

MEMORANDUM

TO: County Council

FROM: Amanda Mihill, Legislative Attorney *A. Mihill*
Josh Hamlin, Legislative Attorney *J. Hamlin*

SUBJECT: **Action:** Bill 2-14, Environmental Sustainability – Buildings – Benchmarking

Transportation, Infrastructure, Energy and Environment Committee recommendation (2-1):
enact Bill 2-14 with amendments to:

- delete the energy audit and retro-commissioning requirements;
- apply benchmarking only to nonresidential buildings;
- adjust the reporting timeframe so that benchmarking is required for County buildings beginning in June 2015, Group 1 covered buildings in December 2016, and Group 2 covered buildings in December 2017;
- create a Benchmarking Work Group to review the implementation of the law as it is applied to County buildings and submit a report in September 2015 with any recommendations regarding how benchmarking should be implemented for privately-owned buildings, including any recommended amendments to County law.
- change the implementing department to the Department of Environmental Protection.

Councilmember Floreen did not support Bill 2-14 or the Committee amendments.

Bill 2-14, Environmental Sustainability – Buildings - Benchmarking, sponsored by Councilmembers Berliner, Floreen, Riemer, Andrews, and Navarro, was introduced on January 28, 2014. A public hearing was held by the Committee on February 11 and a Transportation, Infrastructure, Energy and Environment Committee worksession was held on March 24.

As introduced, Bill 2-14 would require the owners of certain buildings to benchmark the energy use of certain buildings and retro-commission certain building systems to improve their energy efficiency. Modeled after laws in New York, Chicago, and the District of Columbia, Bill 2-14 would require building owners to measure the energy efficiency of their buildings, make that information public, and periodically commit to assuring that their energy efficiency equipment is working properly. A chart comparing select jurisdictions that have benchmarking laws is on ©87.

Councilmember Berliner explained the purpose of this Bill in his January 14 memorandum describing his proposed energy/environmental package (see ©20). This Bill is designed to work with the recently enacted PACE program to create market-based incentives for building owners to increase the efficiency of their buildings. Information provided would aid tenants in forecasting future utility costs. An informative fact sheet about benchmarking from the Department of Energy's State and Local Energy Efficiency Action Network is on ©81.

The Fiscal and Economic Impact statements for this Bill are on ©75. According to both DEP and DGS, one new position (for each Department) resulting from the implementation of Bill 6-14 (Office of Sustainability) could also implement the requirements of Bill 2-14. OMB estimates the fiscal impact of Bill 2-14 in FY15 would be \$263,712 (\$95,346 in personnel costs, 16,666 in operating costs, and 151,700 in one time expenses).

Summary of Testimony

The Council heard testimony and received correspondence from several people raising a variety of concerns. These include:

- Calvert Investments, Boland Trane Services, and the National Electrical Manufacturers Association supported Bill 2-14.
- The U.S. Green Building Council, Montgomery County Chapter, the Greater Bethesda-Chevy Chase Chamber of Commerce and Greater Silver Spring Chamber of Commerce, and others raised several concerns regarding the auditing and retro-commissioning portion of Bill 2-14, including the costs associated with an energy audit.
- The County Chamber of Commerce recommended that if the county requires benchmarking of private buildings, then the County should also participate in the program. The US Green Building Council, Montgomery County Chapter urged that benchmarking should first apply to County buildings and to private buildings after a successful program is implemented with County buildings.
- The County Chamber of Commerce recommended that for older buildings that are likely to be less efficient than newer buildings, the County provide a process to help with mitigation. Examples the Chamber mentioned include priority for County programs or other education to address efficiency problems.
- The Greater Bethesda-Chevy Chase and Greater Silver Spring Chambers of Commerce and Guardian Realty Management raised concerns about the disclosure requirement and questioned whether proprietary information would be protected.
- The Maryland National Capital Building Industry Association and Montgomery Housing Partnership supported the concept of encouraging and supporting efforts to benchmark the energy use of buildings, but urged the Council to establish a working group to identify ways to create, support, and measure building energy use.
- The Greater Bethesda-Chevy Chase and Greater Silver Spring Chambers of Commerce raised a variety of specific questions, including whether the waiver provisions are adequate, and what the costs are for benchmarking, energy audits, and retro-commissioning.
- The Maryland-National Capital Park and Planning Commission questioned whether benchmarking would be required for buildings that are scheduled to be demolished.

Department of Environmental Protection Comments

Before the Committee worksession, the Department of Environmental Protection provided a helpful review of Bill 2-14 (©72). Included in their review were the following recommended amendments:

- delete the energy audit and retro-commissioning requirements;
- change the implementing department from Permitting Services to Environmental Protection;
- require benchmarking for County buildings before applying the law to private buildings;
- establish a work group to develop a Benchmarking Reporting Protocol for how the benchmarking process should work in the County;

The Department noted that additional resources would be required to implement the bill.

Committee Discussion/Recommendation

Councilmember Berliner amendment Councilmember Berliner offered an amendment to Bill 2-14 that addressed several of the concerns raised in testimony and correspondence. This amendment would:

- delete the energy audit and retro-commissioning requirements;
- apply benchmarking only to nonresidential buildings;
- adjust the reporting timeframe so that benchmarking is required for County buildings beginning in June 2015, Group 1 covered buildings in December 2016 , and Group 2 covered buildings in December 2017;
- create a Benchmarking Work Group to review the implementation of the law as it is applied to County buildings and submit a report in September 2015 with any recommendations regarding how benchmarking should be implemented for privately-owned buildings, including any recommended amendments to County law.

Councilmember Berliner also asked Council staff to ensure that the Bill as amended would include the same minimum size criteria as for private buildings (50,000 square feet). This is included on the attached bill at ©2, lines 20-23. **The Committee (2-1) supported** this amendment. Councilmember Floreen dissented.

What County department should be the implementing department? As drafted, Bill 2-14 would be implemented and enforced by the Department of Permitting Services. DEP Comments recommend changing this to the Department of Environmental Protection. **The Committee recommended** changing the implementing Department to the Department of Environmental Protection.

Should benchmarking be required for buildings that are scheduled to be demolished? The Maryland-National Capital Park and Planning Commission recommends that a building that is scheduled to be demolished within 4 years be excluded from the benchmarking requirement. The Bill as drafted does not exclude these buildings. The Committee did not address this issue.

What benchmarking information must be disclosed? Bill 2-14 requires the Department to make reported benchmarking information readily available to the public. Some Chambers of Commerce and Guardian Realty Management raised concerns about this requirement and questioned whether proprietary information would be protected. Council staff notes that this section briefly restates portions of the State Public Information Act. To the extent that information reported is exempt from disclosure under State law, it would be withheld.

What is the potential cost to building owners? Committee members discussed the potential cost to perform the requirements of Bill 2-14. The economic impact statement addresses this issue:

It is not possible to ascertain the costs incurred by building owners related to benchmarking. The benchmarking process requires the use of EPA's ENERGY STAR Portfolio Manager, which is a free software tool. Many building owners in the County already utilize this tool, so there would be no or minimal costs to these building owners. Property owners that are not currently using this tool may incur some expense to gather the building energy data that is required. That expense is offset by higher occupancy rates whereby there is an increase in the demand by tenants, greater business income through higher rents, and greater property values. The results of benchmarking could have a positive economic effect on investment, business income, and property values.

This packet contains:	<u>Circle #</u>
Bill 2-14	1
Legislative Request Report	19
Councilmember Berliner Memo	20
OMB and Finance Memo	24
Select Correspondence	
County Executive	25
American Institute of Architects, Potomac Valley Chapter	26
Boland Trane Services	32
Calvert Investments	36
Charles Nulsen, III	38
Greater B-CC and Greater Silver Spring Chambers	42
Guardian Realty Management	44
Maryland National Capital Building Industry Association	46
Maryland National Capital Park and Planning Commission	48
Montgomery County Chamber of Commerce	62
Montgomery Housing Partnership	65
National Electrical Manufactures Association	67
U.S. Green Building Council, Montgomery County Branch	69
DEP Memo	72
Fiscal and Economic Impact Statements	75
DOE fact sheet	81
Chart of laws in other jurisdictions	87

Bill No. 2-14
Concerning: Environmental Sustainability
– Buildings – Benchmarking
Revised: 4/3/2014 Draft No. 5
Introduced: January 28, 2014
Expires: July 28, 2015
Enacted: _____
Executive: _____
Effective: _____
Sunset Date: _____
Ch. _____, Laws of Mont. Co. _____

COUNTY COUNCIL FOR MONTGOMERY COUNTY, MARYLAND

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

AN ACT to:

- (1) require the owners of certain buildings to benchmark the energy use of certain buildings;
- (2) require the Director of the Department of Permitting Services to issue an annual report to review and evaluate energy efficiency in certain covered buildings;
- (3) require the Director make certain benchmarking information readily available to the public;
- (4) allow the Director to waive certain requirements; and
- (5) [[require the owners of certain buildings to have an energy audit performed on certain buildings;
- (6) require the owners of certain buildings to assure that retro-commissioning is performed on certain buildings; and
- (7)]] generally amend County law regarding energy efficiency and environmental sustainability.

By adding

Montgomery County Code
Chapter 18A, Environmental Sustainability
Article 5
Sections 18A-34, 18A-35, 18A-36, and 18A-37
Article 6
Sections [[18A-38, 18A-37,]] 18A-38, 18A-39, 18A-40, 18A-41, 18A-42, and 18A-43
[[Article 7
Sections 18A-44, 18A-45, 18A-46, 18A-47, 18A-48, 18A-49, and 18A-50]]

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

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

1 **Sec. 1. Chapter 18A is amended by [[adding]] amending Article 5 to add**
2 **Sections 18A-34, 18A-35, 18A-36, and 18A-37; Article 6, consisting of Sections**
3 **18A-38, 18A-39, 18A-40, 18A-41, 18A-42, and 18A-43[[; and Article 7,**
4 **consisting of Sections 18A-44, 18A-45, 18A-46, 18A-47, 18A-48, 18A-49, and**
5 **18A-50]] as follows:**

6 **Article 5. Commercial Property Assessed Clean Energy Program.**
7 **18A-34 – 18A-37. Reserved.**

8 **Article 6. Building Energy Use Benchmarking.**

9 **18A-38. Definitions.**

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

11 *Benchmark* means to track and input a building’s energy consumption data
12 and other relevant building information for 12 consecutive months, as
13 required by the benchmarking tool, to quantify the building’s energy use.

14 *Benchmarking tool* means the website-based software, commonly known as
15 ENERGY STAR Portfolio Manager, or any successor system, developed
16 and maintained by the United States Environmental Protection Agency to
17 track and assess the relative energy use of buildings nationwide.

18 *Certificate of use and occupancy* means the certificate issued by the Director
19 that allows a building to be occupied and used.

20 *County building* means any building owned by the County, or any group of
21 buildings owned by the County that have the same property identification
22 number, that equals or exceeds 50,000 square feet gross floor area, as
23 identified by the Director

24 *Covered building* means any [[building owned by the]] County building,

25 Group 1 covered building, or Group 2 covered building[[, as defined in this

26 Article]]. *Covered building* does not include any building with more than

27 10% occupancy which is used for

- 28 (1) public assembly in a building without walls;

- 29 (2) warehousing;
30 (3) self storage; or
31 (4) a use classified as manufacturing and industrial or transportation,
32 communication, and utilities.

33 Data center means a space designed and equipped to meet the needs of high
34 density computing equipment such as server racks, used for data storage and
35 processing, as defined by the benchmarking tool.

36 Department means the Department of [[Permitting Services]] Environmental
37 Protection.

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

39 Energy performance score or ENERGY STAR score means the numerical
40 score produced by the benchmarking tool, or any successor score, that
41 assesses a building's energy performance compared to similar buildings,
42 based on source energy use, operating characteristics, and geographic
43 location.

44 Energy use intensity or EUI means a numeric value calculated by the
45 benchmarking tool that represents the energy consumed by a building
46 relative to its size.

47 Group 1 covered building means any nonresidential building, or any group
48 of nonresidential buildings that have the same property identification
49 number, not owned by the County that equals or exceeds 250,000 square feet
50 gross floor area, as identified by the Director.

51 Group 2 covered building means any nonresidential building, or any group
52 of nonresidential buildings that have the same property identification
53 number, not owned by the County that equals or exceeds 50,000 square feet
54 gross floor area but is less than 250,000 square feet gross floor area, as
55 identified by the Director.

56 Gross floor area means the sum of the gross horizontal area of the several
 57 floors of a building or structure measured from the exterior faces of the
 58 exterior walls or from the center line of party walls. In a covered but
 59 unenclosed area, such as a set of gasoline pumps or a drive-through area,
 60 gross floor area means the covered area. Gross floor area does not include
 61 any:

- 62 [(a)] (1) basement or attic area with a headroom less than 7 feet 6 inches;
 63 [(b)] (2) area devoted to unenclosed mechanical, heating, air conditioning,
 64 or ventilating equipment;
 65 [(c)] (3) parking structure; or
 66 [(d)] (4) accessory structure to a residential building.

67 Licensed professional means a professional engineer or a registered architect
 68 licensed in the State, or another trained individual as defined in applicable
 69 County regulations.

70 Reported benchmarking information means the descriptive information
 71 about a building, its operating characteristics, and information generated by
 72 the benchmarking tool regarding the building's energy consumption and
 73 efficiency. Reported benchmarking information includes the building
 74 identification number, address, gross floor area, energy performance score,
 75 energy use intensity, and annual greenhouse gas emissions.

76 Residential occupancy means the occupancy of dwelling units in any
 77 building that includes one or more dwellings.

78 **18A-39. Energy use benchmarking.**

- 79 (a) County buildings. No later than June 1, 2015, and every June 1
 80 thereafter, the County must benchmark all buildings owned by the
 81 County for the previous calendar year.

82 (b) Group 1 covered buildings. No later than ~~[[June 1, 2014]]~~ December
 83 1, 2016, and every [[June]] December 1 thereafter, the owner of any
 84 Group 1 covered building must benchmark the building for the
 85 previous calendar year. ~~[[However, the owner of any Group 1~~
 86 covered building with at least 10% residential occupancy, as measured
 87 by square footage, must benchmark the building for the previous
 88 calendar year no later than June 1, 2015, and no later than June 1st
 89 each year thereafter.]] The owner must report the benchmarking
 90 information to the Department no later than [[July]] January 1 each
 91 year.

92 ~~[[b)]]~~ (c) Group 2 covered buildings. No later than ~~[[June 1, 2015]]~~
 93 December 1, 2017, and [[no later than June 1st each year]] every
 94 December 1 thereafter, the owner of any Group 2 covered building
 95 must benchmark the building for the previous calendar year.
 96 ~~[[However, the owner of any Group 2 covered building with 10% or~~
 97 more residential occupancy must benchmark the building for the
 98 previous calendar year no later than June 1, 2016, and no later than
 99 June 1st each year thereafter.]] The owner must report the
 100 benchmarking information to the Department no later than [[July]]
 101 January 1 each year.

102 (d) Waiver. The Director may waive the requirements of this Section if
 103 the owner of a covered building documents, in a form required by
 104 regulation, that the building:

105 (1) is in financial distress, defined as a building that:

106 (A) is the subject of a tax lien sale or public auction due to
 107 property tax arrearages;

108 (B) is controlled by a court appointed receiver; or

- 109 (C) was recently acquired by a deed in lieu of foreclosure;
 110 (2) had average physical occupancy of less than 50% throughout
 111 the calendar year for which benchmarking is required; or
 112 (3) is new construction and received its certificate of use and
 113 occupancy during the calendar year for which benchmarking is
 114 required.

115 **18A-40. Data Verification.**

- 116 (a) Verification required. Before the first benchmarking deadline
 117 required by Section 18A-39, and before each third benchmarking
 118 deadline thereafter, the owner of each covered building must assure
 119 that reported benchmarking information for that year is verified by a
 120 licensed professional. The verification must be a stamped and signed
 121 statement by a licensed professional attesting to the accuracy of the
 122 information. If the Director requests, the owner of a covered building
 123 must produce the statement available for the most recent year in
 124 which verification was required.
- 125 (b) Waiver. The Director may waive the requirements of this Section if
 126 the owner shows that compliance with this Section will cause undue
 127 financial hardship. If a no-cost or low-cost verification option is
 128 available, the Director may require the owner to use the alternative
 129 option.

130 **18A-41. Solicitation of compliance information from tenants.**

- 131 (a) Solicitation of information from tenant. An owner of a covered
 132 building must request relevant information from any tenant in a
 133 covered building no later than March 1 of each year in which
 134 benchmarking is required by Section 18A-39. If the owner receives
 135 notice that a tenant intends to vacate a unit which is subject to this

136 Section, the owner must request the information within 10 days after
 137 receiving the notice to vacate.

138 (b) Tenant response. Within 30 days after receiving a request for
 139 information from the building owner, each tenant of a unit in a
 140 covered building must provide the building owner with all
 141 information that the owner cannot otherwise acquire that is necessary
 142 to comply with this Article.

143 (c) Failure of tenant to provide information.

144 (1) If any tenant does not provide the information required under
 145 this Section to the owner of a covered building, that fact does
 146 not relieve the owner of the obligation to benchmark the
 147 building under Section 18A-39, using all information otherwise
 148 available to the owner.

149 (2) If a tenant of a unit in a covered building does not provide
 150 information to the owner of the building under this Section, the
 151 Director must consider the owner to be in compliance with
 152 Section 18A-39 if:

153 (A) the owner shows that the owner requested the tenant to
 154 provide the information under this Section; and

155 (B) the owner benchmarked the building under Section 18A-
 156 39, using all information otherwise available to the
 157 owner.

