Agenda Item 5D
April 22, 2014
Action

MEMORANDUM

TO: County Council

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

SUBJECT: **Action:** Bill 9-14, Environmental Sustainability – Renewable Energy – County Purchase

Transportation, Infrastructure, Energy and Environment Committee recommendation (2-0): enact Bill 9-14 as introduced.

Bill 9-14, Environmental Sustainability – Renewable Energy – County Purchase, sponsored by Councilmember Berliner, Council Vice President Leventhal, and Councilmembers 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 February 26. At the hearing, a representative of the Executive expressed the Executive's general support for the package of environmental initiatives (©5).

Bill 9-14 would require that 50% of the County's electric power usage be supplied with renewable energy by Fiscal Year 2015 and 100% by 2020. Currently, 30% of the County's electric power usage is supplied by renewable energy.

Councilmember Berliner explained the purpose of this Bill in his January 14 memorandum describing his proposed energy/environmental package (©6).

The Fiscal and Economic Impact statements for this Bill are on ©10. The Office of Management and Budget estimates that the cost to purchase an addition 20% renewable energy in FY15 would be $48,498.

Committee Discussion/Recommendation

At the worksession on Bill 9-14, Committee members requested Executive staff to provide a cost estimate to increase the County's purchase of renewable energy to 100% in FY15. The fiscal impact statement on ©11 indicates that the cost to go from 30% (current level) to 100% in FY15 would be $169,743.

The Committee recommended (2-0, Councilmember Floreen temporarily absent): enact Bill 9-14 as introduced.

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Bill No. 9-14
Concerning: Environmental Sustainability – Renewable Energy – County Purchase
Revised: 1/9/2014 Draft No. 1
Introduced: January 28, 2014
Expires: July 28, 2015
Enacted:
Executive:
Effective:
Sunset Date: None
Ch. _____, Laws of Mont. Co.

COUNTY COUNCIL
FOR MONTGOMERY COUNTY, MARYLAND

By: Councilmember Berliner, Council Vice President Leventhal, and Councilmembers Floreen, Riemer, Andrews, and Navarro

AN ACT to:

(1) require that at least 50% of the County's electric power usage be supplied with renewable energy by Fiscal Year 2015;

(2) require that 100% of the County's electric power usage be supplied with renewable energy by Fiscal Year 2020; and

(3) generally amend County law on environmental sustainability.

By adding

Montgomery County Code
Chapter 18A, Environmental Sustainability
Section 18A-11A

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

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

Sec. 1. Section 18A-11A is added as follows:

18A-11A. Renewable Energy.

(a) *Purchase of renewable energy.*

(1) The County Executive must assure that at least 50% of the County's total annual electric power usage will be supplied by renewable energy, beginning in Fiscal Year 2015.

(2) The County Executive must assure that 100% of the County's total annual electric power usage will be supplied by renewable energy, beginning in Fiscal Year 2020.

(b) *Criteria for renewable energy purchases.* The renewable energy purchased under subsection (a) must:

(1) be generated from an energy source defined as a Tier 1 renewable source in Section 7-701 of the Public Utilities Article of the Maryland Code or any successor provision;

(2) qualify as green power as defined by the United States Environmental Protection Agency;

(3) not be included in a supplier's renewable portfolio standard requirement for any year or supplant clean energy purchased to comply with either federal law or the law of states other than Maryland; and

(4) be registered and tracked in a regional tracking system.

(c) *On-site clean energy generation.* The County may satisfy the requirement of subsection (a) through on-site clean energy generation. The County must retain ownership of each on-site project's renewable energy certificates and must meet all other requirements of this Section. The County may exchange the renewable energy certificates for certificates from an alternate source that complies with this Section.

