

Resolution No. \_\_\_\_

RESOLUTION: To Declare the City of Rockville's Intent to Take a Leadership Role in Reducing Electricity Consumption and Generating Renewable Energy, to Partner with the Maryland Energy Administration, and to Enroll as a Maryland Smart Energy Community

**WHEREAS**, the Maryland Energy Administration established the Maryland Smart Energy Communities program to encourage local governments to adopt certain policies related to energy efficiency, renewable energy, and/or transportation petroleum reduction, and put plans in place to achieve the goals established in those policies; and

**WHEREAS**, the Mayor and Council approved the *Strategy for a Sustainable Rockville* on October 1, 2007, committing to making Rockville a sustainable leader among Maryland communities and identifying goals to maximize energy efficiency and to generate energy as opportunities present themselves; and

**WHEREAS**, the City prepared an *Energy Efficiency and Conservation Strategy* for submission to the U.S. Department of Energy in 2009 that identified strategies to improve the energy efficiency of City owned buildings and facilities using Energy Efficiency and Conservation Block Grant funds; and

**WHEREAS**, the Mayor and Council adopted a resolution to become a U.S. Environmental Protection Agency Green Power Community on February 28, 2011, committing the City to the generation and use of renewable energy; and

**WHEREAS**, the Mayor and Council adopted a resolution supporting Rockville's participation in the Sustainable Maryland Certified program on October 24, 2011 and Rockville became the second community in Maryland to achieve program certification on June 8, 2012; and

**WHEREAS**, by adhering to the Maryland Smart Energy Communities program, the City of Rockville is committed to being a responsible energy leader by decreasing municipal electricity consumption and increasing onsite renewable energy production; and

**WHEREAS**, the City of Rockville recognizes that smart investments in energy efficiency and renewable energy support economic growth and long term monetary savings; and

**WHEREAS**, upon meeting the Maryland Smart Energy Communities program requirements, the Maryland Energy Administration will provide up to ninety-seven thousand, three hundred and eight dollars (\$97,308.00) in grant funds to enable projects that increase energy efficiency or renewable energy generated at facilities owned by the City, to benefit the local community and promote affordable, reliable and clean energy.

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**NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF ROCKVILLE MARYLAND, as follows:****Section 1. Policy**

The City of Rockville establishes a policy to take a leadership role in reducing electricity consumption and generating onsite renewable energy by completing the following initiatives:

- a. Become a Maryland Smart Energy Community by partnering with the Maryland Energy Administration to enroll in the program and satisfy the grant requirements provided by the State of Maryland.
- b. Establish an energy efficiency goal of reducing per-square-foot electricity consumption by 15 percent relative to the baseline within 5 years of the baseline year.
- c. Establish a renewable energy goal to reduce conventional centralized electricity generation serving City buildings by meeting 20 percent of those buildings' electricity demand with distributed, renewable energy generation by 2022.
- d. Develop and implement an Energy Action Plan to document baseline electricity consumption and identify strategies to reach the energy efficiency and renewable energy goals.
- e. Report electricity consumption and renewable energy generation capacity annually to the Maryland Energy Administration to demonstrate progress towards accomplishing these goals.

**Section 2. Definitions**

For the purpose of this policy, the following terms shall have the meaning given:

- a. **Baseline:** The electricity consumption in megawatt-hours per gross square foot of building space (MWh/GSF) in the baseline year.
- b. **Baseline year:** Fiscal Year 2010 (July 1, 2009 through June 30, 2010).
- c. **Building space:** The amount of gross square feet (GSF) of building space encompassed by the facility and utility baseline portfolio.
- d. **Electricity consumption:** The amount of megawatt-hours (MWh) purchased by the City on a fiscal year basis for the facility and utility baseline portfolio.
- e. **Facility and utility baseline portfolio:** The subset of City-owned and operated buildings, water and sewer electricity accounts that collectively consume over 75 percent of the City's electricity and are greater than 7,000 square feet. Includes City Hall, Civic Center Park-Glenview Mansion, Croydon Creek Nature Center, F. Scott Fitzgerald Theatre, Gude Maintenance Facility, Lincoln Park Community Center, Police Headquarters, Recreation Services Buildings, Senior Center, Swim and Fitness Center, Thomas Farm Community Center, Twinbrook Community Recreation Center, Water Treatment Plant, Glen Mill Water Pump Station, Hunting Hill Water Tank, Carr Water Tank, North Horners Sanitary Lift Station, and Fallsgrove Sanitary Lift Station; excludes streetlights, traffic lights, parks, small electricity consuming facilities, and leased buildings.
- f. **Per-square-foot-electricity consumption:** Electricity consumption in megawatt-hours (MWh) for the facility and utility baseline portfolio divided by building space (GSF) calculated on an annual fiscal year basis.
- g. **Renewable energy:** Energy generated from any one of the following sources: solar (including photovoltaic technologies and solar thermal), wind, biomass (excluding saw dust), methane from anaerobic decomposition of organic materials, geothermal (for space heating and

