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Climate Change Action Plan Operational Committee Members

- Jamee Alston, Management Analyst, Division of Supporting Services, Department of Sustainability and Resiliency
- Kristi Murphy Baldwin, Chief Human Resources Officer
- Donald Belle, Environmental Outreach Educator, Department of Environmental Education, William S. Schmidt Outdoor Education Center
- Quincy Boyd, Chief of Staff
- **Jean-Paul Cadet,** Director, Career and Technical Education
- **Jeffery Carpenter,** Director, Employee and Labor Relations
- **Charoscar Coleman,** Chief Operating Officer
- Sylvester Conyers, Instructional Supervisor, William S. Schmidt Outdoor Education Center
- **Vincent Curl,** Safety Office Manager
- **Garth Deitzer,** Maintenance Planner, Department of Building Services
- Mark Dreszer, Supervisor of Garage Operations, Transportation/ Central Garage Department
- **Sara Gillespie,** Recycling Technician, Department of Sustainability and Resiliency
- **Michael Herbstman,** Chief Financial Officer (former)
- **David Hill,** Transportation Operations Supervisor, Transportation Department
- **Dawn Holton,** Senior Mechanical Engineer, Department of Capital Programs
- Millard House II, Superintendent of Schools
- **Sheila Jackson,** Director, Family and School Partnerships
- **Shayla Jackson,** Director, Department of Capital Programs
- **Shawn Matlock,** Office of Alternative Infrastructure Planning and Development
- **Lynn McCawley,** Senior Public Information Specialist, Office of Communications
- **George McClure,** Supervisor of Athletics
- **John McDaniels,** Program Coordinator, Department of Career and Technical Education/ JROTC, Public Safety and Homeland Security
- **Dorothy Morrison,** Director, Department of Sustainability and Resiliency
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- **Joan Shorter,** Director, Food and Nutrition Services
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- **Jason Washington,** Associate Superintendent, Supporting Service
- **Amber Wilson,** Executive Assistant, Office of the Superintendent
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- Andrew Zuckerman, Chief Information and Technology Officer

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BACKGROUND SUMMARY

On March 1, 2021, the Prince George's County Board of Education established the Climate Change Action Plan (CCAP) Focus Work Group to develop a plan for creating and meeting climate action goals. Prince George's County Public Schools (PGCPS) will work to meet UN Intergovernmental Panel on Climate Change (IPCC) emission reduction targets by 2030 or 2040, depending on the target.

To begin implementing the 58 Climate Change Action Plan items, the Chief Executive Officer created a Climate Change Action Plan Operational Committee composed of 38 PGCPS staff members who meet monthly to review each action item, share progress for each priority area and discuss plans to continue moving the work forward. Additionally, eight priority area implementation workgroups with technical expertise have been established and meet as often as required to execute tangible project tasks, which are reported on during the larger monthly Operational Committee meetings.

INTRODUCTION

As PGCPS continues its journey of transformation for excellence in education and equity, it embraces a culture of sustainability and is working diligently to implement measures to sustain healthy students, families, communities and the ecosystems that support them. In the face of a changing climate, PGCPS recognizes the importance of planning, collaborating, and investing in our infrastructure and day-to-day operations so that we are prepared for and resilient to the impacts of climate change.

Within the past two years, PGCPS has made noteworthy accomplishments to reduce its carbon emissions footprint through energy efficiency in operations and the development of renewable sources of energy as new schools are being constructed. New schools are being built to a minimum standard of LEEDS Silver, with electric vehicle charging and solar ready infrastructure and geothermal energy.

PGCPS has secured, to date, a fleet of 40 plus electric school buses and is working to build the infrastructure needed to support these cleaner vehicles. We have also made progress in reducing food and other waste in schools through composting and recycling of materials. We have conducted curriculum audits and are exploring strategies by which to infuse climate change and environmental justice literacy into learning and awareness for our students.

