T&E COMMITTEE #3
November 30, 2009

Update

MEMORANDUM

November 25, 2009

TO: Transportation, Infrastructure, Energy and Environment Committee

FROM: KL Keith Levchenko, Senior Legislative Analyst

SUBJECT: **Update:** County Environmental Incentives for Energy Conservation and Clean Energy

On November 3, 2009, the Council introduced Bill 44-09 sponsored by Councilmember Berliner to adjust the maximum tax credits that the County could provide annually for the purchase of energy conservation devices (from $250,000 down to $100,000) and solar/geothermal energy devices for residential properties (from $250,000 to $400,000). The impetus for the legislation was the fact that the solar energy tax credit cap had already been reached and a waiting list is growing, while the energy efficient device credit portion of the program is not expected to come close to its current cap. The proposed legislation will be discussed by the Management and Fiscal Policy Committee on November 30 (later the same day as this T&E update) with Council action scheduled for December 1.

At the November 3 legislation introduction, Councilmember Leventhal also expressed an interest in reviewing the Clean Energy Rewards program, which has already seen its rewards funding exhausted for FY10.

In addition to the two programs noted above, the County has enacted two other related incentive programs including:

- A property tax credit for buildings that achieve LEED Silver or greater designation.
- HELP Program: On April 22, 2009 the Council approved Bill 06-09 establishing a Home Energy Loan Program (HELP). Regulations were to be drafted within 6 months of enactment of the legislation. However, the Executive recently sought a deadline extension to April 15, 2009 (see ©2-7).

Council Staff has prepared a chart (see ©1) that provides summary information for each of the programs.

The following Executive Branch officials and staff are expected to participate in the discussion:

Department of Environmental Protection

- Robert Hoyt, Director
- Stan Edwards, Chief of Environmental Policy and Compliance

Department of Finance

- Jennifer Barrett, Director
- Rob Hagedoorn, Chief, Treasury Division

Clean Energy Rewards Program

Bill 39-04 (Energy Policy - Clean Energy Rewards Program) was adopted by the Council on March 8, 2005. The Council later approved Regulation 2-06AM implementing the program. The program is intended to encourage electricity ratepayers (both residential and non-residential) to choose clean energy options through available energy suppliers. Participating energy suppliers receive a clean energy financial reward for clean energy sold to customers. This reward is required to be passed on to the customer choosing the clean energy. The reward is intended to narrow the gap in cost between clean energy and standard energy packages.

The program was modified again in 2008 via Regulation 26-08 to allow national Renewable Energy Certificates (RECs) to be eligible for the program. This change was made to enable the program to take on more participants, since RECs available nationally are cheaper in cost than regional RECs.

Funding for the program includes an administrative component (i.e. DEP staff and operating expenses required to run the program) and a reward component. The reward component is established by the Council each year as part of the budget process. The reward funding was moved to a non-departmental account in FY09.

The program has gained popularity over time and has had to close to new participants several times as a result of the rewards funding projected to be fully allocated. County and private sector marketing efforts are certainly one reason for this rise in interest. There appear to be many electricity ratepayers who support the concept of purchasing clean energy (even when it is marginally more expensive than standard energy). However, recent trends in energy prices have also resulted in situations where clean energy (with the reward factored in) is cheaper in some cases (ex. Pepco's summer rates for standard offer service). This has lead to even more interest and enrollment in the program.

At the Committee discussion, DEP staff will provide an update on the program. Council Staff asked DEP to address the following points:

- How many people (residential, non-residential, and on-site producers broken out separately) are currently enrolled in the program?

- How many people are on a waiting list to be enrolled in the program?

- What is the current price differential (without the reward) per KWh between eligible clean energy and standard energy?

- If clean energy purchases are possible at prices below (or very close to) standard energy, should the County consider a more aggressive clean energy purchase policy for itself?

DEP provided written responses to these questions (see ©8-9).