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cooling and hot water), ocean, fuel cells powered by methane or biomass, poultry litter, and waste-to-energy facilities (per Public Utilities Article, §7-701, Annotated Code of Maryland).

**Section 3. Baseline and Reporting**

The City of Rockville will establish a baseline and maintain an annual electricity consumption inventory for the facility and utility baseline portfolio. This annual inventory will be conducted using ENERGY STAR Portfolio Manager (or equivalent energy management program previously approved by the Maryland Energy Administration), the results of which will be presented to the Maryland Energy Administration by no later than October 1<sup>st</sup> of each year until the completion of said goals are accomplished.

The following information shall be included in an annual inventory of municipal electricity consumption and provided to the Maryland Energy Administration (fiscal year 2010 sample data provided below). Local governments who earn the Maryland Smart Energy Community designation and are up-to-date on their annual reporting may be eligible for grant funding in future years.

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**Baseline and Inventory Reporting**

	Building/Facility Name	Building Size GSF	Annual Electricity Consumption			Electricity Consumption Intensity (Total MWh/GSF)
			Conventional (MWh)	Onsite Renewable (MWh)	Total (MWh)	
<b>Buildings (subset)</b>	City Hall	53,000	1,382	0	1,382	0.026
	Civic Center Park- Glenview Mansion	26,628	261	0	261	0.010
	Croydon Creek Nature Center	7,250	145	0	145	0.020
	F. Scott Fitzgerald Theatre	24,100	349	0	349	0.014
	Gude Maintenance Facility	62,400	629	0	629	0.010
	Lincoln Park Community Center	12,866	197	0	197	0.015
	Police Headquarters	11,848	13	0	13	0.001
	Recreation Services Buildings	20,200	122	0	122	0.006
	Senior Center	33,100	343	0	343	0.010
	Swim and Fitness Center	30,000	1,078	0	1,078	0.036
	Thomas Farm Community Center	18,086	413	0	413	0.023
	Twinbrook Community Recreation Center	15,740	340	0	340	0.022
	<b>Subtotal Buildings (subset)</b>	<b>315,218</b>	<b>5,272</b>	<b>0</b>	<b>5,272</b>	<b>0.017</b>
<b>Water</b>	Water Treatment Plant	25,000	4,770	0	4,770	0.191
	Hunting Hill Tank (8 million gallons)	N.A.	22	0	22	N.A.
	Carr Water Tank (3 million gallons)	N.A.	0.3	0	0.3	N.A.
	Glen Mill Water Pump Station	2,500	33	0	33	0.013
	<b>Subtotal Water</b>	<b>27,500</b>	<b>4,824</b>	<b>0</b>	<b>4,824</b>	<b>0.175</b>
<b>Sewer</b>	North Horners Sanitary Lift Station	N.A.	13	0	13	N.A.
	Fallsgrove Sanitary Lift Station	N.A.	44	0	44	N.A.
	<b>Subtotal Sewer</b>	<b>N.A.</b>	<b>56</b>	<b>0</b>	<b>56</b>	<b>N.A.</b>
<b>Total FY 2010 Baseline (building subset, water, sewer)</b>		<b>342,718</b>	<b>10,152</b>	<b>0</b>	<b>10,152</b>	<b>0.030</b>

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**Section 4. Energy Action Plan**

The City Manager will establish an Energy Action Plan for municipal facilities and operations to fulfill the requirements of the Maryland Smart Energy Communities program. The Plan will include the electricity baseline and identification of potential cost-effective energy projects and practices to meet the energy efficiency and renewable energy goals outlined in the policy within the given timeframes.