Recognizing the all-encompassing nature of sustainability practices, we continue to forge internal and external partnerships and deliberate with diverse stakeholders to help identify and adopt smart management practices as well as leverage limited resources. During the 2023-2024 school year, PGCPS applied for and was awarded over \$10 million in grant funds, which will aid efforts to reach our set targets and accomplish our goals for a more sustainable and resilient school district and beyond.

The 2024 Year-End Report highlights activities and progress over the past 12 months. An archive of past reports can be accessed HERE.







Support Environmental Justice Through Climate Curriculum. Training and Partnerships

Create Climate Curriculum and Environmental Justice Work Group

- Multiple climate change professional development sessions for teachers were offered throughout SY23-24.
- Developed an initial set of sustainability principles.
- Worked with the Chesapeake Bay Foundation to plan Prince George's County Climate Change Investigations and Actions sessions (summer sessions).
- Developed and conducted the Climate and Stormwater Stewards Program, providing over 30 field experiences for students (3rd-12th grade) at no cost to schools.
- Guided the Student Environmental Coalition in meetings, activities and planning of the Student Environmental Alliance Summit.

PRIORITY RECOMMENDATION #1 (cont.)

Support Environmental Justice Through Climate Curriculum. Training and Partnerships

Launch Annual Climate-Ready Leadership Summit

- Secured PGCPS funding for summit hosting expenditures. \$115,000 was allocated, and the following activities were planned and delivered:
 - April 17 The inaugural Climate-Ready Leadership Summit was held at the Accokeek Foundation in Accokeek, Maryland. The summit was targeted to PGCPS executives with participation from student representatives. Peer school districts and other partners were also in attendance.
 - April 25 Environmental Student Alliance at the Bladensburg Waterfront Park
 - April 29 Environmental Student Alliance at Bowie State University
- Worked with the Prince George's Department of the Environment, Prince George's County Parks and Recreation, local universities, and partnering organizations to plan and conduct the summit.
- Provided opportunities to showcase student achievements and student voice during the summit.

Enhance Access to Climate Technology

- Solar energy data monitoring was established at Glenarden Woods Elementary School.
- Installation for solar energy data monitoring is underway at Greenbelt MS and Oxon Hill High School.
- Worked with the University of Maryland Center for Community Engagement, Environmental Justice, and Health to expand outdoor air quality monitor networks.

Enhance CTE Program to Further Incorporate "Green" Skills and Job Readiness

- The Environmental, Agricultural and Natural Resources (EANR)
 Program at Gwynn Park High School received a \$60,000
 Innovation grant for educational development and/or program enhancements.
- Auto Program coordinator Truell Ard received an electric Toyota bZ4X to allow a deeper dive into electric vehicle education in maintenance and repair.
- EANR = International HS @ Largo teacher will attend training in the first course for the EANR program: Natural Resources pathway, June 2023. This is the first step to expand the EANR program.

PRIORITY RECOMMENDATION #1 (cont.)

Support Environmental Justice Through Climate Curriculum. Training and Partnerships

Build New Climate Partnerships with Environmental Non-Governmental Organizations (ENGOs) and Businesses

 PGCPS has established and continues to build partnerships with a host of stakeholders including but not limited to the Chesapeake Bay Trust and Program, Accokeek Foundation, World Resources Institute, Association of Climate Change Officers, U.S. Green Building Council and many more.

Incorporate Climate and Environmental Justice Curriculum into Learning Standards and Benchmarks A Climate Change (CC) and Environmental Justice (EJ)
 curriculum audit was completed and reviewed for the number
 of hours and content areas that explicitly address CC & EJ.
 The next steps include increasing the number of hours
 that students engage with CC & EJ in K-12 and professional
 development for the Department of Curriculum & Instruction
 and school-based staff.