158 **18A-42. Annual report; disclosure of benchmarking information.**

159 (a) Annual report required. By October 1 of each year, the Director must
 160 submit a benchmarking report to the County Executive and County
 161 Council. The report must review and evaluate energy efficiency in
 162 covered buildings, including:

- 163 (1) summary statistics on the most recent reported energy
164 benchmarking information; [[and]]
- 165 (2) discussion of any energy efficiency trends, cost savings, and job
166 creation resulting from energy efficiency improvements; and
- 167 (3) for County buildings:
- 168 (A) the scores of County buildings benchmarked; and
- 169 (B) whether the Director recommends any energy efficiency
170 improvements for specific buildings.
- 171 (b) Disclosure of benchmarking information. The Director must make
172 reported benchmarking information readily available to the public,
173 including on the open data website created under Section 2-154, and
174 the Director may exempt information from disclosure only to the
175 extent that disclosure is prohibited under federal or state law.
- 176 (c) Exceptions to disclosure. To the extent allowable under state law, the
177 Director must not make the following readily available to the public:
- 178 (1) any individually-attributable reported benchmarking
179 information from the first calendar year that a covered building
180 is required to benchmark; and
- 181 (2) any individually-attributable reported benchmarking
182 information relating to a covered building that contains a data
183 center, television studio, or trading floor that together exceeds
184 10% of the gross square footage of the individual building until
185 the Director finds that the benchmarking tool can make
186 adequate adjustments for these facilities. When the Director
187 finds that the benchmarking tool can make adequate
188 adjustments, the Director must report this data in the annual
189 report.

190 **18A-43. Regulations; penalties.**

191 (a) The County Executive may issue Method (2) regulations to administer
192 this Article.

193 (b) Any violation of this Article is a Class A violation.

194 **[[Article 7. Energy Audits and Retro-Commissioning of Base Building**
195 **Systems.]]**

196 **[[18A-44. Definitions.**

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

198 ASHRAE means the American Society of Heating, Refrigerating and Air-
199 conditioning Engineers, Inc.

200 Base building system means each system or subsystem of a building that
201 uses energy or impacts energy consumption, including:

- 202 (1) the building envelope;
- 203 (2) any heating, ventilating, and air conditioning (HVAC) system;
- 204 (3) any conveying system;
- 205 (4) any domestic hot water system; and
- 206 (5) any electrical or lighting system.

207 Base Building system does not include any industrial process that occurs in a
208 covered building or any system or subsystem owned by a tenant (other than
209 a net lessee for a term of 49 years or more, including any renewal option),
210 condominium unit owner, or cooperative unit shareholder, or a system or
211 subsystem for which a tenant bears full maintenance responsibility and that
212 is located in the tenant's leased space or exclusively serves that leased space.

213 Building management system means a computer-based system that monitors
214 and controls a building's mechanical and electrical equipment, such as its
215 HVAC, lighting, power, fire, and security system, including, at least, control
216 of the heating equipment using interior temperature sensors.

217 County building means a covered building that is owned by the County and
218 for which the County regularly pays all or part of the energy bills.

219 Covered building means

- 220 (1) 1 building that exceeds 50,000 gross square feet;
221 (2) 2 or more buildings on the same tax identification number that
222 together exceed 100,000 gross square feet; or
223 (3) 2 or more buildings held in the condominium form of ownership that
224 are governed by the same board of managers and that together exceed
225 100,000 gross square feet.

226 Covered building does not include any 1, 2, or 3-family residential building.

227 Current facility requirements means the owner's current operational needs
228 and requirements for a building, including temperature and humidity set
229 points, operating hours, filtration, and any integrated requirements such as
230 controls, warranty review, and service contract review.

231 Department means the Department of Environmental Protection.

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

233 Energy audit or audit means a systematic process to identify and develop
234 improvements to any base building system, including any alteration of that
235 system and the installation of new equipment, insulation, or other generally
236 recognized energy efficiency technology to optimize energy performance of
237 the building and achieve energy savings.

238 Energy auditor means an individual the Department authorizes to perform
239 energy audits and certify audit reports required by this Article.

240 Energy management system means a system incorporating interior
241 temperature sensors and a central processing unit and controls, which are
242 used to monitor and control electricity, gas, steam, and oil usage, as
243 applicable, based on the need for heating.

244 Energy efficiency report means the report required under Section 18A-47.

245 Financial hardship of a building means a building that:

- 246 (1) was included on the Department of Finance's tax lien sale list within 2
247 years before an energy efficiency report was due; or
- 248 (2) is exempt from real property taxes under Maryland Code, Tax-
249 Property Article, Sections 7-201, 7-202, and 7-204, or any successor
250 provisions, and had negative revenue less expenses during the 2 tax
251 years before an energy efficiency report was due.

252 Green Building Council means the U.S. Green Building Council, an
253 organization that has developed and published the LEED rating system to
254 measure the energy and environmental performance of a building.

255 LEED refers to the series of Leadership in Energy and Environmental
256 Design (LEED) rating systems developed by the Green Building Council.

257 Owner means:

- 258 (1) the owner of record of a covered building;
- 259 (2) the net lessee in the case of a net lease of an entire building for a term
260 of 49 years or more, including any renewal option;
- 261 (3) the board of directors or similar body if the covered building is a
262 cooperative apartment or condominium corporation.

263 Registered design professional has the meaning in the latest version of the
264 ICC International Building Code or another building code that the County
265 adopts.

266 Retro-commissioning means a systematic process applied to an existing
267 building that has never been commissioned to assure that the building's
268 systems are designed, installed, functionally tested, and can be operated and
269 maintained according to the owner's operational needs.

270 Simple payback means the number of years for projected annual energy
 271 savings to equal the amount invested in an energy conservation measure, as
 272 determined by dividing the investment by the annual energy savings.

273 Space means an area in a building enclosed by floor to ceiling walls,
 274 partitions, windows and doors.]]

275 **[[18A-45. Energy audits required.**

276 (a) Audit required. The owner must assure that an energy audit is
 277 performed on the base building systems of a covered building before
 278 filing an energy efficiency report required by this Article. Except as
 279 otherwise provided in Section 18A-49, an energy audit must be
 280 performed by or under the supervision of an energy auditor and must
 281 be performed in accordance with applicable regulations. The audit
 282 process must cover the base building system and must at least
 283 identify:

- 284 (1) any reasonable measure, including any capital improvement,
 285 that would reduce energy use or the cost of operating the
 286 building;
- 287 (2) for each measure, the associated annual energy savings, the cost
 288 to implement, and the simple payback, calculated by a method
 289 approved by the Department;
- 290 (3) the building's benchmarking output consistent with the United
 291 States Environmental Protection Administration Portfolio
 292 Manager tool or another method the Director finds equivalent;
- 293 (4) a break-down of energy usage by system and predicted energy
 294 savings by system after any proposed measures are
 295 implemented; and

- 296 (5) a general assessment of how the major energy consuming
297 equipment and systems used in tenant spaces impact the energy
298 consumption of the base building systems, based on a
299 representative sample of spaces.
- 300 (b) *Audit process.* The energy audit process must be at least as stringent
301 as the Level II Energy Survey and Engineering Analysis of the 2004
302 edition of Procedures for Commercial Building Energy Audits
303 published by the ASHRAE, or another process the Director finds
304 equivalent.
- 305 (c) *Qualifications of auditor.* An energy auditor must be a registered
306 design professional with any other certification or qualification the
307 Director finds appropriate.
- 308 (d) *Contents of audit report.* The energy auditor must prepare and certify
309 a report of the energy audit. Except as otherwise provided in Section
310 18A-49, the audit report must include information relating to the audit
311 as required by applicable regulations, including the date when the
312 audit was completed and the information required by subsection (a).
- 313 (e) *Compliance with landmarks laws.* The cost estimates for any covered
314 building that is regulated by any state or federal law regulating
315 landmarks or historic buildings must include all added costs necessary
316 for the proposed work to comply with that law.
- 317 (f) *Timing of energy audit.* Except as otherwise provided in Section 18A-
318 49, the energy audit must be completed no earlier than 4 years before
319 the date when a covered building's energy efficiency report is filed
320 under this Article.

321 (g) Exceptions. An energy audit is not required if a registered design
322 professional certifies that the building complies with any of the
323 following requirements:

324 (1) The covered building received an EPA Energy Star label for at
325 least 2 of the 3 years before the building's energy efficiency
326 report is filed.

327 (2) No EPA Energy Star rating is available for the building type,
328 and a registered design professional documents that the
329 building's energy performance is 25 or more points better than
330 the performance of an average building of its type over a 2-year
331 period during the 3 years before an energy efficiency report is
332 filed, consistent with the methodology of the Leadership in
333 Energy and Environmental Design 2009 rating system for
334 Existing Buildings published by the United States Green
335 Building Council or other rating system or methodology for
336 existing buildings, as determined by the Department.

337 (3) The covered building received certification under the LEED
338 2009 rating system for Existing Buildings, or another rating
339 system for existing buildings the Director finds equivalent,
340 within 4 years before the building's energy efficiency report is
341 filed.]]

342 **[[18A-46. Retro-commissioning required.**

343 (a) Retro-commissioning required. The owner of a covered building must
344 assure that retro-commissioning is performed on the base building
345 system of a covered building before filing an energy efficiency report
346 as required by this Article. Except as otherwise provided in Section
347 18A-49, retro-commissioning must be performed by or under the

348 supervision of a retro-commissioning agent, as required by applicable
 349 regulations issued under subsection (b).

350 (b) Regulations. The County Executive must issue regulations requiring
 351 that sufficient analysis, corrections and testing have been done so that
 352 each base building system demonstrates efficient operation.

353 (c) Contents of retro-commissioning report. The retro-commissioning
 354 agent must prepare and certify a retro-commissioning report. Each
 355 retro-commissioning report must include information relating to the
 356 retro-commissioning as specified in applicable regulations.

357 (d) Timing of retro-commissioning Except as otherwise provided in
 358 Section 18A-49, each retro-commissioning must be completed no
 359 earlier than 4 years before a covered building's energy efficiency
 360 report is filed with the Department under this Article.

361 (e) Documentation of retro-commissioning. The owner must maintain a
 362 copy of the latest up-to-date equipment manual and the most recent
 363 retro-commissioning report at every covered building and must make
 364 either available to the Department for inspection on request.

365 (f) Exceptions. A retro-commissioning is not required if the covered
 366 building received certification under the LEED 2009 rating system for
 367 Existing Buildings, or another rating system for existing buildings the
 368 Department finds equivalent, within 2 years before the building's
 369 energy efficiency report is filed and earned the LEED point for
 370 Existing Building Commissioning investigation and analysis and the
 371 LEED point for Existing Building Commissioning implementation.]]

372 **[[18A-47. Energy efficiency report required.**

373 (a) Report required. Except as provided in Section 18A-49, the owner of
 374 each covered building must file an energy efficiency report for the

375 building during the calendar year when the report is due under this
 376 Section and every tenth calendar year thereafter.

377 (b) Content of report. Except as otherwise provided in Section 18A-49,
 378 each energy efficiency report must include, in a format approved by
 379 the Department:

380 (1) the building's energy audit report or documentation that an
 381 exception applies to the building; and

382 (2) the building's retro-commissioning report or documentation
 383 that an exception applies to the building.

384 (c) Due dates. The first energy efficiency report for each covered
 385 building in existence on July 1, 2014, and for each new building must
 386 be due, beginning with calendar year 2015, in the calendar year with a
 387 final digit that is the same as the last digit of the building's property
 388 identification number, as illustrated in the following chart:

<u>Last</u> <u>digit of</u> <u>property</u> <u>ID</u> <u>number</u>	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>
<u>Year</u> <u>first</u> <u>EER is</u> <u>due</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>

390 (d) Deferral of energy efficiency report. An owner of a covered building
 391 may defer submitting an energy efficiency report for a covered

392 building until the tenth year after the year identified in subsection (c)
393 if the building:

394 (1) is less than 10 years old at the beginning of its first assigned
395 calendar year; or

396 (2) has undergone substantial rehabilitation, as certified by a
397 registered design professional, within 10 years before the
398 calendar year when an energy efficiency report is due, if at the
399 beginning of the calendar year the base building systems of the
400 building comply with County law in effect for new buildings
401 constructed on and after July 1, 2010 or in effect on the date of
402 the substantial rehabilitation, whichever is later.

403 (e) Exceptions.

404 (1) The Director may allow an extension of time to file an energy
405 efficiency report if the building's owner shows that, despite the
406 owner's good faith efforts, the owner could not complete the
407 required energy audit and retro-commissioning before the due
408 date for the report. The Director may allow no more than 2
409 extensions of no more than one year each. Any extension
410 allowed under this Section must not extend the scheduled due
411 dates for any later energy efficiency report.

412 (2) The Director may allow one or more annual extensions of time
413 to file an energy efficiency report because of financial hardship
414 of the building.

415 (f) Due dates for County buildings. The first due dates for County
416 buildings must follow a staggered schedule, from calendar year 2015
417 through calendar year 2023, for each building in use on July 1, 2014.
418 The Director must add each County building opened to use after that

419 date to the schedule within 10 years after the Department of
420 Permitting Services issues the certificate of use and occupancy for the
421 building.

422 (g) Combined audit and retro-commissioning. An owner may perform
423 the audit and retro-commissioning of a building in a combined process
424 if that process meets all requirements of Sections 18A-45 and 18A-
425 46.]]

426 **[[18A-48. Notice.**

427 The Department must notify the owner of each covered building of the
428 requirements of this Article no later than 3 years before the calendar year when the
429 covered building's energy efficiency report is due and in the calendar year before
430 the calendar year when the report is due.]]

431 **[[18A-49. Early compliance.**

432 The Department may allow an owner of a covered building to comply with
433 this Article before the deadline specified in Section 18A-47.]]

434 **[[18A-50. Regulations; penalties.**

435 (a) The County Executive may issue Method (2) regulations to administer
436 this Article.

437 (b) Any violation of this Article is a Class A violation.]]

438

LEGISLATIVE REQUEST REPORT

Bill 2-14

Environmental Sustainability – Buildings - Benchmarking

DESCRIPTION:	Would require the owners of certain buildings to benchmark the energy use of certain buildings and retro-commission certain building systems to improve their energy efficiency. Modeled after laws in New York, Chicago, and the District of Columbia, would require building owners to measure the energy efficiency of their buildings, make that information public, and periodically commit to ensuring that their energy efficiency equipment is working properly. This Bill is designed to work with the recently enacted PACE program to create market based incentives for building owners to increase the efficiency of their buildings. Information provided would aid tenants in forecasting future utility costs.
PROBLEM:	Insufficient attention is often paid to the energy efficiency of existing commercial buildings.
GOALS AND OBJECTIVES:	To improve the energy efficiency of existing and future commercial buildings.
COORDINATION:	Department of Environmental Protection, Department of Permitting Services
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:	Class A.



MONTGOMERY COUNTY COUNCIL
ROCKVILLE, MARYLAND

ROGER BERLINER
COUNCILMEMBER
DISTRICT I

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

STELLA B. WERNER OFFICE BUILDING • 100 MARYLAND AVENUE, 6TH FLOOR, ROCKVILLE, MARYLAND 20850
240-777-7828 OR 240-777-7900, TTY 240-777-7914, FAX 240-777-7989
WWW.MONTGOMERYCOUNTYMD.GOV

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,

A handwritten signature in black ink, appearing to be the initials 'J.B.' followed by a horizontal line.

**FACT SHEET ON
COUNCILMEMBER BERLINER'S 13 ENERGY/ENVIRONMENT LEGISLATIVE INITIATIVES**

Councilmember Roger Berliner (D-1), Chair of the Montgomery County Transportation, Infrastructure, Energy & Environment Committee, will be introducing 13 energy/environmental measures on January 21. The measures are designed to underscore and support the County's commitment to sustainability and would (1) promote increased energy efficiency; (2) increase use of renewable energy; (3) decrease consumption of gasoline and support electric vehicles; and (4) create more accountability and responsibility within County government for achieving the County's goal of reducing greenhouse gas emissions 80% by 2050. Below is a brief description of each of these measures:

Renewable Energy

- **Renewable Energy Purchasing – 50% Renewables by 2015; 100% by 2020** – Today the County purchases approximately 30% of its energy from renewable energy resources. Washington, DC; Austin, Texas; and Portland, Oregon are already at 100% renewable energy.
- **Renewables Onsite** – This bill, modeled after a recently passed law in Prince George's County, 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.
- **Greentaping Solar** – Two of the impediments to increased solar utilization are the cost and time involved in getting permits. This measure, patterned after a successful program in Chicago, requires our Department of Permitting Services to devise an expedited and less costly process for solar related permits.
- **Solar Zoning Accommodation**– Current set back requirements limit the use of solar in residential dwellings. This ZTA would modestly amend our zoning laws to permit solar to extend 2 feet into the side or rear setback.

Energy Efficiency

- **Benchmarking Buildings** – This legislation, modeled after laws in New York, Chicago, and the District of Columbia, would require building owners to measure the energy efficiency of their buildings, make that information public, and periodically commit to ensuring that their energy efficiency equipment is working properly. It is designed to work with the recently passed PACE program to create market based incentives for building owners to increase the efficiency of their buildings. Information provided would aid tenants in forecasting future utility costs.
- **Silver LEED for New Buildings** – Current county law requires new commercial buildings to be LEED certified, while county buildings must meet the more environmentally stringent Silver standard. This bill would require all new commercial buildings to meet Silver LEED.

- Cost of Carbon -- The use of conventional fuels, particularly coal, extracts a cost on society that is not reflected in its price. These "external" costs should be factored into the cost/benefit calculations that the county utilizes when it assesses the potential for energy efficiency improvements. This bill would require the County to use EPA's "social cost of carbon" calculation or a comparable methodology for those purposes.
- LED Street Lighting -- It is generally recognized that LED lighting is far more energy efficient and requires far less maintenance. This bill would require DOT, upon the expiration of its current contract for street lighting, to contract with an LED company.

Transportation

- EV Infrastructure – Electric Vehicles will only become mainstream when there are sufficient charging stations to inspire confidence in the public. California recently passed legislation requiring all new buildings over a certain size to be "EV ready." This ZTA would require all new buildings to install 1 EV charging station for every 50 parking spaces.
- Greentaping EV stations – Just as in solar installations, EV charging stations can be subject to a lengthy and costly permitting process. This bill would require DPS to institute an expedited and less costly permitting process.
- Teleworking -- Teleworking is becoming far more common and accepted. Other jurisdictions, including Fairfax, have made significantly more progress in establishing teleworking goals and meeting them. This legislation would require the County Executive to publish regulations that set forth a definitive teleworking policy and a requirement to designate a telecommuting manager.

