stakeholders prior to taking a position on these bills.

In regards to the specific proposed bills we have the following comments:

Bill 2-14 – Environmental Sustainability – Buildings - Benchmarking.

The USGBC NCR Montgomery County Branch had an Energy Data Sharing Summit in October 2013 to discuss this issue with many key stakeholders like County, State, and Federal Agencies, utilities, property owners, technical experts, other local jurisdictions, and industry professionals. Through this forum we have identified the following issues to be addressed prior to implementing required benchmarking of buildings in our county:

- Benchmarking requirements should first apply to County owned and leased buildings and the information should be publically available. Once the county can show they have worked through administrative issues then it would be appropriate to roll out to the private sector.
- Energy auditing and retro commissioning is expensive and the industry does not have a pool of adequately trained professionals to fulfill this requirement. However, new data access & analysis technology will reduce the cost of audits and retro commissioning and facilitate ongoing virtual building performance monitoring.
- Data provided by the utility companies must be in a clear and consistent format and be flexible to allow for automatic uploading to uniform platform such as ENERGY STAR, DOE/ASHRAE smart meter interfaces, etc.
- The benefits to data access are known by the industry and the first step is getting the needed data from the utilities. Utility commissions and elected officials should coordinate on data access so that utilities and building owners have clarity on how data should be tracked and presented to eliminate privacy concerns and still provide usable data to owners. Condo communities with one master meter are common in the County. Enhanced access to meter data would be helpful, but many have expressed interest in cost effective solutions to sub-metering.
- Pepco is currently aware of this issue and is providing aggregated data, directly uploaded to ENERGY STAR in the District of Columbia, following the Sustainable DC II Legislation.

The key findings regarding Bill 2-14 is there will be a fiscal impact for businesses in terms of benchmarking and the required energy audit. The cost to property owners should be assessed and determined if the financial burden is reasonable prior to passage of the bill. There may be opportunities for incentives to help with implementation for small businesses in our county. They have not taken advantage of existing state incentive dollars due to a distrust of the current program. This is attributed to the complexity of the process and experiences of other business owners where misinformation and errors have increased cost instead of saving money.

Bill 3-14, Buildings - Energy Efficiency - Energy Standards

- The bill should focus on moving toward a sustainability code solution like the IgCC or ASHRE 189.1 with modifications to coordinate with current codes and regulations.
- Offering a multiple compliance path option between LEED V3, IgCC, or ASHRE 189.1 should be allowed until the codes have been better coordinated.
- Significant issues have arisen in jurisdictions where new codes conflicted with existing regulations.
- The County should conduct an industry impact study to fully understand the economic impact to businesses, our community and county agencies. The intent of this regulation should show a leadership path for a successful sustainable future.

Bill 4-14 Streets and Roads - County Street Lights

- The county should allow an appropriate engineering solution for each location, along with Life Cycle Assessment, to determine the most effective lighting solution in lieu of a straight LED requirement.
- This alternative allows for site specific engineering solutions, for location effectiveness and efficiency, not merely complying with a regulatory requirement.
- Lighting technology is consistently changing and any legislation should be adaptable to the future changes.

Bill 8-14 Buildings - County Buildings - Clean Energy Renewables

- This bill should be a goal; not a mandate. A better solution is to consider the life cycle cost effectiveness of this requirement and how it would be implemented by county capital construction and operated and maintained by the county staff.
- Most buildings will not be able to meet this goal along with other building regulations; such as storm water management, HVAC systems, etc.
- Long term monitoring and maintenance of these systems is challenging and there is a high risk of failure.
- The cost ratio of meeting the renewable requirements to the total project cost is very high and competes with overall county efforts to limit capital building spending, posing financial problems for many county projects.
- County agencies have experience with Power Purchase Agreement (PPA) where a private entity owns and operates much larger systems. Although this has met with some success, the current PPA financial climate has made building size systems less than attractive to PPA providers.
  An alternative compliance path may be to allow purchasing renewable energy credits (REC), which are currently available and comply with the current legislated mandate. The county agencies are currently required to purchase at least 20% of their annual electrical load in REC's.

Thank you for the opportunity to comment on these bills. We may have further comments as additional discussions and comments identify other impacts.