For energy efficiency, the plan will credit efficiency measures completed since the FY 2010 baseline as well as future planned measures through FY 2015. For renewable energy, the plan will credit existing onsite renewable energy capacity and identify potential future opportunities through calendar year 2022. Given that one of the program's primary purposes is to increase renewable energy generation in Maryland, the purchase of Renewable Energy Certificates (RECs<sup>1</sup>) for out-of-state wind production cannot be credited toward the 20 percent goal. Therefore, the City's primary onsite renewable energy opportunities will include solar photovoltaic (PV) systems that convert sunlight to electricity, solar hot water heating (SWH) systems that use the sun to heat water for domestic applications, and geothermal heating and cooling systems that use the earth as a heat reservoir to heat and cool buildings.

The plan will also provide flexibility for the consideration for emerging energy technologies, best practices, and financing mechanisms. The benefits of plan development and implementation include annual assessments of municipal electricity demand and costs, reduction in peak energy demand, long-term savings in annual electricity costs, and reductions in the City's greenhouse gas emissions.

**Section 5. Implementation**

The Department of Recreation and Parks and the Department of Public Works are primarily responsible for facility and utility operations and will be the designated leads responsible for implementing the plan within their respective areas. Nevertheless, involvement from elected officials, all municipal departments, employees and the community is needed to achieve the plan's goals. The Sustainability Coordinator in the Environmental Management Division of the Department of Public Works will coordinate annual reporting to the Maryland Energy Administration and respond to policy-related inquiries.

Strategies to achieve the energy efficiency and renewable energy goals include, but are not limited to:

- Implementing energy efficiency in the design and construction of new buildings and retrofits of existing buildings.

- Implementing, where practicable, energy efficiency and renewable energy measures through a variety of mechanisms, including but not limited to life cycle analysis; incentives, grants and rebate programs; energy performance contracting; and power purchase agreements.

- Procuring and managing consultant contracts in areas where specialized expertise is required.

- Employing a combination of energy conservation upgrades, operational efficiency enhancements, and employee education and engagement to improve energy performance and services.

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<sup>1</sup> RECs are tradable, non-tangible energy commodities that can be purchased to represent proof that one-megawatt hour of electricity was generated from an eligible, offsite renewable energy resource and delivered to the grid. RECs represent the environmental benefits of renewable energy generation and are sold separately from the physical electricity commodity.

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Employing rigorous building management and maintenance practices to keep all equipment functioning optimally.

Evaluating energy management tools to track energy consumption and identifying opportunities for improvement.

Facilitating coordination and collaboration between City departments, other jurisdictions, utilities and regional organizations to proactively address energy issues.

Participating in local, state, regional, and federal energy management training efforts and encouraging internal training.

Educating City employees to instill energy conservation workplace practices.

Facilitating coordination across all City department and numerous partners to incorporate energy considerations into policy development, project planning, and other processes.

Supporting continuous energy performance improvements by funding new measures with funds derived from utility savings.

Employing environmental preferable purchasing policies for energy and water-saving products and technologies to reduce operating costs.

Improving office equipment energy use and reduce loads on electrical outlets (plug load).

Recognizing and rewarding individual and collective efforts to contribute to the energy policy goals.

The City of Rockville will make a good faith effort to implement, where practicable, energy efficiency and renewable energy projects and practices to meet the policy goals; however, should the City adhere to the terms and conditions of the Maryland Smart Energy Community Grant Agreement (GR # 2013-28-420S1) but not achieve the adopted goals within the appropriate timeframes, grant funding will not be rescinded.

**Section 6. Applicability**

This policy applies to all divisions and departments of the City, with the exception of the exclusions outlined in the definitions above.

**Section 7. Effective Date**

This policy shall be effective immediately.

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I hereby certify that the foregoing is a true and correct copy of a  
Resolution adopted by the Mayor and Council at its meeting of October  
28, 2013.

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Douglass A. Barber, CMC, City Clerk