


EXHIBIT NO. 1

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City of Alexandria, Virginia

MEMORANDUM

DATE: MAY 3, 2011
TO: THE HONORABLE MAYOR AND MEMBERS OF CITY COUNCIL
FROM: JAMES K. HARTMANN, CITY MANAGER 
SUBJECT: RECEIPT OF THE PROPOSED ENERGY AND CLIMATE CHANGE ACTION PLAN FOR 2012-2020 AND SETTING IT FOR PUBLIC HEARING

ISSUE: Consideration of the proposed Energy and Climate Change Action Plan for 2012-2020.

RECOMMENDATION: That City Council:

1. Receive the proposed Energy and Climate Change Action Plan 2012-2020; and
2. Schedule the Plan for public hearing on Saturday, May 14, and final consideration on Tuesday, May 24.

DISCUSSION: The City Council adopted the Eco-City Charter in June 2008, which was followed by adoption of the comprehensive Environmental Action Plan 2030 (EAP 2030) on June 23, 2009. The EAP 2030 was based on several core guiding principles. Principles of “Global Climate Change and Other Emerging Threats” and “Energy” were among the core guiding principles in the EAP 2030. EAP 2030 recommends several actions including the development of an emissions inventory and a climate change action plan. The EAP 2030 also includes goals for greenhouse gas (GHG) emissions reductions that mirror those recommended by the Metropolitan Washington Council of Governments (MWWOG). These initiatives are also priorities outlined in the Goal #2, Objective 2 of the Alexandria City Council Strategic Plan 2010. City staff has been continually working to implement actions of EAP 2030 within the present constraints of the City’s budgetary process. The proposed Energy and Climate Change Action Plan 2012-2020 (Attachment 1) is a culmination of efforts of the City Council, the Environmental Policy Commission (EPC) and staff to fulfill the goals articulated by the City Council in the various policy documents outlined above.

Proposed Energy and Climate Change Action Plan 2012-2020: The proposed Energy and Climate Change Action Plan (ECCAP) is a subset of the EAP 2030. In fact, it is an amalgamation of targets, goals and actions defined in four of the key principles of the EAP 2030, namely, Global Climate Change and Other Emerging Threats, Energy, Transportation, and Green Building. It is intended to further define the City’s path to achieving significant GHG emission

reductions. It builds on the work done in developing the EAP 2030 by providing information on policies and measures that the City is already undertaking, as well as possible new measures under consideration, to achieve the City's climate change goals.

The following GHG emissions reduction targets developed for the EAP 2030 are included in the ECCAP and apply to City operations and the community as a whole: (1) reduce GHG emissions to 2005 levels by 2012; (2) reduce GHG emissions by 20% below 2005 levels by 2020; and (3) reduce GHG emissions by 80% below 2005 levels by 2050.

This plan focuses on near- and medium-term actions that City staff, elected officials, residents, and businesses can take to reduce GHG emissions. Specifically, ECCAP presents a summary of the GHG emission inventory using 2005 as the baseline and focuses on the following:

- City government operations emission reduction measures such as green buildings, energy conservation initiatives, alternative modes of transportation, green vehicle fleet and land use and urban forestry planning;
- Community-wide emission reduction measures such as citizens actions to reduce GHG emissions, energy conservation and use of renewable energy, water conservation, solid waste recycling and sustainable transportation options;
- Climate adaptation and preparedness with specific focus on potential climate change impacts and risks to Alexandria and preliminary climate adaptation goals and actions; and
- Challenges in responding to climate change.

Based on the results of the emissions inventory, City government's operations accounted for only 3% (or 79,820 metric tons of CO₂e) of the total GHG emissions. City schools contributed about 1% of the total. Thus, 96% of the GHG emissions are generated by the commercial/ industrial and residential sectors. Moreover, the community-wide emissions consist of the following major component sources: (1) commercial (46%); (2) transportation (31%) and (3) residential (19%). These findings clearly show that to meaningfully lessen the impacts of climate change, Alexandria should emphasize efforts on community-wide activities such as transportation, and existing commercial and residential buildings focusing on energy conservation, smart growth principles and the use of renewable energy. As such, implementation of the Transportation Master Plan, implementation of the recently adopted Green Building Policy, as well as increased outreach and education on energy conservation practices in existing buildings, are considered key to Alexandria's climate change mitigation effort.

The City has been proactive in reducing the GHG emissions. For example, the City's Green Building Policy sets the stage for greening the City's buildings, which account for 65% of the City's GHG emissions. The City's recycling program and the Covanta Waste-to-Energy facility divert millions of tons of trash from landfills, reducing the amount of harmful methane gas released into the atmosphere.