Government Incentives & Accountability

- Create an Office of Sustainability within DEP – This bill would create a new Office of Sustainability within DEP. When the Council passed legislation in 2008, it tasked a Sustainability Working Group with the responsibility of guiding our County's greenhouse gas reduction implementation. It is now time to make this a fundamental responsibility of the county government and to hold ourselves accountable.
- County Green Certified Businesses – The County has created a program whereby a local business can be "green certified" by adopting good sustainable practices. This bill calls upon the County Executive to issue regulations that would give a preference in contracting to local businesses that are green certified.



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 Plait, Department of Finance
Alex Espinosa, Office of Management and Budget
Mary Beck, Office of Management and Budget
Nacem Mia, Office of Management and Budget
Felicia Zhang, Office of Management and Budget

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.

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.

AIA Potomac Valley

A Chapter of the American Institute of Architects

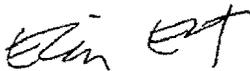
Date: February 11, 2014
To: Roger Berliner, Nancy Floreen, Hans Reimer
Montgomery County Council, Transportation and Energy Committee Members
From: American Institute of Architects, Potomac Valley Chapter
Subject: February 11, 2014, Public Hearing on Proposed Environmental and Energy Bills

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, w170@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

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.

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, Construction and Plans for Operation

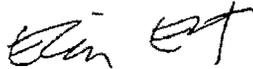
* Unlike the IgCC, ASHRAE 189.1 does not have a chapter for historic and existing buildings so comments on those building types have been incorporated into each section's recommendations.

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, w170@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

Council Bill 2-14 – Favorable

**Testimony of Steven Beatrice, Boland Trane Services, Inc.
To the County Council for Montgomery County**

February 11, 2014

I thank you for the opportunity to testify in strong support of Bill 2-14, requiring energy performance ratings for large, existing commercial buildings in Montgomery County.

Boland Trane Services, Inc. (Boland)

Boland was founded in 1960 by Louis J. Boland, Sr. and has grown from a small HVAC equipment sales and service company to a Professional Services company, with just over three hundred employees in our Gaithersburg headquarters, providing a complete slate of building Energy Service solutions. Thirty-six Boland employees hold one or more of the following professional or industry certifications: Professional Engineer, Certified Energy Manager, LEED Accredited Professional/Green Associate, Certified Sustainable Development Professional and Certified Buildings Systems Commissioning. Boland provides energy benchmarking services, energy audits, building energy modeling, re- and retro-commissioning, building energy management system design and construction and HVAC equipment upgrades.

A Property's Single Largest Operating Expense

According to the EPA, energy represents 30 percent of the typical office building's costs and is a property's single largest operating expense. Building energy benchmarking provides property owners with the information to compare building energy performance across a portfolio or with comparable buildings within the same region and will identify opportunities for significant reductions in operating costs resulting in increased profitability and competitiveness of their business.

Retro-commissioning and Energy Auditing

On a higher level, an Energy Services Company (ESCO) such as Boland may be brought in to perform retro-commissioning (retro-cx) and auditing of a building. Retro-commissioning looks at the entire building as a system to identify and rank all possible energy efficiency measures, everything from simple maintenance procedures to building envelope improvements to adding solar or wind renewable energy sources. As Boland's energy professionals identify and qualify

energy saving opportunities with a building owner other trades and contractors will be engaged to provide specialized skills, products and systems furthering the growth of Montgomery County's workforce.

Recent technological advances associated with Advanced Metering, Data Acquisition and Data Analysis have reduced the costs of retro-cx and auditing. These technologies enable Boland to incorporate the retro-cx and auditing into an annual maintenance contract. Also, Boland can make more precise and quicker evaluations of a building's energy performance – think of it as having an MRI of a building's energy performance over a year (Figure 1), being able to record in 15-minute intervals ongoing performance data of all control points from the EMS (Figure 2) and automatic monthly updates of Energy Star's Portfolio Manager account (Figure 3).

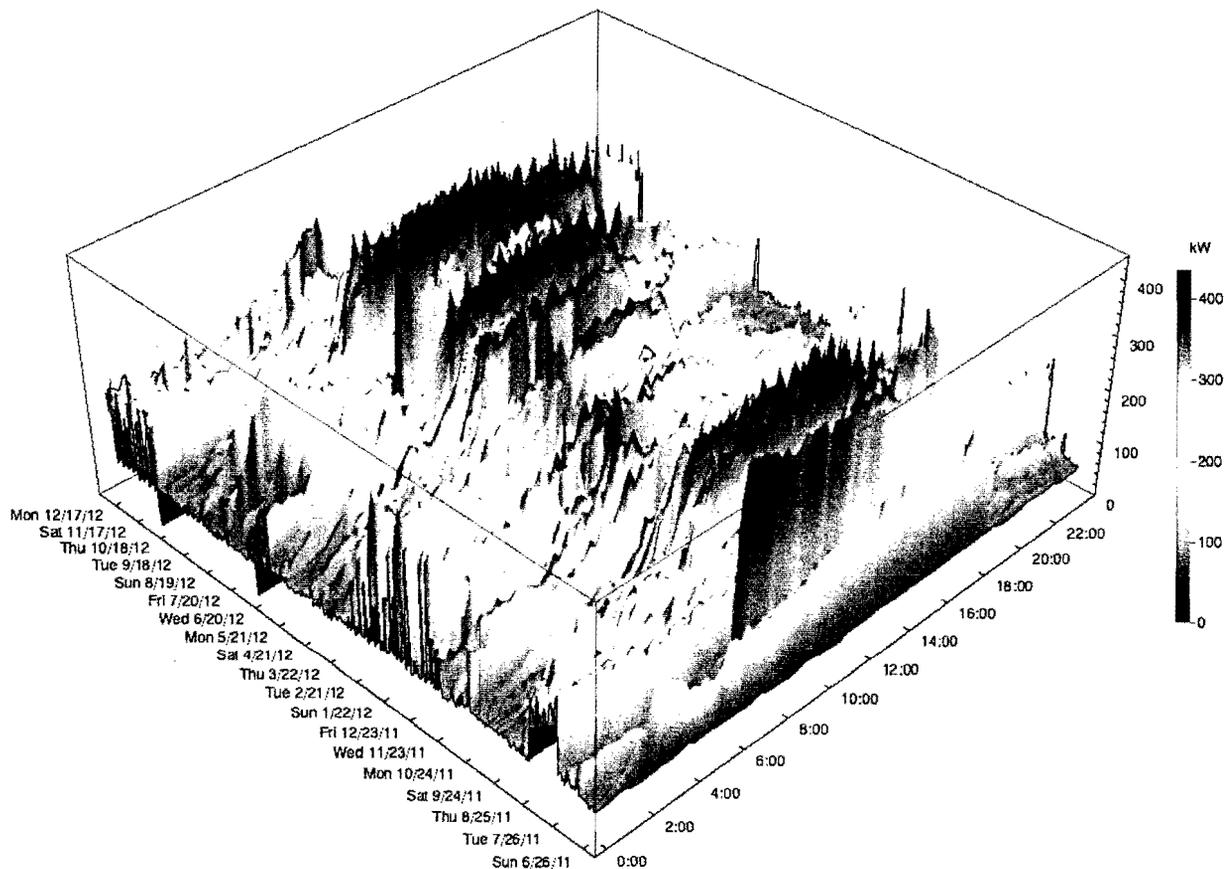


Figure 1.

¹ "The Cost-Effectiveness of Commercial-Buildings Commissioning,"

Lawrence Berkeley National Laboratory. <http://eetd.lbl.gov/EMills/PUBS/Cx-Costs-Benefits.html>

² <http://www.boma.org/research/newsroom/press-room/2013/Pages/EPA-Recognizes-BOMA-International-with-2013-ENERGY-STAR%C2%AE-Partner-of-the-Year-Sustained-Excellence-Award.aspx>

³http://www.energystar.gov/index.cfm?current_sort_column=SECTOR¤t_sort_order=ASC&resultsPerPage=20&fuseaction=partner_list.showPartnerResults&s_code=ALL

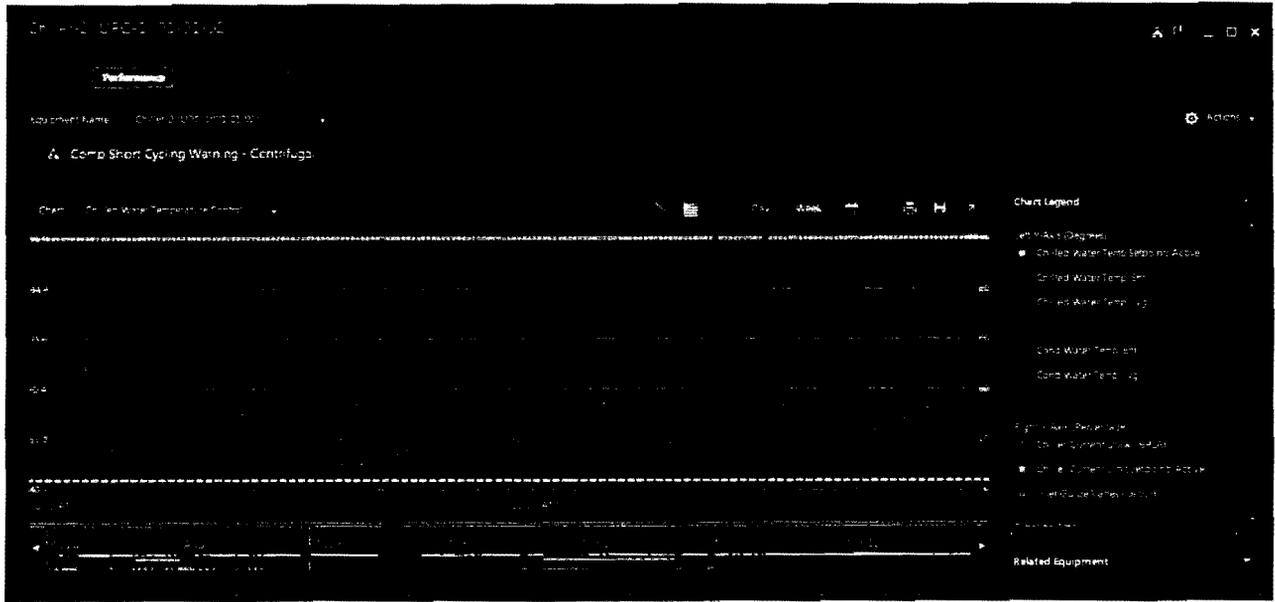


Figure 2.

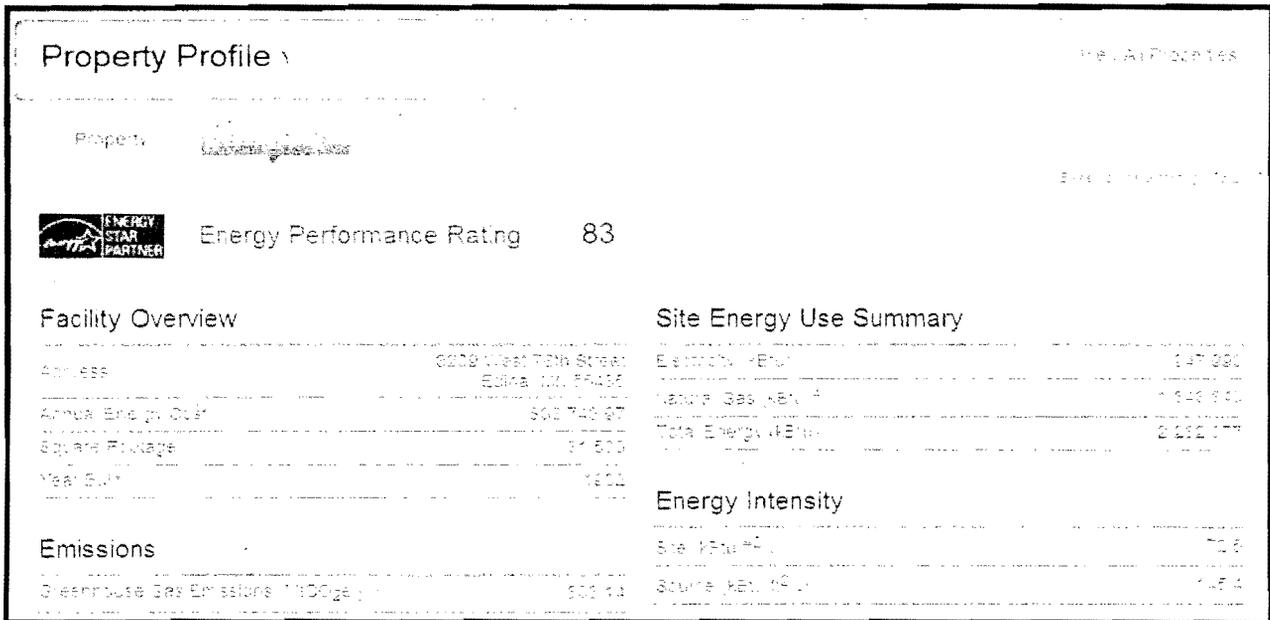


Figure 3.

¹ "The Cost-Effectiveness of Commercial-Buildings Commissioning,"

Lawrence Berkeley National Laboratory. <http://eetd.lbl.gov/EMills/PUBS/Cx-Costs-Benefits.html>

² <http://www.boma.org/research/newsroom/press-room/2013/Pages/EPA-Recognizes-BOMA-International-with-2013-ENERGY-STAR%C2%AE-Partner-of-the-Year-Sustained-Excellence-Award.aspx>

³ http://www.energystar.gov/index.cfm?current_sort_column=SECTOR¤t_sort_order=ASC&resultsPerPage=20&fuseaction=partner_list.showPartnerResults&s_code=ALL

Why Enact Disclosure of Energy Benchmarking Information?

- The voluntary users of benchmarking understand the benefits of energy efficient buildings; a benchmarking law would universally touch all others.
- Energy Star as a standard, third-party program, becoming mainstreamed, will make building energy ratings as ubiquitous as the gas mileage ratings of autos and as easily understandable – bogus or abnormal ratings will immediately raise a flag with prospective buyers or tenants.
- The real estate industry has embraced the use of Energy Star benchmarking:
 - BOMA has received multi-year EPA Energy Star Partner of the Year awards and received the Energy Star Sustained Excellence Award in 2009, 2010, 2012 and 2013²
 - Thirteen of 162 2010 EPA Energy Star Leaders are Commercial Real Estate companies³

As building owners increasingly recognize the importance to their bottom line of reducing their environmental impact and increasing asset value they turn to energy experts for solutions. As the demand for energy efficiency solutions grows so does the demand for companies who can identify the solutions and companies who can provide these services. As with other Energy Services Companies, Boland recognizes the financial and environmental benefits of applying energy benchmarking and retro-commissioning to the stock of Montgomery County's existing buildings. A result of this focus on energy services, over the past few years of economic downturn, Boland has maintained our workforce with no expectations for downsizing. A favorable review of Bill 2-14 will demonstrate your commitment to stimulating Montgomery County's economy with more green jobs and to promoting an environmentally attractive commercial real estate market.

Thank you to the Chair and Council members for your time today. Feel free to contact me with any follow up questions or information requests.

Contact Information:

Steven D. Beatrice, CEM, LEED AP+OM, CSDP
240.306.3202
steve.beatrice@boland.com

Boland Trane Services, Inc.
30 West Watkins Mill Road
Gaithersburg, MD 20878

¹ "The Cost-Effectiveness of Commercial-Buildings Commissioning,"

Lawrence Berkeley National Laboratory. <http://eetd.lbl.gov/EMills/PUBS/Cx-Costs-Benefits.html>

² <http://www.boma.org/research/newsroom/press-room/2013/Pages/EPA-Recognizes-BOMA-International-with-2013-ENERGY-STAR%C2%AE-Partner-of-the-Year-Sustained-Excellence-Award.aspx>

³http://www.energystar.gov/index.cfm?current_sort_column=SECTOR¤t_sort_order=ASC&resultsPerPage=20&fuseaction=partner_list.showPartnerResults&s_code=ALL

February 19, 2014

Councilmember Roger Berliner
Chair, Montgomery County Transportation, Infrastructure, Energy & Environment Committee
Montgomery County Council
100 Maryland Ave
Rockville, MD 20850

RE: Calvert Investments Support for Bill # 2-14, Environmental Sustainability – Buildings Benchmarking

Dear Councilmember Berliner:

I am writing on behalf of Calvert Investments, a longstanding Montgomery County business to support Bill # 2-14, Environmental Sustainability – Buildings Benchmarking.

Building disclosure standards help markets work by providing more information, and well-functioning markets can yield more efficient and sustainable buildings. Investors have an interest in more efficient and sustainable buildings as they are more sustainable investments from a financial and environmental perspective.

Building energy benchmarking and disclosure standards are valuable to tenants who may wish to understand and reduce their energy use and costs, and minimize their environmental footprint. As a tenant in an office building in downtown Bethesda, Calvert has sought to better understand its own energy use and the related energy efficiency of the building where its offices are located. Improved disclosure requirements would help Calvert and other building tenants across the County to do that. Improved disclosure often leads to better management and improved performance, which is a potential source of costs savings and greenhouse gas emissions reductions. In addition, requiring commissioning at certain buildings, as the Bill would do, is an important way to ensure that such buildings are operating efficiently, as intended.

From the investor perspective, energy efficiency is critical throughout the economy given volatile energy prices and concerns related to climate change. Calvert and a growing number of institutional investors in the United States and around the world look at corporate energy efficiency as part of their investment process. This applies particularly to residential and commercial buildings. Indeed, Calvert released reports in 2008 and 2010 that benchmarked the sustainability practices of large U.S. homebuilders, with a special emphasis on energy efficiency. The purpose of these reports was to better understand which companies were best managing environmental and energy risks and opportunities, and by extension, which companies were positioned to meet the growing consumer interest in green building attributes.