TESTIMONY ON BEHALF OF COUNTY EXECUTIVE ISIAH LEGGETT

ON ENVIRONMENTAL AND SUSTAINABILITY PACKAGE

Bills 2-14, 3-14, 4-14, 5-14, 6-14,7-14, 8-14, 9-14, 10-14, 11-14, 12-14

February 11, 2014

Good evening Council President Rice and members of the County Council. My name is Bonnie Kirkland and I am pleased to be here on behalf of County Executive Isiah Leggett to testify on the package of environmental and sustainability measures introduced on February 4, 2014 by Councilmember Berliner and others. Mr. Leggett supports Councilmember Berliner's initiative and the Council's efforts to address the need for more sustainable development in Montgomery County. Following up on recommendations from the Sustainability Workgroup, this package of renewable energy, energy efficiency and sustainability measures will take the County to the next level of environmental excellence.

Sustainable development has been defined as meeting the needs of the present without compromising the ability of future generations to meet their own needs.[1] The path forward requires understanding and planning: understanding how existing buildings perform and how planned buildings are expected to perform; and designing buildings and other infrastructure that reduce materials consumption, reuse materials, reduce energy consumption and maximize the use of renewable resources.

County Executive Leggett recognizes that the path forward will involve substantial change and commitment on the part of both the public sector and the private sector. He is committed to working with the Council on this package during the coming weeks to develop the most progressive and reasonable legislation achievable that will balance both the compelling need to achieve sustainable development and the budgetary realities faced by the County and our local businesses to fully implement the approved changes the legislative package requires.

Stewardship for future generations has been a cornerstone of Mr. Leggett's Smart Growth Initiative in terms of planning for future growth at appropriate transit oriented locations. The County Executive applauds Councilmember Berliner's and the sponsoring council members' vision and recognition of the need for stewardship of our precious resources for future generations.

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[1] International Institute for Sustainable Development quoting from the World Commission on Environment and Development (WCED). *Our common future*. Oxford: Oxford University Press, 1987 p. 43.

MONTGOMERY COUNTY COUNCIL
ROCKVILLE, MARYLAND

ROGER BERLINER
COUNCILMEMBER
DISTRICT 1

CHAIRMAN
TRANSPORTATION, INFRASTRUCTURE
ENERGY & ENVIRONMENT COMMITTEE

January 14, 2014

Dear Colleagues,

Next week I will be introducing a package of 13 energy/environmental measures that are designed to ensure that Montgomery County remains at the sustainability forefront. I would be pleased to have you cosponsor some or all of these measures.

These measures focus on renewable energy, energy efficiency, transportation, and government accountability. I have attached a fact sheet that gives a brief description of each of them, and of course would be happy to discuss any of them in greater detail should you have questions.

I was inspired by our Council's decision to assert its leadership in the context of reducing the gap in income disparities by passing a local minimum wage law. I think all of us appreciate that the federal government has become so dysfunctional that we can expect little progress on many of the issues we care deeply about. Indeed, Bruce Katz of Brookings recently described the federal government as a "large health insurance company with an army." His thesis, which I share, is that our governing paradigm has shifted from a top down led by the federal government to a bottom up led by local governments like ours.

I say all of this because we need to do more if we are to address climate change. It is obviously not a hoax and we know what we need to do to address it. We need to use less energy and cleaner energy. Period. This package of bills is taken in many instances from what other leading jurisdictions are doing – from Chicago to Seattle to California and New York states. They are a mix of leading by example, rewarding green businesses, supporting market forces, adopting more exacting standards, and holding our county government accountability.

Holding ourselves accountable is important. When the Council passed a similar package in 2008, we tasked a Sustainability Working Group with the principle responsibility for guiding our County to achieve our formal goal of reducing greenhouse gas emissions by 80 percent by 2050. It is time now to make this a core government

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responsibility, and this package includes a measure that will create an Office of Sustainability within DEP whose principal responsibility will be to monitor how we are doing and to help develop the policies and practices that will get us to where we need to be.

I hope you will join me in making sure Montgomery County burnishes its reputation as a community that embraces sustainability at our core.

Sincerely,