Property Tax Credit — Renewable Energy

Bill 33-07 "Renewable Energy" was enacted by the Council on April 22, 2008. One of the elements in this bill was the creation of a residential property tax credit for energy conservation devices and for geothermal and solar devices. The law was later amended in March 2009 to clarify some issues.

The law provides that up to $250,000 in tax credits can be provided by the County each year for energy conservation devices and that a separate $250,000 maximum is available for geothermal and solar devices. There are also limits established per property per year.

As mentioned earlier, Councilmember Berliner has proposed legislation to adjust the two $250,000 annual caps to increase the cap for geothermal and solar devices and to decrease the cap for energy conservation devices, in order to maximize utilization of the overall program.

At the Committee discussion, Council Staff has asked Executive staff to address the following points:

- By tax year since the program's inception, please note how many people have applied for the solar/geothermal credit? What about the energy conservation devices credit?

- What is the total value of credits given out annually so far (by each of the two types)?

- How many applicants are on a waiting list for either credit? What is the total value of potential credits on the waiting list?

- Please describe any State and Federal credits available that applicants are also eligible for who apply for these credits.

Energy and Environmental Design Property Tax Credit

Bill 37-06 "Property Tax Credit – Green Buildings" was enacted by the Council on December 4, 2007. This credit (which varies from 10% to 75% over a 3 to 5 year period depending on the certification level and whether the building is a "covered" building or "other" building) is provided to buildings that are certified by the United States Green Building Council as LEED silver or greater. An overall annual cap of $5.0 million was established. Specific caps of $1.5 million for LEED silver and $2.5 million for LEED gold were also established.

Council Staff has asked Department of Finance staff to provide an update to the Council on the number and value of credits approved since the inception of the program and what (if any) policy or operational issues have arisen.

Home Energy Loan Program (HELP)

Bill 6-09 "Home Energy Loan Program – Establishment" was enacted by the Council on April 14, 2009. This program is intended to encourage single-family home property owners to get home energy audits done and to invest in major energy efficiency improvement opportunities identified in these audits. The costs for the improvements (as well as the initial audit) are eligible to be paid back through the owner's property tax bill via a low interest loan tied to the property.

On November 4, the Executive sent a memorandum (see ©2-7) to the Council noting a number of issues that have delayed transmittal of the implementing regulation for this program. While the Executive remains supportive of HELP, these unresolved issues have resulted in the Executive seeking a transmittal deadline extension to April 15, 2010. A resolution approving this extension was adopted by the Council on November 24.

The issues delaying implementation primarily relate to funding the program, although some of the funding mechanisms being considered may have implications for the program scope as well. Executive staff will be available at the Committee meeting to discuss the outstanding issues.

Attachments
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Environmental Incentive Programs

Program	Eligibility	Benefit Provided	Annual Cap	Issues
Clean Energy Rewards	Residential Property Owners	half a cent per kWh of clean energy consumed up to the limit of 20,000 kWh per year	FY10=$518k	1. Program closed to new participants based on FY10 cap. 2. Difference in clean energy costs versus standard energy costs changes over time.
	Non-Residential Property Owners	half a cent per kWh up to the limit of 400,000 kWh per year		
Renewable Energy Property Tax Credits*	Owner Occupied Residential single-family homeowners	Geothermal/solar: The lower of 50% of eligilble costs or $5k for h/c system, $1.5k for hot water supply, $5k for device that generates electricity	250k per year	Waiting List. Note: Participants on the waiting list can receive a tax credit in future years.
		energy conservation devices: up to $250 credit per property	250k per year	Low participation
Energy and Environmental Design Property Tax Credit	For new and renovated buildings that are certified LEED silver, gold, or platinum	3-5 year property tax credit varying from 10% to 75% of the total property tax for new and renovated buildings that meet LEED silver, gold, or platinum designations	$5 million cap per year in total, $1.5 million for LEED silver buildings, and $2.5 million for LEED gold	
Home Energy Loan Program*	Residential single-family homeowners	Low interest loan (no shorter than 15 years) tied to property tax bill to pay for the purchase of energy efficiency devices and renewable energy devices.	Will depend on how the revolving fund is established.	Regulation Transmittal behind schedule. CE is seeking transmittal deadline extension to April 15, 2010.