LEGISLATIVE REQUEST REPORT

Bill 9-14
Environmental Sustainability – Renewable Energy – County Purchase

DESCRIPTION:	Would require 50% of the County's electric power usage be supplied with renewable energy by Fiscal Year 2015 and 100% by 2020.
PROBLEM:	The County has low standards for the use of renewable electric supplies.
GOALS AND OBJECTIVES:	To eventually make the County's power supply entirely from renewable sources.
COORDINATION:	Department of General Services, Office of Management and Budget, Department of Environmental Protection
FISCAL IMPACT:	To be requested.
ECONOMIC IMPACT:	To be requested.
EVALUATION:	To be requested.
EXPERIENCE ELSEWHERE:	To be researched.
SOURCE OF INFORMATION:	Amanda Mihill, 240-777-7815
APPLICATION WITHIN MUNICIPALITIES:	To be researched.
PENALTIES:	Not applicable.

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ROCKVILLE, MARYLAND

MEMORANDUM

February 5, 2014

TO: Craig Rice, President, County Council

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

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

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

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

JAH:fz

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

TESTIMONY ON BEHALF OF COUNTY EXECUTIVE ISIAH LEGGETT

ON ENVIRONMENTAL AND SUSTAINABILITY PACKAGE

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

February 11, 2014

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

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

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

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

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

MONTGOMERY COUNTY COUNCIL
ROCKVILLE, MARYLAND

ROGER BERLINER
COUNCILMEMBER
DISTRICT 1

CHAIRMAN
TRANSPORTATION, INFRASTRUCTURE,
ENERGY & ENVIRONMENT COMMITTEE

January 14, 2014

Dear Colleagues,

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

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

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

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

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

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

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 9-14, Environmental Sustainability- Renewable Energy – County Purchase

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

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
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 9-14 Environmental Sustainability
– Renewable Energy – County Purchase

1. Legislative Summary.

   The legislation requires that at least 50% of County annual electric power usage be supplied by renewable energy starting in FY15, and up to 100% by FY20. Renewable energy purchased must meet the requirements of a Maryland Tier 1 renewable energy source (e.g., wind, solar), qualify as green power as defined by the Environmental Protection Agency (EPA), and be registered and tracked in a regional tracking system.

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.

   The legislation does not change County revenues.

   The legislation would expand the County's existing clean energy purchasing efforts from the current level of 30% of annual electricity use to 50% by FY15 and 100% by FY20. The County currently meets this requirement by purchasing renewable energy certificates (RECs) which are a traded and independently verified commodity representing the environmental attributes of clean energy. The cost of RECs is always in addition to the cost of electricity supply.

   The legislation would require an increase in the FY15 Recommended Budget (Utilities Non Departmental Account) of $48,498, assuming 50% clean energy purchasing, or $169,743, assuming 100% clean energy purchasing. Additional staff time would be needed to execute and monitor the program, approximately 25% of a grade 23 Program Manager position at an estimated cost of $22,831.

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

Additional Cost Above Recommended FY15 Budget for Clean Energy Purchases ($73,000)

		Total Cost Per Year						
% Nationally Sourced Clean Energy		FY15	FY16	FY17	FY18	FY19	FY20	Total
Base 30%	Base	$72,747	$88,664	$103,978	$119,449	$135,078	$150,865	$670,781
	Market Trend	$72,747	$118,218	$178,248	$209,035	$300,172	$362,077	$1,240,497
50%	Base	$121,245	$147,773	$173,296	$199,081	$225,129	$251,442	$1,117,966
	Market Trend	$121,245	$197,030	$297,080	$348,392	$500,287	$603,462	$2,067,496
100%	Base	$242,490	$295,545	$346,593	$398,163	$450,259	$502,885	$2,235,935
	Market Trend	$242,490	$394,060	$594,159	$696,785	$1,000,575	$1,206,924	$4,134,993

		Estimated Additional Cost Above 30% Base						
% Nationally Sourced Clean Energy		FY15	FY16	FY17	FY18	FY19	FY20	Total
50%	Base	$48,489	$59,109	$69,318	$79,632	$90,051	$100,577	$447,185
	Market Trend	$48,489	$78,812	$118,832	$139,357	$200,115	$241,385	$826,999
100%	Base	$169,743	$206,881	$242,615	$278,714	$365,209	$352,020	$1,565,154
	Market Trend	$169,743	$275,842	$415,911	$487,750	$700,403	$844,847	$2,894,496

