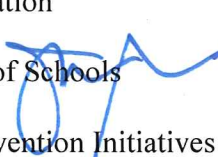


Office of the Superintendent of Schools  
MONTGOMERY COUNTY PUBLIC SCHOOLS  
Rockville, Maryland

September 25, 2019

MEMORANDUM

To: Members of the Board of Education

From: Jack R. Smith, Superintendent of Schools 

Subject: Update on Climate Change Prevention Initiatives

Montgomery County Public Schools (MCPS) recognizes the urgency and importance of incorporating climate change preventions and continues to have strong commitments to environmental sustainability. During the past three decades, MCPS has celebrated many accomplishments and continues to focus on the efforts to reduce Greenhouse Gas (GHG) emissions as a part of climate change prevention initiatives. Following are highlights.

**Summary of Accomplishments and Ongoing Efforts**

- Solar photovoltaic panels hosted at 17 schools are capable of generating 4.1 megawatts of direct current.
- Electricity procurement of clean or renewable energy, through the purchase of renewable energy certificates, is now at 33 percent of total MCPS electricity requirements.
- Geothermal heating and cooling systems have been installed at 30 schools.
- MCPS Energy Use Intensity (EUI) for Fiscal Year (FY) 2018 was 57.1 kBTU/SF (kilo-British thermal unit per square foot). According to the U.S. Energy Information Administration, the national median site EUI for K–12 schools is 58.2 kBTU/SF. Our schools operate more efficiently.
- Vegetative roofs are installed at 36 MCPS schools, totaling nearly 1.1 million square feet. Two additional schools currently under construction also will have vegetative roofs.
- The Maryland Energy Administration launched the Data Center Energy Efficiency Grant Program (DCEEG) in FY 2018 to support the robust and growing information technology sector. MCPS applied for and received a DCEEG conditional award and currently is working on implementing cost-effective energy efficiency measures as required by the grant to reduce energy usage at the data center at 45 West Gude Drive.
- As of FY 2019, 25 schools are Leadership in Energy and Environmental Design (LEED) Gold certified and 3 schools are LEED Silver certified. Nine additional schools are pending LEED certification.
- MCPS meets Montgomery County's version of the International Green Construction Code 2012 on all construction projects. This code requires commissioning of all projects and verification by a third-party design professional.
- From FY 2016 to FY 2019, 55 Heating, Ventilation, and Air Conditioning (HVAC) system replacement projects were completed to maximize indoor air quality and energy efficiency. Eleven HVAC replacement projects are planned for FY 2020.

- As of FY 2019, 10 schools are proud recipients of the U.S. Department of Education's Green Ribbon School Award. MCPS is the recipient of the 2013 District Sustainability Award.
- As of FY 2019, 86 schools are maintaining Maryland Green School Certification.

In addition, the MCPS Environmental Sustainability Management Plan (ESMP), published biannually, includes accomplishments, new goals and strategies, and data-driven approaches to our environmental sustainability efforts. The plan demonstrates how our teachers actively teach environmental education; how we build environmentally friendly and energy-efficient schools; how we utilize technology in our classrooms; how our students and staff are dedicated to conserving energy, reducing waste, and increasing recycling; and how we transport our students using the most efficient routes daily to minimize the number of miles driven by our buses.

MCPS' largest contributor to GHG emissions is associated with the heating, cooling, and lighting of our schools and facilities. The second largest contributor is the use of fleet fuel by buses that transport our students daily to and from schools and activities and by the service vehicles operated by our supporting services staff. These two contributors account for approximately 98 percent of all GHG emissions generated in MCPS. As a result of the initiatives described and additional initiatives, the avoided GHG in FY 2018 was 88,010 metric tons of carbon dioxide equivalent.

MCPS has applied for funds from the Volkswagen Settlement Funds to cover the purchase cost differential for an electric school bus and the cost of charging infrastructure. The settlement allows for \$3 million awarded to the Maryland Department of the Environment; therefore, not all districts will be able to receive funding for electric buses. We are hopeful MCPS will receive an award. If awarded before the end of 2019, it is anticipated the electric bus would be placed into service for the 2020–2021 school year. Assuming the electric bus pilot is successful, MCPS looks forward to continued electrification of the fleet.

The Montgomery County Government has launched a planning process to develop prioritized actions and strategies to meet its GHG emissions reduction goals of 80 percent by 2027 and 100 percent by 2035. Three technical work groups—Buildings, Transportation, and Clean Energy—were formed in July 2019, consisting of community members, as well as staff from various governmental agencies including MCPS. Two additional work groups—Climate Adaptation and Sequestration and Community Engagement and Education—currently are being convened. MCPS students are being invited to participate in these work groups as active collaborators in the planning process to achieve the county's GHG emissions reduction goals.

If you have any questions, please contact Dr. Andrew M. Zuckerman, chief operating officer, at 240-740-3050.

JRS:AMZ:sro

Copy to:  
Executive Staff  
Mr. Adams  
Mr. Benjamin  
Mr. Watkins  
Ms. Webb