OFFICE OF THE COUNTY EXECUTIVE
ROCKVILLE, MARYLAND 20850

Isiah Leggett
County Executive

MEMORANDUM

November 4, 2009

TO: Phil Andrews, County Council President

FROM: Isiah Leggett, County Executive

SUBJECT: Implementation of the Home Energy Loan Program

The purpose of this memorandum is to request an extension of time to draft implementing regulations for the Home Energy Loan Program (HELP) established in Expedited Bill 06-09 (enacted on April 22, 2009) and to provide updated information to the County Council related to implementation of the program.

The HELP legislation required the Executive branch to:

1. Submit implementing regulations to the County Council within six months of enactment of the legislation, unless the Council grants an extension;
2. Report to the County Council if the Executive believes that the repayment provisions of the program are likely to unduly burden the lending industry or hinder homeowners from obtaining financing to refinance or purchase a home; and
3. Report to the County Council on whether the cost of a home energy audit is likely to be a significant barrier to participation in the program.

The Departments of Environmental Protection (DEP), Finance (Finance Department), and Economic Development (DED) collaborated to develop the following information to address these issues.

Development of Implementing Regulations

Although a significant amount of work has been done toward the development of implementing regulations, I am requesting an extension of the deadline to submit final regulations. Executive branch staff, in conjunction with the Maryland Clean Energy Center (MCEC), held a number of stakeholder meetings to discuss the operation of the program. These meetings, which included energy auditors, contractors involved in energy efficiency improvements and renewable energy installations, utility representatives, and financing and banking personnel, helped clarify a number of issues that will be fundamental to the success of the program. However, these meetings also helped identify a number of issues that still need to be resolved prior to the completion of regulations. These issues are summarized below.

Funding the Program

While the Finance Department early on identified self-supporting appropriation-backed debt as an appropriate funding source for HELP, numerous questions remain to be answered, including the identification of a secure, up front funding source for the loans prior to bond issuance; the degree that loan repayments will fully cover the entire costs of the program, including both bond repayment and administration; and underwriting criteria.

DEP proposed to use approximately $1.5 million in American Recovery and Reinvestment Act (ARRA) funds, which will be made available to the County from the U.S. Department of Energy (DOE) through an Energy Efficiency and Conservation Block Grant (EECBG), to support the program. To date, the County's application for EECBG funding has not been approved by the DOE. During the initial review process, DOE raised several questions regarding the use of EECBG funds for HELP. It seems clear from the initial feedback that EECBG funding could not be used for renewable projects unless it was in conjunction with energy efficiency activities, or the energy efficiency of the home must be demonstrated (to a standard established by DEP).

From a longer-term perspective, another obstacle to the development of regulations (and more fundamentally the actual implementation of the program) remains finding a source of permanent funding. A variety of different approaches were identified as potential options, including grant funding, bond funding, and private capital. It was generally believed when this program was enacted that cash would be available to fund the program via various Federal and state grants. However, to date a defined source of funds has not materialized.

The Finance Department believes that the County may be able to utilize a new ARRA bond program to fund HELP. Specifically, Qualified Energy Conservation Bonds (QECBs) are designed to provide funding for capital expenditures incurred for implementing green community programs (including loans, grants or other repayment mechanisms to implement such programs). The cost/benefit analysis relative to determining the economic benefit of using these bonds to fund the program has not been completed.

Use of either of these sources of money may have major implications on the requirements of the program. For example, both the EECBG funds and bond proceeds must be spent within prescribed periods of time. In addition, activities conducted under HELP may be subject to Davis-Bacon wage requirements if ARRA funds are utilized. These and other issues related to the use of ARRA funds cannot be resolved until additional guidance is provided by DOE and/or the Maryland Energy Administration (MEA), which is defining parameters for use of QECBs in Maryland.