In addition to addressing investor and consumer interest in energy performance, this bill can help reduce energy consumption. Buildings represent a particularly compelling energy savings opportunity, using approximately 40% of the world's primary energy. Simply benchmarking buildings has been shown to reduce energy use (and the subsequent emissions) by 7%. Furthermore, green buildings are attractive to investors, because they can contribute to higher

rents, ROI improvement, building value increases, and higher occupancy rates, all of which can lead to increased shareholder value.¹

Fortunately, the Commercial Real Estate industry can invest profitably in energy efficiency. According to a McKinsey report, commercial buildings account for 32% of the "efficiency potential in stationary uses of energy" in terms of primary energy. McKinsey finds that "only a small share of the commercial sector's energy productivity potential is currently being captured."

Investments in energy efficiency make a great deal of sense. In 2008, McKinsey estimated that worldwide, \$170 billion could be invested yearly in energy efficiency with an average annual Internal Rate of Return (IRR) of 17%. (By comparison, ten year U.S. treasury notes currently yield below 1.7% annually). By 2020, these investments could produce billions in annual energy savings.

Indeed, many companies have already benefited from their investments in energy efficiency. Between 2000 and 2006, Trizec (now Brookfield Properties Corporation) invested \$20 million in efficiency upgrades. The company achieved an average payback time of less than 2.2 years and cut its energy bill by 16%. The owners of the Empire State Building also invested in energy efficiency retrofits, and earned a 30.8% annual return.

Many cities and other jurisdictions have established building energy disclosure, including New York City, Philadelphia, Seattle, San Francisco, Boston, Minneapolis, Chicago, and Washington, DC. These governments see the value in improving the energy productivity of their buildings and understand that being known as leaders in sustainability can help attract business and investment.

Montgomery County has demonstrated a commitment to sustainability. Approving this bill will help to bolster the County's leadership on this set of issues.

Respectfully submitted,

Ron Wolfsheimer (S.O.)

Ronald M. Wolfsheimer
Executive Vice President, Chief Financial and Administrative Officer
Calvert Investments, Inc.

¹ McGraw Hill Construction, "Green Outlook 2011: Green Trends Driving Growth", November 2010, <http://aiacc.org/wp-content/uploads/2011/06/greenoutlook2011.pdf>. Ranges result from differences between retrofits and new buildings.

Charles K. Nulsen, III – Speaker #5

Against Bills 2, 3, 5, and 6-14

Outline Testimony

- I. Thank you for letting me speak tonight. My name is Charlie Nulsen. I am the President and Owner of Washington Property Company, a small Bethesda based real estate company. I have worked in real estate in Montgomery County for 35 years. I am here to speak in opposition of 4 of the bills. #2, 3, 5, and 6, I disapprove more than just these 4. I have been warned that I will speak to you in English, but you will hear a foreign language. Not a great characterization from my business brothers, but bad communication is a 2 way street and I am here for the first time as my attempt to help address this issue.
- II. I want to start with big picture
 - a. Montgomery County is in a double dip recession of the likes it has never seen. Ever!
 - b. The Federal Government's economic impact on Montgomery County will be declining for the next 20 years – It is a technology thing –Montgomery County for the first time must rely heavily on private sector growth.
 - c. Our commercial tenant base is dwindling – 25% vacancy in our office market is structural.
 - d. WPC's commercial property taxes have decreased 30% in last five years and I predict another 15-20% drop in the next two because of lower rents, increased vacancy, causing lower assessments. I have commercial

properties in Bethesda, Silver Spring, Rockville, I-270; they are all at the distressed stage.

- e. Montgomery County has supplemented this loss in commercial real estate income with taxes – particularly on utilities to the tune of \$233M in 2013. Montgomery County Energy Tax accounts for approximately 30% of commercial Pepco bill and 15% of residential Pepco bill.

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

- a. Modelled after the District – creates 2 weeks of reporting man hours for the owner. Probably 3 times that on the Government side. D.C. owners do their own energy assessments as a matter of business. So do Montgomery County owners.
- b. Taken in the context of Montgomery County.
 - i. It will highlight to corporate tenants a Corporate Energy Tax that could be highest in the country! Montgomery County utility bills are 30% higher than DC or VA. Montgomery County collects more for the distribution of electricity than Pepco itself. What policy goal are we serving here?
 - ii. It comes at a terrible time for the commercial industry. More cost – zero pay back. “The house is on fire, but turn out the lights before you leave.”

IV. Bill 3-14 Silver LEED requirements

- a. Silver LEED for residential is very hard to obtain and further drives up the cost of rental and for-sale product.

- b. Commercial Construction is dead – inside beltway development activity is 11-1 residential / office. Why throw up another road block to commercial growth?
- c. County Buildings - ok

V. Bill 5-14 Carbon Assessment

- a. If you have a Silver LEED requirement for County Buildings why is there a need for social carbon assessment?

VI. Bill 6-14 Office of Sustainability

- a. Does the County, within it's current budget constraints, really have the resources to add an additional department?
- b. Sustainability is an often used term: but let's look at Montgomery County's overall direction: Decreasing commercial tax base / exploding residential base (especially rental) Is this really sustainable?

I am the poster child for a real estate owner in Montgomery County. I had a \$16M office building on 270, then Lockheed moved out. An appraisal 2 weeks ago (done by lender) gave the value at \$6M. Basically the value of the ground. But, in 2 months I will be starting my 3rd apartment project in Montgomery County, which will bring in more renters that need County services.

I don't think this path is sustainable for a healthy Montgomery County. We need balance.

To put it in another context – over the past 8 years Montgomery County has gotten an A- in environmental stewardship and an F in economic stewardship. I suggest we collectively, as a community, focus on pulling our F up to a C instead of our A- to an A so we may pass on to future generations a healthy, sustainable Montgomery County.

Thank you.



February 11, 2014

The Honorable Craig Rice
President, Montgomery County Council
Stella B. Werner Council Office Building
100 Maryland Avenue, 6th Floor
Rockville, MD 20850

RE: Bill 2-14, "Environmental Sustainability – Buildings – Benchmarking" and Bill 3-14, "Buildings – Energy Efficiency – Energy Standards" (together, the "Environmental Bills", or "Bills")

Dear Council President Rice and Members of Council:

The Greater Bethesda-Chevy Chase Chamber of Commerce and the Greater Silver Spring Chamber of Commerce (together, the "GB-CC and GSS Chambers") recently met with Councilmember Berliner, representatives of his staff, and representatives from other county chambers to discuss the above-referenced environmental bills, provide general comments, and pose our preliminary questions and concerns. The GB-CC and GSS Chambers collectively represent the interests of nearly a thousand business members in Montgomery County.

Both our Chambers are very concerned that the Environmental Bills are being introduced at an inopportune time, given that the County's commercial real estate industry is experiencing tremendous difficulty and strain due to record high vacancy rates. While we recognize the importance of the policies and goals that the Environmental Bills seek to address – making sure that the County is more "green," more "sustainable," and more energy efficient – we strongly believe that regulatory measures of this kind need to be structured and analyzed in a deliberate manner to ensure that the efforts to attain the stated policies and goals will be successful, without resulting in increased costs or unintended consequences. Sufficient time and attention to detail will be necessary to ensure that the bills are workable both for the County and for the businesses and individuals who will be subject to their requirements, especially in these difficult times for building owners.

We strongly believe that incentives work better than mandates for the purpose of encouraging building owners to increase the efficiency of their buildings and to promote sustainability. Thus, we are very concerned about Bill 2-14, "Environmental Sustainability – Building Energy and Benchmarking." The bill, as currently drafted, is vague in certain respects but has potential implications for the business community and County taxpayers that could be significant. At the same time, other than collecting information for County government at the expense of building owners, no purpose is provided for the use of this information. While not an exhaustive list, some of the important questions that are raised by – but not answered in – the bill are as follows:

- The bill applies to two groups of buildings, defined in the bill as "Group 1 Covered Buildings" and "Group 2 Covered Buildings." Does the County know how many of each group type exist in the County? Before the legislation is enacted, shouldn't that information be known to determine the scope of the legislation and to assess the potential costs associated with implementation and compliance?
- The bill's definition of "gross floor area" differs from that in the Montgomery County Zoning Ordinance. Is this intentional? If so, why?
- Are the "waiver" provisions adequate to protect owners of older buildings? Are vacancy and other thresholds set at appropriate levels?
- Why is the benchmarking information supplied by an owner not sufficient? Why does this information have to be verified by a "licensed professional"? What will it cost the building owner to have the information verified?

- If certain information is to be provided by a tenant but the tenant does not provide it, how can the owner supply it? Yet, under Section 18A-41(c) of the bill, the onus is on the owner, who is "not relieved of the obligation to benchmark the building". The owner's information, without input from the tenant, may not be accurate, despite the owner's good faith efforts to comply. How will that inaccuracy be factored in the undescribed use of the information?
- The bill requires the director of the Department of Environmental Protection to submit an annual report to the County each year. Will the "disclosure of benchmarking information" under 18A-42(c) protect proprietary information of businesses? The chambers strongly believe that it should.
- The energy audit provisions of the bill define "covered buildings" differently than the definition in the benchmarking provisions of the bill. Why?
- What will an energy audit cost? Who will pay the cost? How will "any reasonable measures" to reduce energy use or the costs of operating a building be determined? Who will make that determination? Will implementation of such measures be required?
- We understand that commissioning is an expensive and time-consuming process. How much will retro-commissioning cost?

In order to address the concerns of the GB-CC and GSS Chambers and others, we believe that the County should conduct a "pilot program" on one of its older buildings (perhaps the County Office building at 100 Maryland Avenue) to demonstrate how Bill 2-14 would affect owners and possibly tenants in a real world environment before deciding to launch the program County-wide. Such a demonstration would allow the County to study the impacts of the bill to ensure that its goal of increasing energy efficiency will accomplish its intended result and will not cost more than it will save. This would go a long way towards encouraging building owner and tenants to support the bill.

We have a number of similar concerns about Bill 3-14, "Buildings – Energy Efficiency – Energy Standards." Principally, we understand that sustainable design and construction practices are being gradually incorporated into the building codes promulgated by the International Code Council and adopted with increasing frequency by municipalities. In response, in order to protect its position as a market leader, the U.S. Green Building Council is continually refining and making the necessary requirements for LEED certification more stringent. Has the County considered or evaluated the ever-increasing costs of compliance with the ever-changing LEED standards or the certification program? Additionally, has there been any study of development under the County's current Green Buildings Law? Finally, in what respect has the current law proven to be insufficient to meet policy objectives so as to call for changes?

While we do not support the Environmental Bills as currently drafted, we look forward to working with the County to further define the language in these bills, to revise them as necessary to prevent any unintended consequences, and to further understand the implications the bills will have for our members.

Thank you for your consideration of these comments.

Sincerely,



Ginanne Italiano, President & CEO
Greater Bethesda-Chevy Chase Chamber



Jane Redicker, President & CEO
Greater Silver Spring Chamber

cc: Manual Ocasio, Chair, GSSCC
Andy Shulman, Chair, GB-CCCC
William Kominers, Chair, GSSCC Government Affairs Committee
Christopher Ruhlen, Vice President, GB-CCCC Economic Development & Government Affairs

GUARDIAN
REALTY MANAGEMENT, INC.

VIA E-MAIL AND REGULAR MAIL

February 11, 2014

The Honorable Craig Rice
President, Montgomery County Council
Stella B. Werner Council Office Building
100 Maryland Avenue, 6th Floor
Rockville, MD 20850

Re: Councilmember Berliner's Energy/Environment Legislative Initiatives
Bill 2-14, *Environmental Sustainability – Buildings – Benchmarking*
Bill 3-14, *Buildings – Energy Efficiency – Energy Standards*

Dear Council President Rice and Members of Council,

On behalf of Guardian Realty Management, please accept this letter in opposition to Bill 2-14, *Environmental Sustainability – Buildings – Benchmarking*, and Bill 3-14, *Buildings – Energy Efficiency – Energy Standards* (together, the "Energy/Environment Initiatives"). The Energy/Environment Initiatives are overly aggressive in their approach to energy conservation and sustainable development policy. Without additional incentives and carve-outs, the Energy/Environmental Initiatives will disproportionately impact the owners of older, mature buildings in Montgomery County by increasing financial costs, administrative complexity and, potentially, producing disincentives for reinvestment. Our specific concerns are as follows.

We are extremely concerned about Bill 2-14's requirements for the public Disclosure of building energy performance information. Such mandatory disclosure is invasive and lacks fundamental protections for privacy and proprietary information, and does not advance any legitimate public interest. Energy efficiency information is routinely provided between buyers and sellers, and between commercial landlords and tenants. Furthermore, to the extent that publication of such information may chill transactions involving mature buildings, such a requirement will have negative consequences. This is particularly disconcerting, given that commercial building owners in the County continue to struggle with difficult economic conditions, evidenced by continued high vacancy rates.

With regard to Bill 2-14, *Environmental Sustainability – Buildings – Benchmarking*, we note that there are no provisions for the kinds of financial incentives that have ensured the success of benchmarking legislation in other jurisdictions. Energy audits and retro-commissioning are not cost-free to building owners. While we understand that the County has recently adopted legislation to facilitate a commercial property assessed clean energy ("PACE") program, this program addresses the costs associated with energy efficient improvements, not audits or retro-commissioning expenses. PACE financing also requires lender approval and, therefore, cannot be guaranteed. To achieve the desired policy outcomes, the County must provide proven incentives (e.g., grants, tax credits, tax rebates). Such

incentives recognize that greater gains in energy efficiency can be made through an investment-driven, rather than strictly regulatory, approach.

Regarding Bill 3-14, *Buildings – Energy Efficiency – Energy Standards*, LEED Silver certification is simply too onerous for properties that are not located in "Smart Growth" areas. Achieving any LEED rating becomes more difficult over time, as newer, more stringent versions of the rating systems are released in response to the standardization of sustainable development principles and practices into municipal building codes. We are very concerned that requiring LEED Silver certification will make desirable, necessary renovations more costly, and thus potentially bar reinvestment in older buildings. Certain "extensive modifications" to existing buildings (i.e., structural modifications altering more than 50% of the building gross floor area of a covered building) would become subject to LEED review based on factors that were not contemplated at the time of development. It may even be the case that even a Certified level rating (as required under the existing law) is not achievable for certain existing mature buildings in desperate need of renovation. The County should consider exempting extensive building modifications from any LEED rating requirements in connection with Bill 3-14.

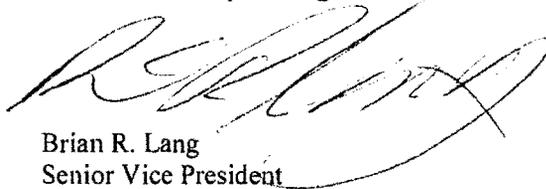
The County should undertake a comprehensive, comparative fiscal review of the costs that the Energy/Environment Initiatives propose to impose on the private sector, so that the consequences of approval are understood and transparent. We believe the financial implications for building owners are significant.

Furthermore, the Energy/Environment Initiatives raise issues that are worthy of careful, deliberate analysis. We strongly believe that the Council should task an informal "commission" comprised of local building owners or their representatives to study these issues, and to work with the Council towards refining the proposed Energy/Environment Initiatives. This common-sense approach would serve to avoid unintended consequences, and we would be more than happy to participate.

Thank you for your consideration of the above.

Very truly yours,

Guardian Realty Management, Inc.



Brian R. Lang
Senior Vice President

BRL/sm

cc: Patricia Harris, Esquire

Mihill, Amanda

From: Faden, Michael
Sent: Tuesday, February 11, 2014 1:24 PM
To: Mihill, Amanda
Subject: FW: Energy Bills Testimony

From: Robert Kaufman [mailto:rkaufman@mncbia.org]

Sent: Tuesday, February 11, 2014 12:44 PM

To: Berliner's Office, Councilmember; Riemer's Office, Councilmember; Floreen's Office, Councilmember; Leventhal's Office, Councilmember; Rice's Office, Councilmember; Elrich's Office, Councilmember; Andrews's Office, Councilmember; Navarro's Office, Councilmember; Branson's Office, Councilmember; Hoyt, Bob

Cc: Goldstein, Steven; Gibson, Cindy; Faust, Josh; Healy, Sonya; Jones, Diane; Wright, Gwen; Zyontz, Jeffrey; Orlin, Glenn; Faden, Michael; Michaelson, Marlene; McMillan, Linda; Kelly Grudziecki; Bruce H. Lee; Bryant F. Foulger; Bob Harris; William Kominers; selmendorf@linowes-law.com; tdugan@shulmanrogers.com; Montenegror@ballardspahr.com; Pharr, Shaun; Clark Wagner; JRussel@rodgers.com; Paul Chod; Steve Robins; Steve Orens; Ilaya Hopkins; Ilana Branda; lisetracey@yahoo.com; gitaliano@bccchamber.org; Jane Redicker; Annette Rosenblum; mjackson@mncbia.org; dswenson@mncbia.org

Subject: Energy Bills Testimony



Please accept the following as Testimony on behalf of the MNCBIA concerning the various Energy related bills introduced by Councilmember Berliner and others.

Bills 11-14 and 10-14 Expedited Review

We understand and appreciate the desire to provide an expedited review as an incentive to promote use of energy saving technology, the facts however suggest that all new buildings and remodeling meet substantially higher standards of energy efficiency and all deserve efficient review and approval. Especially since passage of the 2012 Building and Energy Code changes, all new and remodeled buildings today provide substantial energy savings and efficiencies. Additionally, identifying specific permits to expedite may not be as simple as it seems given the complexities of today's permits and construction techniques. The Solar permits or charging permits may be part of a much larger permit application and may not be easily separated for expedited review. The MNCBIA recently established a Solar Energy Program with ASTRUM Solar to encourage use of Solar installations on new homes and would in fact benefit from an expedited process.

Instead, however, we urge the County to continue to improve the overall permit review and approval process so that an expedited review becomes moot. We draw attention to and gratefully acknowledge the recent announcement by DPS to institute an electronic plan submission for new construction and right-of-way permits and look forward to other improvements.