The City is using \$1.37 million under the federal Energy Efficiency and Conservation Block Grant (EECBG) program to assist residents and businesses begin to develop and implement sustainable energy efficiency and conservation programs that target energy conservation in existing buildings. Examples include the creation of a Green Building Resource Center, a series of Green Building workshops, development of an audit program and loan assistance program and partnering with non-profit organizations. EECBG funds are also being used for LED traffic lights and streets, clean fleet vehicles and a variety of other energy conservation projects on City properties.

The City has identified a number of proposed transportation investments and priorities that will reduce vehicle traffic and promote public transit. Examples include the three high-capacity transit corridors identified in the Transportation Master Plan, the Crystal City-Potomac Yard transitway, the Potomac Yard Metrorail station, the King Street Metrorail station improvements, and bike connectivity to transit and bike sharing programs.

The short- and mid-term measures can help the City achieve stabilization of GHG emissions with currently available technology. Meeting the long-term GHG emission reduction targets set for 2020 and beyond will likely require accelerated development of new, affordable technologies and beneficial behavioral changes. Programs and policies related to district energy, alternative transportation infrastructure, and evolving renewable energy technologies can have positive climate change and energy use reduction results to meet the long-term goal of reducing GHG emissions by 80% by 2050.

However, most of these long-term measures are difficult to quantify and will need continuing evaluation in order to design programs and policies that remove barriers to implementation of climate-friendly, commercially viable technologies, and that consider the feasibility of prospective technologies that are not yet commercially viable. ECCAP will be updated periodically as progress and information becomes available.

Staff conducted several outreach activities to obtain public comments and feedback on the proposed ECCAP. Staff and the Environmental Policy Commission (EPC) organized two public events - one EPC lecture to educate the public on the science of climate change and one open house to obtain feedback from the community on the ECCAP. Staff made a presentation on the ECCAP to the Government Relations Committee of the Alexandria Chamber of Commerce. The draft ECCAP has been posted on the City's website since March 14 and several outreach efforts were made to solicit public comment until April 14, 2011. The final draft version of ECCAP submitted in this docket reflects all the comments received to date and final review by the EPC. This final draft was released to the public at the 2011 Alexandria Earth Day on April 30 to solicit further public comments.

Most of the public comments received to date do not address the specific contents of the action plan but focus on specific actions by the City to make a significant impact on GHG emission reduction. They can be grouped into the following categories:

- **City policies** – The City needs to provide incentives to encourage energy conservation projects by residents and businesses. Also, the City should do more to improve public transportation options that reduce overall gas usage and emissions.
- **Increased outreach efforts by the City** - Many expressed the need for the City to increase its effort on outreach and education on climate change and energy conservation techniques focusing on what and how citizens can do to impact these, including hiring additional staff for that purpose.
- Staff made minor adjustments to the ECCAP document to reflect comments from the Northern Virginia Regional Commission (NVRC) regarding the updated Virginia Energy Plan and some other minor details.

Staff passed on specific comments on transportation options to the T&ES Transportation Division and will take other comments into account during the implementation of ECCAP.

In summary, the proposed Energy and Climate Change Action Plan is truly a subset of the existing EAP 2030 that was adopted by City Council in 2009. Staff plans to continue to monitor the science of climate change, future federal and state regulatory developments, as well as funding opportunities. Staff believes that federal leadership is required to come up with long-term measures aimed at effectively mitigating the climate change issue.

FISCAL IMPACT: Since the proposed ECCAP is a subset of the existing EAP 2030, City Council's adoption of ECCAP does not signify a fiscal commitment from the City to complete each and every action proposed in this plan. Staff is of the opinion that many of the long-term measures to effectively mitigate the climate change issue have to come at a national level from the Federal government. However, in the short term, EECBG funding of \$1.37 million has allowed the City to make good progress in implementation of numerous measures to reduce GHG emissions. The implementation of EECBG projects including extensive public outreach workshops will continue through FY 2012. Staff plans to continue to monitor future federal and State regulatory developments as well as new funding opportunities. As a majority of the actions described in this plan have already been embedded in the EAP 2030 and/or the City's various master plans and policies such as the Transportation Master Plan, the Urban Forestry Master Plan, the Open Space Master plan, the Green Building Policy, etc., new measures proposed in this plan will compete with other projects for funding through the City's regular CIP process.

The short-term fiscal impacts for adopting this action plan include the continued funding of the CIP project on energy conservation and management. The proposed FY 2012 CIP budget includes \$4.9 million to implement energy management projects at City facilities over the next ten years. Costs associated with implementation of various measures that are otherwise part of existing master plans and policies are not calculated. Consideration of hiring a full-time Eco-City Sustainability Coordinator would cost \$120,000 per year starting FY 2013. Staff plans to carry out another GHG emission inventory for the year 2012 (FY 2013) to measure progress against the 2012 reduction target at a cost of \$25,000. Flood mitigation along waterfront, which aligns with adaptation strategies outlined in the ECCAP, is estimated to cost \$6.5 million.

ATTACHMENT:

Attachment 1: Draft Energy and Climate Change Action Plan 2012 - 2020

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