Partnering with the Maryland Clean Energy Center

The MEA is interested in supporting energy efficiency loan programs throughout the State. Among other things, MEA has suggested that up to $4 million of State ARRA funds will be devoted to this effort – $2 million to set up the infrastructure (e.g., program website, outreach materials, etc.) to support the administration of such programs, and $2 million for loan capital. At the request of MEA, the MCEC is working to develop a model that could form the basis for programs in jurisdictions throughout the State. In addition, the MCEC is exploring whether they could serve as the program administrator for Montgomery County and other jurisdictions, and what this would entail.

MCEC administration of the program has the potential to greatly reduce the cost to the County of developing the basic infrastructure for the program. MCEC's role as administrator is still subject to approval by the MCEC Board of Directors, and the details of this role need to be defined. In addition, because ARRA is the source of funding that supports the MCEC's activities, the issues highlighted previously related to ARRA funding need to be considered.

Utility Residential Energy Efficiency Programs

The County is served by three electricity utilities (PEPCO, BGE and Allegheny). Each is in the process of developing demand side management (DSM) programs as required by the EmPower Maryland Energy Efficiency Act of 2008. These programs, funded by surcharges on electric bills and subject to approval by the Maryland Public Service Commission (PSC), are designed to help achieve a 15% reduction in per capita electricity use statewide by 2015. Energy audits are a critical component of the utilities' DSM programs, which are in various stages of development. The utility programs are not identical, although each utility has indicated that they intend to use EPA's Home Performance with ENERGY STAR process as the basis for their program.

DEP believes the Home Performance with ENERGY STAR process provides a strong foundation for the audit program under HELP. However, HELP requires certain things from an auditor that the utility programs may not. For example, the HELP legislation requires the audit to highlight those measures that provide cost savings in the initial year of the program, which is not necessarily a requirement of the utility programs. This provision of the legislation requires the auditor to allocate additional time which may not be compensated through the utility programs.

Although discussions have been held with utility representatives regarding HELP, it is important that the relationship between the program and the utilities' DSM programs be clearly determined. Given the significant commitment made by utilities to their DSM programs, and the outreach and education efforts that will accompany these programs, there is the potential for confusion and frustration among residents if HELP and the utility DSM programs are not well coordinated.

Miscellaneous Process Issues

The analysis of programs similar to HELP in other jurisdictions has highlighted several process issues that need to be resolved prior to finalization of regulations. As one example, procedures for disbursing loan funds must be developed. Contractors stressed to DEP that it is important that payments be made directly to the contractor performing the work rather than to the homeowner. The program in Boulder, CO makes payments to the contractor upon approval of the homeowner that the work was satisfactorily performed. In Sonoma County, CA, payments are made to the homeowner, although is appears the homeowner may agree to assign payments to the contractor that performed the work. A significant issue for the contractors is the timing of the payments. Some require a portion of the payment prior to the initiation of the work. Almost all require the balance of the payment at the completion of the job. It is important to note that many energy efficiency improvements funded through HELP may involve the work of multiple contractors, further complicating the payment process. The legal and procedural issues associated with making payments to contractors still need to be figured out.

Impact of HELP on Lending Institutions/Borrowers

Based on a review of similar programs throughout the country, DED determined that the repayment provisions of HELP would not burden the lending industry or hinder homeowners from obtaining financing to refinance or purchase a home if implementing regulations are carefully crafted. On the contrary, DED believes that HELP will likely benefit lenders by increasing property values and increasing borrowers' cash flow. HELP will also create a steady demand for energy efficient/renewable products, which will benefit the local lending industry by growing local businesses to meet these demands.

The County's financing processes already accommodate taxes and liens – and the HELP assessment is no different. Like other taxes or special district assessments, the HELP assessment will not trigger a default. Further, in the event of foreclosure, only the amount due or in default would need to be paid. The banks' concerns about increased escrow payments and closing costs are acknowledged, but these costs will likely be more than offset by the cost savings associated with lower utility costs.