Bill 6-14 Environmental Sustainability Office

Given the real world changes to our land use regulations and building codes, an office of sustainability best serves the County as a comprehensive planning approach that encourages coordination and balance to maximize use and maintenance of our complex systems that tie together smart growth planning, land use planning, building use, land use and transportation. **We support encouraging MNCPPC to create a position of a sustainability planner in MNCPPC** where we do our forward thinking. The Department of Environmental Protection provides guidance and support for land use related issues and environmental stewardship of our land. Sustainability implies economics, construction,

government policy, business management, coordination, building technology as well as land use most of which remain outside the purview of DEP.

Bill 3-14 Building Standards - LEED Silver

New buildings today increasingly meet a minimum of LEED or other similar certification such as IgCC and Green Globes. The LEED Silver level continues to evolve and relies on land use based issues as well and energy efficiencies that cannot be easily achieved. **We prefer continuing to allow the market place to work toward green options** particularly in light of the new energy and building codes and prefer capitalizing on the current market trend toward green certification at the LEED certified, IgCC and Green Globes levels.

Bill 2-14 Benchmarking

Currently we operate on a whole new set of energy saving requirements for all new and remodeled buildings based on the 2012 Building and Energy Codes. In addition, nearly all new buildings today meet LEED certified or similar standard. Benchmarking becomes excessive under these circumstances. Additionally, we need to agree on what purpose the benchmarking serves. As currently developed by EPA, the benchmarking relates largely to greenhouse gas emissions and not costs or energy use. This promotes use of natural gas and renewable energy sources over use of coal, oil, or other carbon based fuel. Today the cost of gas remains comparatively low, this results often in cost savings, however, most users have little say over the source of fuel used to generate electricity and cannot easily switch to gas or renewable sources. Should gas prices rise, than any cost savings may evaporate. Nonetheless, we support the concept of encouraging and supporting efforts to benchmark the energy use of buildings if only to set goals for energy savings over time. **We urge the Council to set up a working group to identify ways to best create, support, encourage and measure building energy use that can be cost effective and manageable.** Especially problematic concerns the requirement to set up benchmarking apparatuses for residential and commercial tenants, or owners of condo space within buildings.

The use of benchmarking can result in the highest energy savings with existing buildings. This unfortunately places the greatest cost burden on the most affordable buildings with the lowest rents, both residential and commercial. Clearly if the investment in energy savings saves money, the owners, tenants and the County have a natural incentive to set up benchmarking. **We urge the County to form a working groups of existing building owners and tenants to consider the most effective way to encourage, support and afford energy re-commissioning.**

S. Robert Kaufman
Vice President, Government Affairs
Maryland National Capital Building Industry Association
1738 Elton Road
Suite 200
Silver Spring, Maryland 20903
bkaufman@mncbia.org
(301) 445-5408 Office
(301) 768-0346 Cell

BIA's Networking Happy Hour – Feb. 20
& FREE Business Development Class
[Click here](#) for details and to register

FIL Speaker Series with Bryant Foulger – Feb. 21
Join us for breakfast. [Click here](#)

Celebrity Chefs & Tabletop Night – March 27
Be a Chef or just come to eat. [Click here](#) for details

Check out NAHB's Member Advantage Program at www.nahb.org/ma

**BUILDING HOMES & CREATING NEIGHBORHOODS FOR 60 YEARS
1954-2014**

March 12, 2014

Ms. Amanda Mihill, Legislative Attorney
Montgomery County Council
100 Maryland Avenue
Rockville, Maryland 20805

RE: County Council Bills on Sustainability and Energy Conservation

Dear Ms. Mihill,

Thank you for the opportunity to review and comment on the 13 County Council Bills for Sustainability and Energy Conservation.

I have attached a copy of our own Sustainability Practice 6-40 for your information. M-NCPPC and the Department of Parks are committed to environmental stewardship. Our organization has employed energy conservation measures in many of our parks, facilities and operations over the past several years. These measures include building temperature control, high efficiency HVAC units, low consumption lighting and an aggressive recycling program. I am proud of our staff and their achievements in reducing the environmental footprint of our extensive operations. The attached Practice 6-40 provides documentation of our commitment to these important issues. We also provide cost savings data in an annual energy conservation report available to the County Council, and our progress has been significant.

For clarification on the pending legislation, please consider the following questions and comments:

2-14

- If we own land, but not buildings, will benchmarking be provided by building owners? For example, aquatic centers or community centers located on park property might be affected.
- Does the benchmarking apply to buildings that are to be demolished within 4 years?

8-14

- We recommend that historic buildings as well as small buildings, such as restroom buildings and storage sheds, be exempt. Language to define limits on the size or purpose of the buildings affected is strongly recommended.
- If there are several buildings in a facility, would the requirements apply to every building contained within the facility? A definition of "facility" may be required here.
- If the cost of renewable energy exceeds 2% of the total construction cost, funding equivalent to 2% of the cost may be transferred to another project. Does it mean a project that has qualified renewable energy cost can help other projects to be exempt? If so, do we need to identify which?
- We are concerned about the definition of "Director" in the definitions section of this bill. Currently, we have many county-financed structures (generally as a result of G.O. bonds) on parkland, and the DGS Director currently has no role in managing or benchmarking such structures. We recommend

clarifying language that the "Director" means the DGS Director OR the Director of the agency managing the affected property.

Please keep in mind the Parks infrastructure is quite complex, including many structures that do not fit the traditional definition of office building or warehouse structure. We also have hundreds of aged and often historic buildings, small service buildings, structures or buildings of varying sizes in remote or constrained locations, and a variety of other specialized facilities. Broad-based legislation that could include all of these could ultimately impact us significantly in the benchmarking process. We request clarification regarding the total impact some portions of this legislation may have on such facilities.

Suggested amendments are attached for your consideration.

Overall, we are encouraged by Councilmember Berliner's goals to advance sustainability in buildings and operations. Such conservation is a core mission of the Department of Parks and a mission we have already committed to achieve.

Thank you for the opportunity to comment.

Sincerely,

Mary R. Bradford
Director
Department of Parks-Montgomery County
The Maryland-National Capital Park and Planning Commission

Attachments: Practice 6-40
Legislative matrix analysis

County Council Bills on Sustainability and Energy Conservation

PROPOSED AMENDMENTS

Bill 2-14 Environmental Sustainability – Buildings - Benchmarking

18A-38 Definitions

Line 21 : ...*Covered building* does not include **buildings that are to be demolished within 4 years or any building with more than 10% occupancy which is used for...**

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

8-54. Definitions

To modify line 22:

Director means the Director of the Department or the Director’s designee; or the Director of the agency managing the affected property.

8-55 Clean energy renewable technology required

To add:

(d) All historic buildings and any other buildings that are smaller than 100,000 square feet are exempt from this requirement.

PRACTICE

No. 6-40

Approved by
The Commission

Initially issued: 11/1/76
Last amended: 11/19/2012
Last reviewed: 11/19/2012

M-NCPPC Sustainability Standards

- AUTHORITY** This Administrative Practice was initially approved by the Executive Committee at its meeting on October 4, 1976, and last amended by the Commission on November 19, 2012.
- Patricia Barney*
Patricia Barney, Executive Director
- RESCISSION** The Practice, as amended on November 19, 2012, updates and replaces all other internal sustainability procedures.
- PURPOSE AND BACKGROUND** This Practice (originally titled Commission Resource Conservation Program) was initially established to communicate agency-wide policy on the conservation of utilities sources, such as electricity, natural gas, fuel oil, and motor fuel. The Practice was revised on November 19, 2012 to update and replace initial measures through a broader understanding of sustainability standards, which benefit the environment, our workplace, and the communities we serve.
- The Practice, as originally approved, has been revised as follows:
- May 1, 1979 and January 9, 1980: Incorporated updated responsibilities due to agency restructuring.
 - November 19, 2012: Policy amended to:
 - Reflect more modern concepts in the area of sustainability, including:
 - Green building management strategies which meet nationally accepted sustainability certifications for energy conservation and use of renewable resources;
 - Procurement of goods and services aimed at high efficiency products and other sustainable practices;
 - Implementation of green development strategies in community planning, landscape design and other site planning;
 - Elements aimed to foster ongoing awareness among our employees and patrons on sustainability objectives and programs; and
 - Updated County and State sustainability mandates.
- REFERENCES** Federal/State/Local Standards:
- Maryland Stormwater Management Act of 2007 and accompanying Environmental Site Design Standards
 - Maryland Code, State Finance and Procurement, § 5-312, High Performance Building Act

- Prince George’s County Executive Order 22-2007, Goes Green Program
- Prince George’s County Energy Policy
- Montgomery County Bill 32-07, Environmental Sustainability Climate Protection Plan
- Montgomery County Code Section 18A, Energy Policy—Regulations
- Montgomery County Resolution 16-757, County Energy Policy (with reference to Interagency Committee on Energy and Utilities Management)
- Leadership in Energy and Environmental Design Certification Standards as issued by the United States Green Building Council
- Standards and Guidelines for Sustainable Sites (United States Sustainable Sites Initiative)
- Maryland Sustainable Communities Act of 2010

M-NCPPC Policies:

- Administrative Practice 4-10, Purchasing Policy
- Administrative Practice 2-18, Work-Life Program and related Administrative Procedures including:
 - 95-02, Compressed Scheduling
 - 95-04, Telework
 - 03-02, Alternative Commuting Resources

APPLICATION

This Practice applies agency-wide.

DEFINITIONS

Chlorine-free Processing: Paper is whitened without the use of chlorine in the process (PCF), eliminating production of chlorinated toxic chemicals and dioxins in processing wastes.

Energy Star: The Department of Energy rating for appliances and building products that minimize the use of energy.

Environmental Site Design (ESD): Using small-scale stormwater management practices, nonstructural techniques, and better site planning to mimic natural hydrologic runoff characteristics and minimize the impact of land development on water resources.

Forest Stewardship Council (FSC) Certification: A third-party guarantee that wood products, including paper, are harvested from a certified sustainably managed forest.

Green Practice: The wise use of resources, conservation, and innovative environment-friendly designs that create or enhance sustainability.

Greenhouse Gas (GHG): A gas that increases the atmospheric reflection of infrared heat emissions from Earth’s surface, measured in carbon dioxide equivalent.

Leadership in Energy and Environmental Design (LEED): A building certification system designed by the U.S. Green Building Council (USGBC) that promotes design and construction strategies aimed at improving environment and resource stewardship. The tiered standards, which use Certified, Silver, Gold, and Platinum, vary by project type and are made available at USGBC.org.

Net Metering: Net metering is a policy that allows a solar-system owner to receive credit on his/her electricity bill for surplus solar electricity sent back to the utility.

Post-Consumer Recycled Content: Contains material that was consumed in a final product and then recycled.

Renewable Energy Certificate: Also known as “Green Tags” and “Green Certificates” is a tradable, non-tangible energy commodity that represents proof that one megawatt-hour of electricity was generated from an eligible renewable energy resource. Renewable Energy Certificates provide organizations a convenient way to purchase renewable energy, offset carbon emissions, and encourage clean energy development.

Smart Growth: Urban planning that supports efficient and sustainable land development and utilizes redevelopment that optimizes prior infrastructure investments. Smart growth incorporates strategies such as mixed-use urban centers that support and enhance public transit; promote walking and bicycling, provide for a range of housing and retail options, and consume less land that can be preserved for open spaces and natural systems.

Sustainable Sites Initiative (SITES): A rating system, similar to LEED developed by the American Society of Landscape Architects, that establishes voluntary national guidelines and performance benchmarks for sustainable land design, construction and maintenance practices.

Sustainability: Creates and maintains the conditions under which humans and nature can exist in productive harmony, and preserves resources so that they are not depleted or permanently damaged.

POLICY

The M-NCPPC is committed to stewardship of the environment, our community, and the workplace through the implementation of sustainable practices that preserve natural and economic resources, reduce waste and consumption, reduce the carbon footprint, promote green practices in our facilities and programs, and support the wellness of our employees and community.

Sustainability efforts shall increase the value or longevity of services while reducing reliance on resources and the negative effect on health or the environment.

The goal of this agency is to lead and implement meaningful sustainability initiatives. The sustainability goals outlined in this Practice are to be carried out as an agency, wherever feasible, and implemented within each department. The feasibility analysis of initiatives should consider the following:

- The prudent use of public dollars;
- The availability of green materials/services;
- The ability to maintain or improve existing service levels and safety; and
- The ability to safeguard the integrity of facilities/structures, including concerns for historic preservation.

These goals are intended to serve as benchmarks that may be further enhanced on a departmental, programmatic, or facility basis. It is recognized that certifications/standards identified in this Practice may evolve over time. The agency shall be guided by the certification/standard requirements that are in place at the time an initiative is being designed.

To implement this policy, each Department shall generate a Sustainability Plan that explains how goals identified in this Practice are being implemented for its respective facilities, operations or services. These Plans shall be presented to the Executive Committee by September 2013 and updated at least every two years.

The agency's sustainability efforts under this Practice also will be supported through a Sustainability Committee comprised of representatives from each department. The Committee shall: ensure coordinated efforts for agency-wide initiatives wherever practical; share ideas and expertise for the implementation on sustainability goals on a departmental level; prepare a Sustainability Report to the Commission that describes initiatives implemented throughout the agency, and recommend new or revised goals to ensure that the M-NCPPC stays at the forefront of sustainability practices.

Specific requirements for development of Sustainability Plans and reporting results to the Executive Committee and Commission are outlined in the Section titled Responsibilities. The following goals and objectives are designed to guide implementation of this Sustainability policy.

- I. **Utility/Energy Conservation:** Conserve natural and fiscal resources by eliminating waste, improving efficiency, reducing the consumption of energy, and increasing the use of renewable sources of energy. Whenever feasible, new appliances and building materials shall meet Energy Star or equivalent rating for high efficiency and energy conservation. This should be in addition to also considering other environmental attributes such as recyclability and applicable federal/state safety and building code requirements.
 - A. **Utility Measurement and Monitoring**
 1. Department sustainability coordinators shall collect utility use information to develop/enhance utility management standards and track the cost of each facility's utility consumption over time.

2. Utility consumption trends shall be made available to facility managers and Department Directors to evaluate and refine utility and cost saving practices.
3. Managers who operate buildings or spaces leased by the M-NCPPC should work with the facility owners to include utility metering or reporting for the leased space(s).

B. Conservation of Electricity and Natural Gas

1. In addition to established internal maintenance programs, departments should pursue grants for energy efficiency studies, upgrades, and retrofits for planned and existing facilities.
2. All M-NCPPC facility managers should seek to meet Leadership in Energy and Environmental Design (LEED) Volume Program for Operations and Maintenance, or LEED for Existing Buildings: Operations and Maintenance criteria, for at least a Silver or equivalent rating standards for operations and maintenance. These standards are issued by the U.S. Green Building Council which can be accessed through its website (www.usgbc.org).
3. Where practical, indoor and outdoor lighting fixtures shall be programmable or linked to occupancy or motion sensor(s).
4. Light emitting diodes (LEDs), daylight fixtures, or other efficient low-energy lighting solutions should be used in place of incandescent, halogen, or fluorescent lights, where practical.
5. By 2020, the agency through coordination with the Department of Finance, will strive to meet a target whereby 40% of its electricity is produced or supported through renewable energy sources. These sources may include, but are not limited to, the purchase of Renewable Energy Certificates, onsite generation of energy from renewable sources (such as wind, solar, geothermal, water, etc.), and/or the acquisition of renewable energy from utility companies. This target may be adjusted by the Executive Committee with input from the Secretary-Treasurer based on fluctuating costs and availability of renewable energy sources.
6. Renewable sources (such as solar, wind and geothermal) should be considered for new and replacement systems where life cycle cost savings are justified in addition to aggregate net metering or power purchase agreements, among other financing or contract mechanisms, to further reduce the Commission's carbon footprint with its energy use, save costs, and further promote clean power alternatives wherever practicable.

C. Conservation of Water

1. Install and properly maintain automatic faucets, where practical.
2. Whenever feasible, utilize low flow toilets and other innovations to reduce water demands.

3. Investigate and where feasible, install an efficient infrastructure for use of rainwater or grey water at M-NCPPC facilities, including water amenities and landscape watering.
4. Upon learning of any abnormal water usage pattern, facility managers shall investigate, locate, and immediately repair any leaks and inefficiencies.
5. Strive to plant native trees and shrubs in landscaping.
6. Strive to reduce lawn areas to minimize the need for irrigation and plant areas with appropriate drought tolerant native species.

D. Management of Heating, Ventilation, and Air Conditioning (HVAC) Systems

Whenever feasible:

1. Insulate exposed piping and ventilation ducts in accordance with at least LEED Silver or equivalent standard.
2. Integrate installation of high efficiency HVAC equipment in new construction or in replacement plans for existing equipment, such as Energy Star or equivalent.
3. Use programmable thermostats to minimize HVAC use when buildings are not in use.
4. In the planning of new buildings or major renovations to existing buildings, review insulation specifications to meet LEED Silver or equivalent standards.

E. Fleet Management and Use of Alternative Commuting Resources

1. Employees utilizing M-NCPPC vehicles are encouraged to carpool with other employees to conserve fuel, minimize operating costs, and reduce environmental impacts related to pollution and congestion.
2. Fleet managers shall assist Departments in assessing the functional use/need of vehicles based on assigned work program needs, and recommend vehicle purchases to most effectively meet these needs to include factors such as fuel/energy efficiency, safety, and effective operation. All new vehicle purchases shall consider the most energy efficient options suitable to meet the indicated use for the vehicle.
3. Vehicle assignments shall ensure the most efficient use of the agency's fleet.
4. To maintain highest operating efficiency, fleet managers should ensure that all vehicles receive periodic maintenance consistent with manufacturer specifications.
5. Reduce impact of employee travel to and from M-NCPPC facilities by implementing the following strategies:
 - a) Implement feasible options and/or incentives to encourage staff's use of public transportation, regional commuting resources (e.g., ride share and car pools), and internal programs such as departmental pool vehicles and vanpools.

- b) Establish and encourage carpooling by M-NCPPC employees, allocating reserved spaces for carpoolers.
- c) Encourage the use of alternate work arrangements such as Telework and Compressed Workweeks to reduce, among other things, environmental impact and costs/needs associated with workspace operations.
- d) Capitalize on meeting and conferencing technology by using more phone and video conference calls (including webinars for training), even locally, to cut back on use of vehicles and travel times.