Assumptions:

- Assumes a 0.05% increase in annual electricity consumption.
- The Base scenario assumes the current REC cost of $1.50 and escalates $0.25 per year through 2020 for the 30%, 50%, and 100% purchasing options.
- The Market Trend scenario for REC cost begins at $1.50 and escalates to $6 by FY20. It is consistent with market trends for the last 8 years tracked by the U.S. Department of Energy.
- Includes REC, or the renewable attribute only, and is reflected as a premium over the cost of conventional electricity.

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

   This legislation does not affect pension or group insurance costs.

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

   The legislation does not authorize future spending.

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

   The staff time needed to expand the program is expected to be less than one FTE (approximately 25%) for a grade 23 Program Manager. The staff resources required under Bill 6-14 could implement this legislation. Staff costs are estimated at $22,831 including benefits.

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

   Existing staff would have to reprioritize other duties in order to comply with this legislation.

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

   Assuming 50% clean energy purchasing and additional staff time, an added appropriation of $71,329 would be needed for FY15 budget. Assuming 100% clean energy purchasing and staff time, an additional appropriation of $192,574 would be needed to implement this bill.

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

   Projected costs are based on the target amount of clean energy required (as a percentage of electricity consumption), changes in the total electricity consumption for County facilities, the renewable energy attributes desired, and the commodity cost of the REC.

   The County's current REC purchases specifies national RECs from sources equivalent to Maryland Tier I; if this definition is changed, the cost of the commodity will vary and most likely increase.

   RECs are a volatile commodity. Pricing is currently low, but over the last ten years REC prices have varied over 600% for the same product.

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

    See question 3.

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

    Not applicable.

12. Other fiscal impacts or comments.

    None

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

Eric Coffman, Department of General Services;

Angela Dizelos, Department of General Services;

Erika Lopez-Finn, Office of Management and Budget

Jennifer A. Hughes

Jennifer A. Hughes, Director
Office of Management and Budget

4/11/14
Date

Economic Impact Statement
Bill 9-14, Environmental Sustainability – Renewable Energy – County Purchase

Background:

This legislation would require that at least fifty percent (50%) of the County's electric power usage be supplied with renewable energy by fiscal year (FY) 2015 and one hundred percent (100%) by FY2020.

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

   The Department of General Services estimates that it would cost the County an additional $75,000 in FY2015 and between $480,000 to $1.114 million by FY2020 to implement this Bill. These data are based on a 0.05 percent increase in energy consumption per year and a base "renewable energy certificate (REC)" cost of $1.50 in FY2015 and an additional $0.25 per year through FY2020 above the cost of conventional electricity.

   The Department of Finance assumes that public utilities currently have installed generating capacity to meet the increase in the County's demand for renewable energy.

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

   The Department of Finance assumes that the County will follow its current practice of purchasing national renewable energy certificates. These certificates originate from renewable energy projects across the Country and it is uncertain what local impact would result. However, because of the increase in Montgomery County Government spending (MCG), such increase could be offset by reductions in other MCG programs or increased tax revenues. What programs could be affected is uncertain at this time.

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

   Because of the assumption in paragraph #1, Bill 9-14 will no have direct economic impact on employment, investment, saving, and property values in the County. However, without data on what County programs or tax revenues may be affected by the increase in spending for renewable energy, it is uncertain whether Bill 9-14 will have an impact on incomes.

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

   Please see paragraph #3.

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

Economic Impact Statement
Bill 9-14, Environmental Sustainability – Renewable Energy – County Purchase

David Platt and Rob Hagedoorn, Department of Finance
Eric Coffman, Department of General Services

Joseph F. Beach
Joseph F. Beach, Director
Department of Finance

4-9-14
Date