DED believes that some of the lending industry's concerns should be addressed in the final program plan. For example, the County should ensure that loan-to-value ratios are appropriate. And, the County should consider only putting an assessment in place when the ratio of projected savings to assessment payment is positive. Consideration should also be given to limiting the size of the loan, thereby reducing risk.

Support for property assessed clean energy, or PACE programs, is growing nationally. Since the passage of enabling legislation allowing the financing of energy retrofits with PACE bonds in California in 2008, 12 other states, including Maryland, adopted enabling legislation, and two others are considering it. Additionally, on September 24, 2009, the Clinton Global Initiative announced a national PACE finance program, which will be supported by 50 mayors and 50 municipalities.

Cost of the Energy Audit

Generally, the unsubsidized cost of an energy audit that is likely to qualify for HELP is in the range of $300 to $700, depending on a home's characteristics (e.g., size) and the scope of the audit. Under certain conditions, audits available through utility DSM programs may also meet the requirements of HELP. In either case, Bill 06-09 allows for the cost of the audit to be included in the amount of the HELP loan. The County Council asked DEP to report whether paying for the audit upfront would be a barrier to participation in HELP.

Simply put, the answer to this is unclear. A precedent set by some related programs is that a consumer needs to pay for the audit, or a significant portion of it, as a good faith commitment to following through with the upgrade process. For example, the Long Island Green Home program (Babylon, NY) requires the homeowner to pay $250 for a home evaluation to "ensure your commitment to the program." Programs in Boulder, CO and Sonoma County, CA recommend but do not require an audit. Neither provides financial support for the audit, although the audit can be included as part of the loan in Sonoma County. The lessons learned from other programs where the cost of an audit was covered by the offering entity cannot necessarily be translated to HELP, as these programs provided grants or rebates for improvements as opposed to long-term financing as contemplated in HELP.

DEP does not believe the upfront cost of an energy audit will be a significant barrier to participating in the program for the majority of Montgomery County consumers. The program is predicated upon utility cost savings offsetting all or a significant portion of the required loan repayment assessed on the property tax bill. These savings are neither certain or guaranteed, as they are dependent upon a wide array of factors including consumer behavior. If a consumer cannot raise the resources to front the cost of the audit, they may be ill equipped to balance fluctuations in utility costs in addition to the loan repayment. Consumers with the greatest needs and the lowest income – those below 175% of poverty level – are eligible for County administered weatherization services or in some cases utility operated limited income programs. While programs can be conceived for hardship cases that provide audit cost assistance, these programs may ultimately be resource intensive to operate and serve a relatively small portion of the population. The costs of these programs would likely have to be spread across all participants as increased administration fees, which may inhibit broader participation in the program. Should evidence emerge, based on consumer feedback and program performance, that the cost of the energy audit is limiting participation of otherwise qualified consumers, appropriate options for addressing this issue can be considered.

Conclusion

I want to reiterate my strong support for HELP. I believe it is one of the most effective ways to enable homeowners to improve the energy efficiency of their homes, which provides them with direct financial savings while helping to improve the environment.

In order to ensure that the program is successful, it is critical that we address the issues identified above so that residents can efficiently take advantage of the program. I have directed staff working on the development of regulations to make every reasonable effort to ensure that final regulations are submitted to the County Council by April 15, 2010. If you or other members of the County Council members would like to discuss these issues in greater detail, please contact DEP Director Bob Hoyt, Finance Director Jennifer Barrett, or DED Director Steve Silverman.

cc: Timothy L. Firestine, Chief Administrative Officer
Kathleen Boucher, Assistant Chief Administrative Officer
Bob Hoyt, DEP Director
Jennifer Barrett, Finance Director
Steve Silverman, DED Director
Leon Rodriquez, County Attorney

DEP Responses to Questions for November 30, 2009 T&E Worksession on Energy Incentives

1. How many people (residential, non-residential, and on-site producers broken out separately) are currently enrolled in the program?

   Residential = 6,500
   Non-residential = 280
   On-site producers = 12 residents

   The table below shows the number of residential and commercial participants in the Clean Energy Rewards (CER) program since its inception.