II. Sustainable Acquisition and Use of Agency Supplies: Develop procurement specifications that encourage the use of goods and services which support the agency's commitment to sustainability in areas including, but not limited to, resources conservation, protection of the environment, and workplace health and safety.

A. Office Supplies and Furniture

- 1. Actively reuse office supplies whenever possible, maintaining a returned inventory of supplies for reuse.
- 2. Durable office equipment, including furniture, should be considered for reuse or repurpose by other M-NCPPC facilities/operations before it is recycled/surplused/or disposed.
- 3. All disposal or external surplus/recycling of M-NCPPC property shall be coordinated with the Department of Finance, Purchasing Office, to ensure-adherence to legal dispossession of assets, with a preference placed on repurposing outside M-NCPPC for the benefit of the community.
- 4. Where feasible, identify and use environmentally friendly cleaning supplies/other products and services that are effective, enhance worker safety and health, and meet or exceed federal/state safety requirements.

B. Printing and Copying

- 1. Utilize two-sided printing whenever one-sided printing is not necessary.
- 2. Limit use of color copying/printing to reduce costs and resources.
- 3. Unless specific job demands or technical specifications of a printer require otherwise, purchase and use 100% post-consumer recycled paper, preferably with chlorine-free processing.
- 4. Purchase of papers containing less than 100% post-consumer content should be limited to those that are Forest Stewardship Council (FSC) Certified.
- 5. Incorporate other practical measures to reduce print material such as e-signatures, document imaging, and other paperless means of doing business.

C. Procurement

- 1. Procurement policies shall incorporate sustainable purchasing guidelines to secure economies of scale and promote sustainable product and service offerings by vendors. (See, for example, the Environmental Protection Agency's list of greener products that promote resource conservation, efficiency, safer

alternatives, and, recycled content and recyclability, among other factors, in addition to other, similar sources. See also Section I.B., Conservation of Electricity and Natural Gas.)

2. Purchases should be combined whenever reasonable to reduce deliveries to minimum essential requirements, to save costs and energy where possible.
3. In cooperation with the Chief Information Officer, departments should create and sustain an efficient information technology (IT) infrastructure that supports operational needs while increasing paperless options for reviewing and storing information, and using environmentally preferable and energy efficient equipment including computers, printers, copiers, document imaging systems, servers, etc.).

III. Recycling and Solid Waste Management: Implement projects and programs to recycle, reuse, and reduce solid wastes used by M-NCPPC employees and patrons to meet or exceed the regulatory mandates established by government regulations. Recycling and disposal of materials shall comply with relevant federal/State safety regulations.

- A. Implement recycling and reuse programs to achieve an overall rate of 90% of recyclable materials mandated by state or local law (including mixed paper, commingled materials, yard trim materials, Christmas trees, and scrap metal).
- B. Implement recycling and reuse programs to include other material to include but not be limited to oils, batteries, asphalt, tires, furniture, computers, electronics, construction debris, etc.
- C. Implement programs to recycle and reuse plant, tree, and related vegetation materials to include composting within the natural resources of the agency.
- D. Develop community-based information programs to encourage, demonstrate, and educate patrons on best practices to recycle, reuse, and reduce solid waste at M-NCPPC facilities/programs.

IV. Sustainable Infrastructure and Natural Areas: The M-NCPPC will utilize the national and State standards for green practices in the design of facilities and in the management of natural resources. Natural areas will be managed to maintain healthy ecosystems and maximize biodiversity.

A. Sustainable Building - Whenever feasible:

1. All new construction of M-NCPPC buildings shall be at least Leadership in Energy and Environmental Design (LEED) Silver eligible or equivalent standard.
2. Major renovation of M-NCPPC buildings shall meet at least LEED Silver eligibility or equivalent standard.
3. Capital improvement plans shall include implementation of LEED or equivalent standards in construction and renovation.

4. When planning new office sites, consideration should be given to locations that offer access to public transportation resources such as metro rail, trains, buses, and carpools.

B. Sustainable Site Work - Where appropriate:

1. Capital improvement plans shall include implementation of the Sustainable Sites Initiative (SITES) or equivalent standards (such as LEED) in construction and renovation.
2. Plant native trees and shrubs around agency-owned buildings to provide wind and summer sun shelter.
3. Utilize appropriate site layout, landscaping, and material choice to reduce heat island effect and summer cooling costs.
4. Use best practices including, but not limited to, current environmental site design standards to avoid, trap, and control erosion or surface runoff of detergents, fertilizers, pesticides, and soil into storm drains and surface waters.

C. Natural Resources Management:

1. Develop and implement a Natural Resources Management Plan for all parklands acquired for conservation purposes by 2012. This Plan provides general guidance to park management staff for the management of natural areas in parks.
2. Maintain, and expand as appropriate, the existing program for the inventory, assessment, and control of non-native and invasive (NNI) plants.
3. Maintain, and expand as appropriate, the existing program for the control of nuisance wildlife (e.g. White-tailed deer, Canada geese, etc.)
4. Utilize integrated pest management practices, where effective.
5. Maintain, and expand, as required by State regulations, the storm sewer system, and the monitoring of water bodies and restoration of watersheds within the park system.

D. Community Planning and Development:

Where possible and practical, Community Planning and Development shall:

1. Plan and locate new development according to Smart Growth principles and in conjunction with Maryland Sustainability initiatives.
2. Locate recreation facilities to afford access via public transit and trails networks.
3. Co-locate community recreation centers and major recreation facilities with other public facilities.

- V. Health & and Wellness:** Promote safety, health, and wellness through our workplace, programs, and services.

- A. Support healthy communities by integrating sustainability concepts and green practices with relevant program offerings, to further enhance patron and employee well-being.
- B. Raise awareness of workplace health, safety, and wellness issues through comprehensive training and education programs targeting illness and injury prevention.
- C. Mitigate workplace hazards through timely identification, investigation, and remedial action. Whenever reasonable, complete collaborative reviews of accidents and design new programs to encourage greater understanding of risks and actions to implementation.

VI. Employee Education & Training on Sustainability Goals

- A. Sustainability efforts will be fostered through agency-wide promotion and education of environmental awareness and conservation.
- B. Employees should be encouraged to seek sustainability credentials appropriate to their work program.
- C. Supervisors are responsible for reviewing work program requirements as they pertain to implementation of sustainability efforts. Applicable sustainability goals are to be incorporated into employee performance expectations.

RESPONSIBILITIES

The following responsibilities are assigned for the overall administration of the agency's sustainability policy. Responsibilities may be delegated as appropriate.

Department Directors shall:

- Ensure compliance with this policy.
- Develop a departmental bi-annual Sustainability Plan that shall be presented to the Executive Committee by September 2013 to outline initiatives for the upcoming two-year period. The Sustainability Plan shall be reviewed and presented every two years.
- Following the first year of implementation of the Plan, Department Directors shall report of the status of achieving sustainability goals and objectives outlined in this Practice and in the departmental Sustainability Plan.
- Designate one or more employees to act as the departmental Sustainability Coordinator(s) and serve as the representative(s) to the agency-wide Sustainability Committee.

Departmental Sustainability Coordinators shall:

- Serve as the departmental liaison to the Sustainability Committee and as the point of contact and clearinghouse for all sustainability-related issues for the M-NCPPC.
- Assist the Department Director in preparing the departmental Sustainability Plan that meets, at a minimum, the sustainability goals and objectives set forth in this Practice.
- Communicate goals outlined in the departmental Sustainability Plan to all operations/facilities and provide support for implementation of the Plan.

- Collect data and perform analyses to monitor and assess ongoing progress on meeting standards and complying with guidelines.

Sustainability Committee shall:

- Share ideas for implementation of sustainability goals throughout the agency and on a departmental level.
- Promote sustainability awareness within M-NCPPC and the region.
- Recommend to Department Directors, and develop/implement approved communication tools to educate the workforce and the community on sustainability goals, initiatives, and progress.
- Recommend to Department Directors, new or amended initiatives to comply with the goals outlined in this Practice.
- Prepare a Sustainability Report to the Commission that describes the initiatives that have been implemented throughout the agency.
- Strengthen information exchange with intergovernmental relationships in the area of sustainability (e.g., Council of Governments, County/State agencies, local municipalities) and, where relevant, explore opportunities to promote cooperative partnerships and complementary cost-savings with potential implementation of various measures with or across organizational boundaries.



THE VOICE OF MONTGOMERY COUNTY BUSINESS

**MONTGOMERY COUNTY COUNCIL
PUBLIC HEARING**

BILLS 2-14 THROUGH 12-14

FEBRUARY 10, 2014

As a Chamber of Commerce that recognizes the economic and environmental imperative of greening the way we do business, we commend the County Council for the intent of this package of bills. We believe that positioning our county as a place to do green business is a compelling competitive advantage in today's marketplace. Supporting a green infrastructure is critical, as is growing the number of green jobs that are created to meet the needs of the new marketplace.

There are, however, areas of concern with regard to the package. Below are specific comments on a few of the bills. Broadly speaking, the fiscal impact statements will likely address the costs associated with the various activities. It will be important to review these so as not to impose undo burden as we try to move the marketplace. Where possible, incentives should be deployed to encourage adoption of new practices and attainment of environmentally sustainable goals. We would also like to see these bills work in concert with other county regulations so there is not confusion in following or enforcing the regulations.

We see green as part of a larger economic development strategy for the county. The Green Business Certification program is a terrific example of the business community working in partnership with the Department of Environmental Protection and Montgomery College to achieve environmental goals through a voluntary program. We look forward to working with you, the County Council, to make sure this package is able to realize the stated intention of addressing climate change at the local level to the greatest extent possible.

Comments on specific bills:

Bill 7-14 Contracts and Procurement -Certified Green Business Program

We applaud the County Council for recognizing the Montgomery County Green Business Certification Program and finding ways to incentivize those companies interested in working with the county to participate. We encourage the county government – or units within it - to become "Green Certified" and to green its own supply chain by using environmentally preferable purchasing of products and practices where appropriate. There is a green procurement bill requested by DGS (HB 629) pending at the state which could serve as a guide.

According to the information provided by the Council staff, "The goal is to encourage businesses to develop strategies for protecting the environment in their day to day operations." If the goal is

indeed to encourage more businesses to adopt green practices internally (such that they can be certified by Montgomery County or another comparable entity), the county may also want to explore using one or more of the many tools available outside of the county procurement process and appropriate to all businesses to incentivize that initiative.

Coincidentally, there is also a bill in the General Assembly that focuses on creating Green Business Incentive Zones (HB 473/SB 787) which also encourages the growth and success of this new market player by offering incentives such as tax credits.

This bill, as drafted, uses the procurement process and the opportunity to gain preference as an incentive. The procurement process is complex. Any modification to that process should be to make it easier to do business with the county. We are concerned that by restricting the language to "percentage price preference" companies that do have the right products or services, but have not met the green business certification preference, may be at a disadvantage that ultimately undermines the overall effort to reduce our collective ecological footprint. Therefore, we suggest reviewing the ways that the procurement process can be used effectively, perhaps by including green certification in the evaluation criteria or as a "tip over." This may more effectively encourage companies to green themselves without inadvertently making the procurement process more cumbersome and ultimately counter-productive in meeting the goal. It is worth noting that "percentage price preference" language was struck from HB 629 mentioned above.

Bill 2-14, Environmental Sustainability - Buildings - Benchmarking

To the extent that buildings are a critical piece of the climate puzzle, it is important to understand energy usage and work to conserve where we can. That being said, we encourage the Council to look to federal regulations as many tenants in the county are federal offices or contract with the federal government. Therefore, any new requirements for owners and/or tenants should conform to federal standards.

Second, we firmly believe that if the county requires benchmarking of private property owners, the county must be able to participate in the program as well. Taxpayers should know the efficiency of the buildings they are paying to operate. Last, for those older buildings that will be among the least efficient, the program must provide some process to help with mitigation, whether it be providing priority for county programs or other education and incentives to address problems.

Bill 5-14, Environmental Sustainability - Social Cost of Carbon Assessments

It is unclear, based on our reading of this bill, how the EPA method that was developed for regulations/legislation would be applied to Capital Improvement Projects or energy efficiency improvements in general. It is also unclear how information gleaned from the calculation would be used to reach any conclusion on the viability of a project.

Bill 6-14, Environmental Sustainability - Office of Sustainability - Established

Based on the bill as written, this new office would record and manage the county's greenhouse gas emissions. We see Montgomery County's position as a leader in sustainability as a driver of economic development. We therefore believe that this effort should include an economic development component as well as clear coordination with the extensive land use and transportation work that happens throughout the county government and with Park and Planning. In addition to producing an annual report, there should be some demonstrable gain to county taxpayers to justify the creation of a new office, which will require additional staffing and new responsibilities.

With regard to the remaining bills that are part of this package, we would encourage Council Members to be mindful of hidden costs and unintended consequences that may arise from the adoption of some of these bills. We hope that the fiscal impact statement will speak to some of these and that the committee work sessions will be constructive and produce useful information.

As mentioned at the outset, we see green as part of a larger economic development strategy for the county. We look forward to working with you to make sure this package is able to realize the stated intention of addressing climate change at the local level to the greatest extent possible.



12200 Tech Road, Suite 250, Silver Spring, MD 20904 • Phone: 301-622-2400 • Fax: 301-622-2800 • www.MHPPartners.org

February 21, 2014

The Honorable Craig Rice
President, Montgomery County Council
Montgomery County Council
100 Maryland Avenue
Rockville, MD 20850

Dear Council President Rice:

On behalf of Montgomery Housing Partnership (MHP), we applaud the Council's effort to encourage energy efficiency in the County. MHP has been designated a Green Organization by NeighborWorks America, a national organization of community development organizations. MHP has employed the Enterprise Green Communities standards in development of our affordable housing developments since 2008, has instituted programs with our residents to increase their level of environmental stewardship, and institutes various green practices in our offices.

As you consider these energy related bills, we would respectfully request the Council consider the following issues:

Bill 2-14

As owners of many older buildings, we agree that benchmarking is a critical to achieving the highest energy savings. However, we feel the action steps in this bill are premature. We recommend the County set up a working group of existing building owners, tenants, and the utility companies to determine the most effective way to encourage, support and afford energy re-commissioning. Especially with individually metered multi-family buildings, we have struggled in the past to effectively collect the necessary data to accurately benchmark our buildings and plan appropriate, and effective energy re-commissioning renovations. We feel that the better approach is to mandate the utility companies, who already have the data, to share this data with the property owners. Additionally, as noted, benchmarking is the most effective for older buildings that have not already undertaken extensive energy improvements. However, to re-commission these buildings is not only an expensive process, but disruptive to the existing

tenants. We encourage the Council to explore the creation of a fund to assist nonprofits and small businesses undertake retro-commissioning.

Bill 3-14

We respectfully request that the Council amend the bill to exclude projects that are solely or partly funded by the Department of Housing and Community Affairs (DHCA), and allow the energy standards for these projects to be selected at the discretion of the Director of DHCA. This would enable DHCA to set standards that are more applicable to affordable housing developments, taking into consideration the multi-family and affordable components of the project. The State has highlighted many of these programs, including Enterprise Green Standards, in the 2013 Qualified Allocation Plan for the administration of Low-Income Housing Tax Credits. LEED Silver usually adds at least a 10 percent premium to construction costs – a significant amount in any project, but even more so in affordable projects where we are already working to stretch every available dollar. This premium will force us to seek additional dollars from the County and reduce the number of affordable units we're able to construct. To be clear, we are not attempting to skirt our obligation for environmental stewardship, we are looking for the flexibility to ensure the standards chosen are in line with the project. As mentioned previously, since 2008 we have been using the Enterprise Green Communities standards to inform and direct our projects.

I welcome the opportunity to discuss these thoughts with you further. Please feel free to reach me at rgoldman@mhpartners.org or 301-812-4114.

Sincerely,



Robert A. Goldman, ESQ.
President

Testimony Before the Montgomery County Council

In Support of Bill 2-14, Environmental Sustainability – Buildings – Benchmarking

**Patrick Hughes
Policy Director for High-Performance Buildings
National Electrical Manufacturers Association**

February 11, 2014

Introduction

Good evening, my name is Patrick Hughes and I am the Policy Director for High-Performance Buildings at the National Electrical Manufacturers Association. I am pleased to be here tonight to speak in support of Bill 2-14, which would establish energy benchmarking requirements for large commercial buildings in Montgomery County.

The National Electrical Manufacturers Association (NEMA) is a non-profit organization representing more than 400 manufacturers of electrical equipment with annual revenues of more than \$100 billion annually. Many of NEMA’s members have manufacturing facilities in Maryland and operations in Montgomery County, including Schneider Electric’s Telvent subsidiary based here in Rockville. Other major companies, such as the lighting manufacturer Osram Sylvania and Rockwell Automation, have facilities just over the county border in Columbia, but employ Montgomery County residents.

Support for Bill 2-14, Environmental Sustainability – Buildings – Benchmarking

NEMA’s members manufacture the products that make buildings more energy efficient, including energy-efficient lighting, efficient motors that drive elevators, escalators, and the fans that run heating and air-conditioning systems, as well as thermostats, occupancy sensors, and other building controls that can help building owners and occupants save energy and money and reduce greenhouse gas emissions. Energy efficiency improvements like these support local construction and manufacturing jobs – in fact, similar benchmarking and disclosure ordinances in New York City and San Francisco resulted in a 30% boost in business for local energy companies. So by investing in energy efficiency, this bill is also helping to bolster Maryland’s economy.

NEMA and its members support the proposed bill because it would increase transparency within the real estate market as to the true cost of owning and operating a building. No one here would buy a car without first knowing its miles-per-gallon rating, but we do that all the time with buildings. The cost of operating a building is roughly five times more than its initial construction cost, yet information about how the energy use of two different buildings compares is largely hidden from the market. This ordinance would fill that information gap, allowing prospective buyers and renters to understand the full cost of operating and occupying a building.

Energy benchmarking has been shown to be an effective means of reducing energy waste in buildings. The U.S. Environmental Protection Agency, which manages the ENERGY STAR

Portfolio Manager tool, issued a report in 2012 that showed that, on average, buildings that benchmarked reduced their energy use by 7% over three years.

But benchmarking and energy efficiency have benefits beyond simply reducing energy bills. Studies have shown that buildings with ENERGY STAR labels sell for a premium of 8-25% more, rent for 2-14% more, and are 3-11% more fully occupied than their non-ENERGY STAR certified peers. In addition, energy efficiency can increase the reliability of the electric grid by reducing congestion and strain during periods of peak demand, reducing the likelihood of brownouts and blackouts – an important benefit for many Montgomery County residents.

In conclusion, NEMA and its more than 400 members believe that energy use should be transparent, and we support this bill because it will do just that. As the old saying goes, you can't manage what you can't measure, so by requiring large buildings to measure and report their energy use, building owners will naturally begin to manage energy inefficiencies, and potential buyers and renters will be able to make informed decisions about the buildings they choose to live and work in.

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.

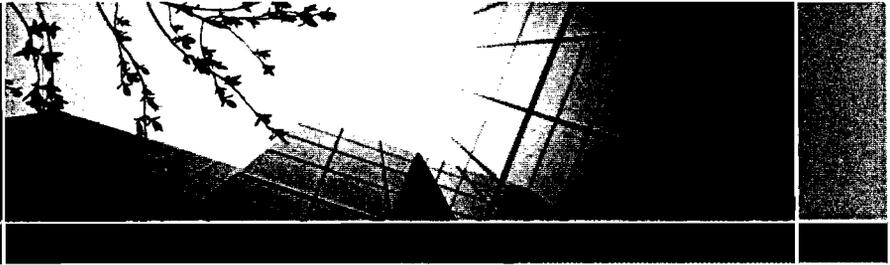
The Montgomery County Energy Summit, sponsored by the JBG Companies, Pepco and Boland, brought experts together to discuss the barriers and explore solutions for improving access to aggregated energy building data. Access to this critical data will empower building owners to make smarter energy decisions 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.

Bill 2-14, Buildings – Benchmarking DEP Review and Recommended Amendments

On January 28, 2014, the County Council introduced Bill 2-14, Environmental Sustainability - Buildings – Benchmarking. As described in the introductory packet, this bill “would require the owners of certain buildings to benchmark the energy use of certain buildings and retro-commission certain building systems to improve their energy efficiency. Modeled after laws in New York, Chicago, and the District of Columbia, Bill 2-14 would require building owners to measure the energy efficiency of their buildings, make that information public, and periodically commit to assuring that their energy efficiency equipment is working properly.”

The CE has expressed his support for the general intent of Bill 2-14. Benchmarking and public disclosure ensures that building owners, managers, tenants and others involved in commercial real estate are aware of the energy performance of buildings. Numerous studies have shown that higher performing buildings have higher occupancy rates, command higher rents, and sell at a premium when compared to similar buildings.

Based on information from Councilman Berliner, we understand the bill will be amended to remove the requirements related to auditing and retro-commissioning. The CE supports these changes. While DEP believes that these activities can provide great benefits to building owners and managers, it is appropriate to begin with benchmarking in order to understand characteristics of the County’s commercial building stock, and give building owners the opportunity to pursue these activities voluntarily before being mandated by the government. Recommended amendments to the bill that DEP believes would help ensure that a benchmarking program can be effectively implemented in Montgomery County are outlined below.

Background

Currently, nine cities around the United States have public benchmarking and disclosure laws. The lessons learned in these cities during their benchmarking development and implementation process provide an excellent roadmap for the County to follow. In particular, a study done for the Boston Green Ribbon Commission’s Commercial Real Estate Working Group in 2012 prior to that city’s implementation of its benchmarking law highlights several major findings that should be considered when instituting a benchmarking program:¹

- Energy Star Portfolio Manager is the industry standard benchmarking tool and has been the basis for all benchmarking programs
- Significant and sustained outreach and education of property owners is key to ensuring that reporting deadlines are met
- Partnerships with leading business and trade associations are a critical part of any benchmarking policy
- Easily accessible utility data is a necessary component for any benchmarking policy and early engagement with utility partners is a key factor to program success

¹ <http://www.abettercity.org/docs/sustainability/Benchmarking%20report%20-%20Final.pdf>

- Program implementation requires dedicated staff and significant resources
- Building size thresholds should be carefully considered as many smaller building owners may not have the resources to comply with reporting requirements

There is a strong base of experience in Montgomery County to build on when developing a benchmarking program. An analysis of data from the U.S. Environmental Protection Agency's Energy Star Portfolio Manager database on high performing buildings indicates that 101 buildings in the County totaling more than 20,000,000 square feet of floor space already perform in the top 25% of similar buildings nationwide, indicating that many building owners and managers are already benchmarking and focused on the energy performance of their buildings.

Recommended Amendments

1. Delete Article 7 related to Energy audits and retro-commissioning [beginning on page 8, line 179].
2. Change the definition of *Department* to the Department of Environmental Protection (DEP) [page 3, line 31].
3. Most jurisdictions have taken a "lead by example" approach when implementing a benchmarking program in order to ensure that the process were well understood and any issues affecting a building's ability to comply could be addressed. The implementation schedule should be revised to require the first set of private sector buildings to comply no earlier than one year after the first reporting date for County buildings, subject to the development of a Benchmarking Reporting Protocol (described below).
4. The bill outlines a general benchmarking and reporting process. However, as noted above, there are several key actions that will help to ensure the success of the program, including establishing partnerships with leading businesses and trade associations, conducting extensive education and outreach, and working with utilities to streamline the data access process. The bill should be amended to require DEP to convene a working group, consisting of appropriate County officials, building owners and managers, industry trade associations and non-profit organizations, and utilities. This working group should develop a Benchmarking Reporting Protocol describing in detail how the benchmarking process would work in Montgomery County, including addressing issues of data access, reporting schedules, the applicability of benchmarking requirements to different building types, etc. The Protocol must be developed by [need to determine appropriate date] for approval by the County Council. In the event the Council fails to approve the Protocol, the provisions of Article 6 as drafted would take effect.
5. NOTE: This bill or an amended version of the bill that includes the recommended amendments discussed above cannot be implemented without additional

resources. The Fiscal Impact Analysis for the bill and/or an amended version of the bill has not yet been finalized.



ROCKVILLE, MARYLAND

MEMORANDUM

April 11, 2014

TO: Craig Rice, President, County Council

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

SUBJECT: Council Bill 2-14: Environmental Sustainability- Buildings -- Benchmarking

Please find attached the fiscal and economic impact statements for the above-referenced legislation.

JAH:mc

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
Joseph F. Beach, Director, Department of Finance
Michael Coveyou, Department of Finance
David Platt, Department of Finance
Robert Hagedoorn, Department of Finance
David Dise, Director, Department of General Services
Greg Ossont, Department of General Services
Erika Lopez-Finn, Office of Management and Budget
Alex Espinosa, Office of Management and Budget
Felicia Zhang, Office of Management and Budget
Naeem Mia, Office of Management and Budget

Fiscal Impact Statement
Council Bill 2-14, Environmental Sustainability – Buildings - Benchmarking

1. Legislative Summary.

Council Bill 2-14 specifies certain requirements and establishes energy benchmarking standards in County buildings.

2. An estimate of changes in County revenues and expenditures regardless of whether the revenues or expenditures are assumed in the recommended or approved budget. Includes source of information, assumptions, and methodologies used.

Revenues are not expected to change as a result of this bill.

According to DEP, one new position resulting from implementation of Bill 6-14 could also implement the requirements of Bill 2-14. DEP estimates 50% of the Program Manager I, for the commercial benchmarking program, would be required to implement Bill 2-14.

DGS estimates that 50% of the Sustainability Program Manager I needed to implement Bill 6-14 can implement the requirements of Bill 2-14.

County expenditures related to the new positions are outlined below:

Personnel Costs

Position	Area	Grade	Salary/Benefits
Program Manager I	Commercial Benchmarking Program (DEP) [50%]	23	\$47,673
Program Manager I	Sustainability Program Manager (DGS) [50%]	23	\$47,673

Total Personnel Costs **\$95,346**

Operating Costs

Description	Budget
Computers & Equipment	\$1,700
General program support & supplies	\$16,666
Benchmarking/Energy Tracking Software	\$150,000

Total Personnel Costs **\$168,366**

The functional area of each position and examples of specific duties each position will perform is described below.

Program Manager I (Grade 23) – Commercial Energy Programs

- (a) Benchmarking and assessment of commercial and multi-family properties
- (b) Energy efficiency retrofits
- (c) Utilization of available incentives from government, utilities and the private sector, including alternative financing programs such as Property Assessed Clean Energy (PACE) programs
- (d) Utilization of clean energy technologies and purchasing of clean energy

Program Manager I (Grade 23) – Sustainability Program Manager

- (a) 50% of time will be spent implementing the DGS Sustainability program and 50% of time will be

- implementing County building benchmarking outlined in Bill 2-14
- (b) Researching, developing, and launching green initiatives related to County-managed buildings and programs
 - (c) Communicate the results of green initiatives to internal and external customers, including communication via web, social media, and traditional media.

3. Revenue and expenditure estimates covering at least the next 6 fiscal years.

Total annual costs to implement Bill 2-14 are estimated to be \$112,012, or \$672,072 over six years. One-time operating expenses are estimated to be \$151,700 and are not assured to continue after the first year of implementation.

4. An actuarial analysis through the entire amortization period for each bill that would affect retiree pension or group insurance costs.

Not Applicable.

5. Later actions that may affect future revenue and expenditures if the bill authorizes future spending.

Not Applicable.

6. An estimate of the staff time needed to implement the bill.

A total of 1.0 FTE are required to implement this bill.

7. An explanation of how the addition of new staff responsibilities would affect other duties.

A total of 1.0 FTE are required to implement this bill. This bill would impact other DEP and DGS activities if additional staffing is not provided to implement this bill.

8. An estimate of costs when an additional appropriation is needed.

An additional appropriation of \$263,712 is needed to implement this bill.

9. A description of any variable that could affect revenue and cost estimates.

Not Applicable.

10. Ranges of revenue or expenditures that are uncertain or difficult to project.

Not Applicable.

11. If a bill is likely to have no fiscal impact, why that is the case.

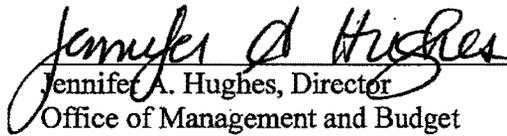
Not Applicable.

12. Other fiscal impacts or comments.

Not Applicable.

13. The following contributed to and concurred with this analysis:

Stan Edwards, Department of Environmental Protection
Kathleen Boucher, Department of Environmental Protection
Eric Coffman, Department of General Services
Alex Espinosa, Office of Management and Budget
Matt Schaeffer, Office of Management and Budget
Erika Lopez-Finn, Office of Management and Budget


Jennifer A. Hughes, Director
Office of Management and Budget

4/11/14
Date

Economic Impact Statement
Bill 2-14, Environmental Sustainability – Buildings - Benchmarking

Background:

This legislation would require the owners of non-residential buildings to benchmark the energy use of certain buildings; require the Director (Director) of Environmental Protection¹ to issue an annual report to review and evaluate energy efficiency in certain covered buildings; require the Director to make certain benchmarking readily available to the public, and allow the Director to waive certain requirements.

1. The sources of information, assumptions, and methodologies used.

The Department of Environmental Protection (DEP) provided information to the Department of Finance (Finance) in the preparation of the economic impact statement (EIS). Finance incorporated into the EIS amendments sponsored by Councilmember Berliner as presented in a council staff memorandum dated March 24, 2014.

2. A description of any variable that could affect the economic impact estimates.

According to information provided by DEP, benchmarking and public disclosure ensures that owners of non-residential buildings, managers of such buildings, tenants and others are informed of the energy performance of non-residential buildings. Buildings that achieve higher energy performance experience higher occupancy rates, owners are able to receive higher rents and obtain greater property values compared to buildings with lesser energy performance.

3. The Bill's positive or negative effect, if any on employment, spending, saving, investment, incomes, and property values in the County.

Bill 2-14 requires benchmarking by property owners of non-residential buildings. It is not possible to ascertain the costs incurred by building owners related to benchmarking. The benchmarking process requires the use of EPA's ENERGY STAR Portfolio Manager, which is a free software tool. Many building owners in the County already utilize this tool, so there would be no or minimal costs to these building owners. Property owners that are not currently using this tool may incur some expense to gather the building energy data that is required. That expense is offset by higher occupancy rates whereby there is an increase in the demand by tenants, greater business income through higher rents, and greater property values. The results of benchmarking could have a positive economic effect on investment, business income, and property values.

¹ The Department of Permitting Services was the implementing department in the original and amended versions of the bill. However, discussions at the T&E Committee on March 24, 2014, indicated this would be changed to DEP.

Economic Impact Statement
Bill 2-14, Environmental Sustainability – Buildings - Benchmarking

4. If a Bill is likely to have no economic impact, why is that the case?

Because Bill 2-14 only requires benchmarking and public disclosure, it will not have a direct economic impact. However, the results from benchmarking and public disclosure could result in a net economic gain to owners of non-residential properties.

5. The following contributed to or concurred with this analysis:

David Platt and Rob Hagedoorn, Department of Finance

Stan Edwards, Department of Environmental Protection



Joseph F. Beach, Director
Department of Finance

4-15-14

Date



SEE Action

STATE & LOCAL ENERGY EFFICIENCY ACTION NETWORK

Energy Benchmarking, Rating, and Disclosure for Local Governments

What is Energy Benchmarking?

Benchmarking is the process of comparing inputs, processes, or outputs within or between organizations, often with an aim toward motivating performance improvement. Benchmarking typically measures performance using an indicator per common unit (e.g., cost per unit produced), which allows for comparison over time, to others, or to an applicable standard.

When applied to building energy use, benchmarking can provide a mechanism for measuring how efficiently a building uses energy relative to the same building over time, other similar buildings, or modeled simulations of a building built to code or some desired standard. Building energy use is typically measured in energy use per square foot (ft²). To make comparison even easier, buildings can also be rated against pre-determined scales that can provide a single rating or score, taking into account variations in building operating characteristics, climate, or other factors. By making energy performance information readily available, disclosure of such ratings can facilitate market transformation toward more energy-efficient buildings.

Why Encourage Energy Benchmarking?

Commercial buildings comprise nearly half of building energy use and roughly 20% of total energy consumption and greenhouse gas emissions in the United States.^{1,2} Government-owned buildings are nearly 25% more energy-intensive than non-government-owned buildings.¹ Energy expenditures average more than \$2 per square foot in commercial and government buildings,¹ making energy a cost worth managing.

To manage energy costs, they must be measured in a way that allows for decision making. By making energy performance measurable and visible, local governments can encourage building owners to improve the efficiency of their buildings, which can drive new investment and create an estimated 5 to 15 green jobs per \$1 million invested.³ For example, a recent California study found that energy performance benchmarking prompted energy efficiency investment in over 60% of participants through improved energy management processes, building upgrades, and behavioral efficiency projects.⁴ Energy efficiency services companies operating in New York City and San Francisco are seeing a 30% increase in business in response to local benchmarking laws.⁵ Efficient buildings are also more profitable and more valuable at resale,⁶ which can increase property tax revenues. Building owners seek benchmarking data to differentiate a building or company, help value rental rates, and inform the sale or acquisition of existing buildings.⁴ In this role, disclosure of benchmarking data can also help strengthen local real estate markets.

By using benchmarking data to drive energy performance improvement in public buildings, governments can save taxpayer dollars while paving the way for private sector benchmarking policies. Similarly, disclosing public building energy performance data can build public trust and confidence in the effectiveness of such policies.

But, like most individual policies or practices, benchmarking and disclosure are not sufficient to realize the full efficiency potential of the commercial buildings market. Benchmarking should be considered a foundational element that can improve awareness of building energy performance and drive users to undertake other energy-efficient practices.

Key Points

- Energy benchmarking is a standardized process of measuring building energy efficiency.
- Benchmarking public buildings is a low-cost way to identify buildings that are good candidates for energy audits and upgrades.
- Local governments can lead by example with their own buildings, then phase in benchmarking and disclosure for the private sector.
- Benchmarking and disclosure policies can facilitate market-based competition and drive investment in energy efficiency, creating local jobs.

About SEE Action

The State and Local Energy Efficiency Action Network (SEE Action) is a state and local effort facilitated by the federal government that helps states, utilities, and other local stakeholders take energy efficiency to scale and achieve all cost-effective energy efficiency by 2020.

About the Working Group

The working group is comprised of representatives from a diverse set of stakeholders; its members are provided at www.seeaction.energy.gov.

Who is Affected?

Benchmarking and disclosure policies can affect key stakeholders, including:

- Public and private building owners and managers must benchmark their facilities and disclose the results.
- Interest groups that represent property managers, real estate professionals, tenants, and energy service providers may help educate owners and managers.
- Utility companies may facilitate access to energy data.
- Energy and/or environmental departments may receive and review data; information technology departments may post data online.

How Does It Work?

Local governments can start by benchmarking a sample of their own buildings, using the results to develop a more encompassing policy that requires all public buildings to be benchmarked at least annually. Governments can also reach private markets with mandatory benchmarking and disclosure policies and voluntary public-private partnerships, such as energy challenges. The remainder of this fact sheet focuses on policies requiring private sector action. Other SEE Action fact sheets provide information on public-private partnerships and ratepayer-funded programs that promote benchmarking.

Implementing Benchmarking Policies

Governments are best positioned to create a common market-based currency for building energy performance. Recognizing this, some local governments have moved to encourage or require benchmarking and performance information disclosure in their own portfolio of buildings and in private real estate markets.

Public Buildings

Local governments can benchmark their own buildings to track the performance of public buildings over time and determine which facilities to target for energy efficiency upgrades, as outlined below:

1. **Select appropriate combination of benchmarking methods.** Benchmarking can be conducted using multiple approaches including those listed below.
 - **Statistical.** A building's energy performance can be compared on a statistical basis to a population of comparable buildings. Benchmarking tools that use this approach include the U.S. Environmental Protection

Agency's (EPA) ENERGY STAR® Portfolio Manager, Lawrence Berkeley National Laboratory's EnergyIQ, and a host of proprietary tools.