Period	Residential	Commercial
Q3 FY07	321	6
Q4 FY07	1,614	8
Q1 FY08	2,332	32
Q2 FY08	2,377	94
Q3 FY08	2,854	104
Q4 FY08	3,356	111
Q1 FY09	3,269	104
Q2 FY09	3,763	164
Q3 FY09	4,207	213
Q4 FY09	4,874	258
Q1 FY10	6,517	280

2. How many people are on a waiting list to be enrolled in the program?

   There are currently 6 residents on DEP's waiting list. The suppliers are providing DEP with the number of customers currently on their waiting lists.

3. What is the current price differential (without the reward) per KWh between eligible clean energy and standard energy?

   For the purposes of this discussion, there are three primary options available to customers in the County for purchasing electricity:

   - Competitive "Brown" Power – Conventional fossil fuel generated electricity offered by a competitive energy supplier. The price of this power is established individually by competitive suppliers based on market conditions.
   - Utility Standard Offer Service (SOS) – Electricity offered by regulated utilities consisting of conventional fossil fuel generated electricity mixed with a mandated amount of "green" power (currently 4.52% in Maryland). The price of this power is based on market rates resulting from a competitive bidding process that was completed under the supervision of the Maryland Public Service Commission.
   - "Green" Power – Electricity offered by a competitive energy supplier or utility generated primarily or entirely from renewable sources. The price of this power is established by a competitive supplier based on market conditions.

The table below shows the current pricing for each of these product options – competitive brown power, Pepco SOS (which represents most of the County's electricity service), and a range of clean energy prices from CER program suppliers. Values in parenthesis are negative. All prices are in cents per kilowatt-hour.

Month/Yr	Comp. Brown Power	Pepco SOS	1 yr. 50% Clean Energy	Difference w/ Pepco SOS	1 yr. 100% Clean Energy	Difference w/ Pepco SOS
Nov 2009	10.2	11.9	11.1 - 11.7	**(0.8) - (0.2)**	11.6 - 12.9	**(0.3) - 1.0**

The table below illustrates the price fluctuations for SOS and clean energy during the life of the CER program. (The price for competitive brown power fluctuates with market conditions and DEP has not been tracking these figures.)

Month/Yr	Comp. Brown Power	Pepco SOS	1 yr. 50% Clean Energy	Difference w/ Pepco SOS	1 yr. 100% Clean Energy	Difference w/ Pepco SOS
Feb 2007	--	10.0	11.6	**1.6**	12.8	**2.8**
Oct 2007	--	10.5	12.3	**1.8**	13.6	3.1
Aug 2008	--	11.6	16.7 - 17.6	5.1 - 6.0	17.2 - 18.8	5.6 - 7.2
Oct 2008	--	11.7	13.0 - 14.0	1.3 - 2.3	13.5 - 15.2	1.8 - 3.5
Mar 2009	--	11.7	11.1 - 11.7	**(0.6)** - 0.0	11.6 - 12.9	**(0.1)** - 1.2
Jul 2009	--	13.1	11.1 - 11.7	**(2.0) - (1.4)**	11.6 - 12.9	**(1.5) - (0.2)**
Nov 2009	10.2	11.9	11.1 - 11.7	**(0.8) - (0.2)**	11.6 - 12.9	**(0.3)** - 1.0

4. If clean energy purchases are possible at prices below (or very close to) standard energy, should the County consider a more aggressive clean energy purchase policy for itself?

   The options available to the County for the purchase of electricity are the same as those available to participants in the CER program – competitive brown power, SOS, and/or clean energy from a competitive energy supplier or utility. The prices for these products vary from those offered to CER participants because the County is a large institutional purchaser. Since 2004, the County has procured brown power through a competitive bidding process, and separately purchased renewable energy certificates (RECs) equivalent to a specified percentage of our electricity consumption. The volume of RECs purchased has increased as the price of clean energy has come down relative to brown power. The County currently purchases RECs equivalent to 30% of our electrical consumption.