- **Same building/building portfolio.** The energy performance of a building can be benchmarked against itself to track performance over time. In addition to tracking energy consumption, this can be a useful approach for measuring changes in an organization's carbon footprint or sustainability profile over time.
- **Energy simulation.** A building's energy performance can be benchmarked against an energy simulation of a building with similar physical and operational attributes. For example, Minnesota's B3 Benchmarking tool⁷ uses an energy simulation to compare a building's actual energy use to expected energy use if built to code.

A recent California study found that building owners and managers are most interested in comparing a building's performance against itself over time (81%), followed by comparison to a national rating scale based on similar buildings (65%).⁴

2. **Benchmark one or more public buildings.** Start with a sample of buildings that are suspected or known to be large energy users or poor energy performers or that reflect a diversity of building types that are representative of the government's building portfolio. This early benchmarking experience can help inform future benchmarking and disclosure policies and provide an opportunity to update building records used for maintenance and other purposes. Key data include:
 - Building characteristics (e.g., age, gross floor area, percentage of gross floor area that is heated and cooled, presence of a garage)
 - Operating characteristics (e.g., weekly operating hours, number of computers)
 - Energy and water (optional) usage data.

EPA offers a Portfolio Manager Data Collection Worksheet⁸ to help gather necessary data inputs. Similar data are required for other benchmarking tools.
3. **Establish a benchmarking policy or plan for public buildings.** Based on the results of the sample of buildings benchmarked, develop a policy or plan for benchmarking the entire building portfolio at least annually. It may be worthwhile to establish a way to automatically transfer utility billing data to the

benchmarking software; some utilities offer this type of automated benchmarking service. Publicly disclosing the results can build public trust and confidence in the effectiveness of such policies. For example, see Arlington County, Virginia's, Building Energy Report Cards.⁹

- 4. Use benchmarking results to improve energy management.** For example, Figure 1 shows how benchmarking can help prioritize energy efficiency projects. EPA's Portfolio Manager is an example of one benchmarking tool available. It generates a 1 to 100 energy performance score comparing a building to its peers using data from sources including the national Commercial Building Energy Consumption Survey (CBECS).¹⁰ Buildings with a score below 50 are, statistically speaking, in the lower half of energy performers nationwide and therefore may require capital investment to improve their efficiency. Buildings scoring in the average to above-average range (50 to 74) can improve energy performance by adjusting their approach to energy management, largely through low-cost operations and maintenance improvements that can be identified through more detailed retro-commissioning studies. Buildings scoring 75 and higher can focus on maintaining successful practices, while continuously striving for even higher performance.

Other tools may use different scales, but accomplish similar ends: (1) analyzing buildings' operating efficiency and (2) identifying the most cost-effective energy investment opportunities across a portfolio of buildings, thereby helping to prioritize the use of limited resources.

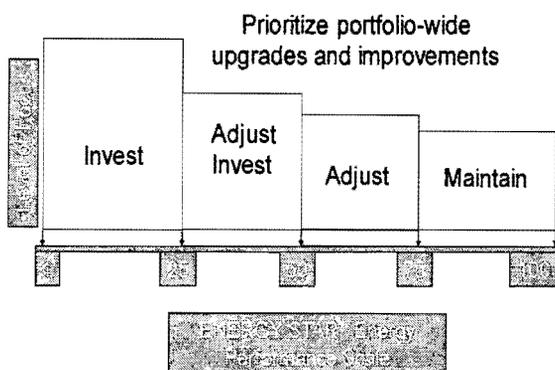


Figure 1. Example of how benchmarking can help prioritize efficiency upgrades among buildings with different scores

Source: U.S. Environmental Protection Agency

- 5. Document the costs and benefits of benchmarking.** Cost-benefit data can be invaluable in developing policies and programs that influence the private sector to follow the government's example. For example, Arlington County's benchmarking and efficiency improvement projects, completed from 2007 through 2010, have reduced the energy intensity of its building stock by nearly 10%, saving the equivalent of more than 300 U.S. homes' annual energy use and \$450,000 in avoided energy costs each year. The county has seen a 20% return on investment for projects uncovered through benchmarking and other energy management techniques.¹¹ Arlington County is sharing its lessons learned through a community-wide green business challenge, Arlington Green Games.¹²
- 6. Monitor and verify results.** Pre- and post-project benchmarking can be used to document energy savings from energy efficiency retrofit projects identified through benchmarking. Some benchmarking systems provide greenhouse gas emissions data that can be useful in calculating emissions inventories.

Private Buildings

Local governments can also influence the private real estate market by following the steps outlined below to adopt mandatory benchmarking and disclosure policies.

- 1. Assess the feasibility of benchmarking and disclosure policies in your area.** Local governments should determine whether there is active support in the public and private sectors and whether state or local law and regulatory practices permit or inhibit such policies.
- 2. Engage key stakeholders.** Engaging stakeholders from the beginning can speed the adoption of and increase the long-term effectiveness of the policy. Key stakeholders are likely to include:
 - **Real estate owners and managers.** These groups, typically represented by associations or other networks, are critical to the development and execution of benchmarking policy.
 - **Real estate brokers.** Brokers are important because they arrange the purchase and sale of most properties.
 - **Tenant organizations.** As a primary consumer of benchmarking information, tenants can build support for the policy and ensure that policy design serves user needs.

- **Electric and gas utilities.** These energy suppliers can provide the energy use data that is the basic currency for benchmarking, in some cases through an automated process.
 - **Utility regulators.** State legislatures and executive agencies can engage regulators of ratepayer-funded programs to gain broader support in the utility sector.
 - **Energy services experts.** Engineers, consultants, contractors, and building service firms can provide support for the policy and help educate clients.
3. **Define the scope and mechanics of the requirement.** Consider what building types will be covered, the ownership type and size of affected buildings, the implementation timeframe, disclosure requirements, and possible exemptions. If specific analytical tools or software are to be used, define such technical requirements and how they will be administered and supported. Many such details need not be specified in enabling legislation, but can be worked out through agency proceedings.
 4. **Adopt policy.** Governments may consider a phased-in implementation schedule based on building size, type, etc. to help building owners and managers start small and work to a portfolio-wide benchmarking program similar to the approach recommended for public buildings.
 5. **Support post-launch activities.** To most effectively earn market acceptance, benchmarking and disclosure policies should be supported with education, outreach, and technical assistance. There is a learning curve with using Portfolio Manager and other benchmarking tools, and it may take more than one cycle before users are proficient in data entry.⁴ The many players in the affected markets need repeated opportunities to learn about and become familiar with the concept of benchmarking, new requirements, technical tools, and processes. It is especially helpful if government agencies can facilitate enhanced access to energy data by working with utilities and energy service professionals. Conversely, the benchmarking data can be invaluable to utilities in improving existing energy efficiency programs and designing new ones. Providing ongoing support for compliance and quality control can also be vital.

Existing Policies/Programs

City of Austin, Texas: Energy Conservation Audit and Disclosure Ordinance¹³

Adopted: 2008 (updated 2011) / **Effective:** 2009.

Affected Property Types: Non-residential public and private buildings greater than 10,000 ft², multifamily properties with more than five units, and single-family homes more than 10 years old.

Key Requirements (non-residential only): Requires owners to disclose energy performance score using EPA Portfolio Manager or equivalent tool to the city, buyers, and prospective buyers at the point of sale and to the city annually thereafter. Phases into effect:

- 2012: Buildings larger than 75,000 ft²
- 2013: Buildings 30,000 to 74,999 ft²
- 2014: Buildings 10,000 to 29,999 ft².

Establishes non-compliance penalty of a class C misdemeanor with fines up to \$2,000.

New York City, New York: Local Law No. 84¹⁴ (part of the Greener, Greater Buildings Plan)¹⁵

Adopted: 2009 / **Effective:** 2010 (public buildings), 2011 (private buildings).

Affected Property Types: Non-residential and multifamily public buildings larger than 10,000 ft² and private buildings larger than 50,000 ft².

Key Requirements: Requires owners to annually disclose energy and water use intensity, ENERGY STAR energy performance score (when available), and a comparison of annual energy and water consumption data to the city using EPA Portfolio Manager (water data required for buildings with automated water meters only). Requires building tenants to disclose energy use to building owners in cases where owner does not have access to aggregate building energy use. Directs the city to disclose annual benchmarking results to the public after the second annual report. Establishes non-compliance as a violation of city construction code, with a potential \$500 quarterly penalty for continued non-compliance.

City of San Francisco, California: Existing Commercial Buildings Energy Performance Ordinance¹⁶

Adopted: 2011 / **Effective:** 2011.

Affected Property Types: Non-residential public and private buildings larger than 10,000 ft².

Key Requirements: Requires owners to annually file a benchmark report that includes an ENERGY STAR energy performance score, a California-specific energy rating, and energy intensity. Requires owners to complete an energy audit every 5 years, and file an audit report with the city, showing all retrofit and retro-commissioning opportunities with a simple payback of less than 3 years. Directs the city to disclose annual benchmarking results and audit compliance confirmation to the public

after the second annual report. Requires owners to make annual benchmarking summary available to tenants. Requires tenants who are directly metered to make energy use data available to building owners solely for the purpose of compliance. Phases into effect:

- 2011: Buildings larger than 50,000 ft²
- 2012: Buildings 25,000 to 49,999 ft²
- 2013: Buildings 10,000 to 24,999 ft².

Establishes non-compliance penalty of \$50 to \$100 a day for a maximum of 25 days.

Washington, D.C.: Clean and Affordable Energy Act¹⁷

Adopted: 2008 (updated 2010) / **Effective:** TBD.

Affected Property Types: Non-residential and multifamily public buildings larger than 10,000 ft² and private buildings larger than 50,000 ft².

Key Requirements: Requires public and private buildings to annually disclose the ENERGY STAR energy performance score to the district using EPA Portfolio Manager. Requires new buildings to use ENERGY STAR Target Finder, which is similar to EPA Portfolio Manager and enables architects and building owners to set energy performance goals based on model results before buildings are constructed, and disclose results to the district. Requires non-residential tenants to provide energy consumption and space use information to building owners to facilitate benchmarking. Directs the district to begin disclosing existing building benchmarking results to the public after the second annual benchmarking report. Requires disclosure of Target Finder results to the public. The implementing regulations are under revision, but will include a phased implementation schedule.

Complementary Policies/Programs

Benchmarking is just one component of an effective portfolio of ratepayer-funded commercial energy efficiency programs. Although it can tell a building owner how a given building rates, it does not explain how to develop solutions, how to finance them, or how to implement them. Thus, benchmarking should be part of a larger framework that includes components such as energy audits, retro-commissioning, and financial and technical assistance. The City of San Francisco's benchmarking law is a good example. The energy audit component of the law ensures that building owners are not only aware of their current energy performance but also opportunities to improve. For access to related SEE Action resources, visit www.seeaction.energy.gov/existing_commercial.html.

Other Resources

American Council for an Energy Efficiency Economy (ACEEE), Local Energy Efficiency Policy Calculator, www.aceee.org/portal/local-policy/calculator.

Efficiency Cities Network, "Building Labeling Ordinances." Presented March 1, 2011. www.energycities.org/wp-content/uploads/030111/ECN03012011.pdf.

Institute for Market Transformation. *Building Energy Transparency: A Framework for Implementing Commercial Energy Rating & Disclosure Policy Report*. www.buildingrating.org/Building_Energy_Transparency_Implementation_Report.

Institute for Market Transformation, Energy Disclosure Website, www.buildingrating.org.

Northeast Energy Efficiency Partnerships. *Valuing Building Energy Efficiency through Disclosure and Upgrade Policies: A Roadmap for the Northeast U.S.*, http://neep.org/uploads/policy/NEEP_BER_Report_1_2.14.09.pdf

SEE Action, Benchmarking and Disclosure: State and Local Policy Design Guide and Sample Policy Language. www.seeaction.energy.gov/pdfs/commercialbuildings_benchmarking_policy.pdf.

U.S. Environmental Protection Agency, Automated Benchmarking System, www.energystar.gov/istar/has.

U.S. Environmental Protection Agency, ENERGY STAR Portfolio Manager, www.energystar.gov/benchmark.

U.S. Environmental Protection Agency, ENERGY STAR Target Finder, www.energystar.gov/targetfinder.

U.S. Environmental Protection Agency, *State and Local Governments Leveraging ENERGY STAR*. www.energystar.gov/ia/business/government/State_Local_Govts_Leveraging_ES.pdf.

For more information, contact:

Cody Taylor

U.S. Department of Energy
202-287-5842
cody.taylor@ee.doe.gov

Tracy Narel

U.S. Environmental Protection Agency
202-343-9145
narel.tracy@epa.gov

References

¹ U.S. Department of Energy (DOE). *Buildings Energy Data Book*, Chapter 3. March 2011.

<http://buildingsdatabook.eren.doe.gov/ChapterIntro3.aspx>.

² U.S. Environmental Protection Agency, *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2009*, Table ES-8. April 2011. www.epa.gov/climatechange/emissions/usinventoryreport.html.

³ U.S. Environmental Protection Agency, *Rapid Deployment Energy Efficiency (RDEE) Toolkit: Planning & Implementation Guides*. December 9, 2009. www.epa.gov/cleanenergy/documents/suca/rdee_toolkit.pdf.

⁴ NMR Group, Inc. and Optimal Energy, Inc., *Statewide Benchmarking Process Evaluation, Volume 1: Report*, April 2012. <http://www.energydataweb.com/cpucFiles/pdaDocs/837/Benchmarking%20Report%20%28Volume%201%29%20w%20CPUC%20Letter%204-11-12.pdf>.

⁵ Hurley, A.K.; Burr, A. *Building Energy Disclosure Laws Push Companies to Hire*. www.bepanews.com/images/pdf/Disclosure_Laws_Push_Companies_Hire.pdf.

⁶ Burr, A. "CoStar Study Finds Energy Star, LEED Bldgs. Outperform Peers." March 26, 2008. www.costar.com/News/Article/CoStar-Study-Finds-Energy-Star-LEED-Bldgs-Outperform-Peers/99818.

⁷ State of Minnesota, B3 Benchmarking Program Website. www.mnbenchmarking.com/.

⁸ U.S. Environmental Protection Agency, ENERGY STAR Portfolio Manager Data Collection Worksheet. www.energystar.gov/ia/business/downloads/PM_Data_Collection_Worksheet.doc.

⁹ Arlington County, Virginia, Building Energy Report Cards. May 25, 2011. www.arlingtonva.us/Portals/Topics/AIRE/BuildingEnergy.aspx.

¹⁰ U.S. Department of Energy. Commercial Building Energy Consumption Survey. www.eia.doe.gov/.

¹¹ Arlington County, Virginia. "Return on Investment: Energy efficiencies yield big paybacks." February 27, 2007. www.arlingtonva.us/portals/topics/documents/9768ReturnInvestment.pdf.

¹² Arlington County, Virginia. Green Games Website. www.arlingtongreengames.com.

¹³ City of Austin, Texas. Energy Conservation Audit and Disclosure Ordinance. www.ci.austin.tx.us/edims/document.cfm?id=152241.

¹⁴ New York City, New York. Local Law No. 84, www.nyc.gov/html/planyc2030/downloads/pdf/jl84of2009_benchmarking.pdf.

¹⁵ New York City, New York. Greener, Greater Buildings Plan. www.nyc.gov/html/planyc2030/html/about/ggbp.shtml.

¹⁶ City of San Francisco, California. *Existing Commercial Buildings Energy Performance Ordinance*. www.sfbos.org/ftp/uploadedfiles/bdsupvrs/committees/materials/LU012411_101105.pdf.

¹⁷ Washington, D.C. *Clean and Affordable Energy Act*. www.ddoe.dc.gov/ddoe/lib/ddoe/information2/public_notices/CAEA_of_2008_B17-0492.pdf.

Disclaimer:

This information was developed as a product of the State and Local Energy Efficiency Action Network (SEE Action), facilitated by the U.S. Department of Energy/U.S. Environmental Protection Agency. Content does not imply an endorsement by individuals or organizations that are part of SEE Action working groups, or reflect the views, policies, or otherwise of the federal government.

	Bill 2-14 as amended	DC	New York City	San Francisco	Philadelphia	Chicago
Date Enacted		2008	2009	2011	2012	2013
Covered Building (square footage)	Gr1: 250K+ Gr2: 50K+	Gr1: 200K+ Gr2: 150K+ Gr3: 100K+ Gr4: 50K+	Gr1: City build 10K+ Gr2: 50K+	Gr1: 50K+ Gr2: 25K+ Gr3: 10K+	50K+	Gr1: 250K+ Gr2: 50K-250K
Multi-family	No	Yes	Yes	No	No	Yes
First report Due	Co: 6/2015 Gr. 1: 12/2016 Gr. 2: 12/2017	Gr1: 1/2010 Gr2: 1/2011 Gr3: 1/2012 Gr4: 1/2013	Gr1: 5/2011 Gr2: 5/2012	Gr1: 10/2011 Gr2: 4/2012 Gr3: 4/2013	6/2014	Gr1: 6/2014 Gr2: 6/2015
Verification	Every 3 years by licensed professional; exception for financial hardship					Every 3 years by licensed professional; exception for financial hardship
Exemptions	-Financial distress -<50% occupancy -year that cert. of occupancy received	-unoccupied -sold in last year -constructed in last year	Certain residential property, including 1, 2, and 3 family homes ; and Condos and Co-ops with no more than 3 dwelling units	-unoccupied -C&O permit less than 2 years old		-Financial distress -<50% occupancy -year that cert. of occupancy received
Disclosure	Public to the extent allowed under State law.	Public	Public	Public after 2013 reports; confidential commercial information remains confidential	Public	Public
Penalties	Class A (\$500/initial violation; \$750 for repeat violation)	\$100/day	\$500/quarter (\$2,000 max/yr)	\$50-\$100/day up to 25 days	\$300 for first 30 days; \$100/day after	\$100 for initial violation; \$25/day violation continues