Reduce Carbon Footprint from PGCPS Buildings

Require Private Partners to Participate in All Rebates and Other Appropriate Programs

- EmPOWER Maryland Rebates were captured for all six new Public-Private Partnership (P-3) schools including PGCPS-James Madison MS, PGCPS-Cesar Chavez Chiller Upgrade, and PGCPS-FAB Heavy-Up Project.
- EmPOWER Maryland rebates were captured for General Mechanical Services' mini-split and Washington Gas steam trap projects.
- Continued work is in progress to add language to all contracts requiring participation in available rebate programs.

Collect and Disseminate Data on Building Energy Performance

- FY22 Data from MEA's AOI.1 Grant is expected to be available at the end of FY24.
- Once energy data becomes available, schools/facilities' energy performance will be reviewed/prioritized.

Build Staff Capacity in Building Maintenance and Management

 Budget requests were made to increase building maintenance and management staff in order to secure and maintain new technologies coming online for energy efficiency.

PRIORITY RECOMMENDATION #2 (cont.)

Reduce Carbon Footprint from PGCPS Buildings

Consolidate PGCPS
Administration/
Central Office Staff

• A contract to procure the services of Jones Lang LaSalle Americas, Inc. (JLL) was executed on April 25, 2024. JLL is contracted to conduct feasibility studies regarding potential green building design for the new central office(s). The contract will expire on June 30, 2025.

Perform Comprehensive Energy Audit of All Existing Buildings and Rely on Data for Educational Facilities Master Plan (EFMP) Cycles

- PGCPS-Eleanor Roosevelt HS senior Charlie Renze completed an Energy Audit of his school with the University of Maryland team. Link to his report found here.
- EssexCo will commence its energy audit of PGCPS-Central HS and PGCPS-Tayac ES.

Move Toward Fossil Fuel Free/Net-Zero Ready for All New Construction

• The move toward fossil fuel free/net-zero ready has been ongoing. The biggest challenge will be field space to accommodate geothermal wells (GTW) for schools utilizing geothermal heating/cooling. The downside of GTW is the life expectancy of heat pumps. Supporting Services teams are still investigating more reliable equipment to be used for these applications. Another important element is reducing energy transmission through walls, windows, floors and roofs by constructing a more efficient building envelope. Replacement of single pane windows alone has been proven to reduce HVAC loads by at least 20%; HVAC is typically 45% of electric consumption for a school.

Research and Potentially Implement Wastewater Thermal Energy Technologies

• Wastewater energy is being evaluated on our two new upcoming high school projects at High Point HS and the new high school coming in Adelphi.

Phase Out Fossil Fuel Powered Steam and Water Heating Systems

• Steam phaseout has been ongoing. New plants are capable of being phased out of fossil fuel with the addition of an electrical heavy up.

PRIORITY RECOMMENDATION #2 (cont.) Reduce Carbon Footprint from PGCPS Buildings		
Phase Out R-22 HVAC	 PGCPS has a plan in place to replace all R-22 & R410A equipment with equipment utilizing refrigerants such as R-454B with GWP ratings lower than anticipated Kigali phasedown requirements into the 2030s. R-32 may be used as well. Equipment using R-134A will be replaced with R-513A. 	
Design All New PGCPS Buildings to be Resiliency Hubs	All new construction projects are being evaluated to serve as resiliency hubs.	



PRIORITY RECOMMENDATION #3Commit to Renewable Energy Sources for a Net-Zero Emissions Future

Begin Renewable Energy Purchasing Through Wholesale Markets

 PGCPS will continue riding the Baltimore Regional Cooperative Purchasing Committee (BRCPC) Agreement. The Energy Consulting Services extension was posted by BRCPC in early June 2024 and will be effective on July 1, 2024, and for 9 one-year renewal terms.

Create a Publicly Available Dashboard

• Energy dashboards have been installed at PGCPS-NEW Fairmont Heights HS and PGCPS-Glenarden Woods ES. Development of dashboards for the six new P-3 Schools is underway with work to verify data for the first few months of operation.

Install Solar Panels on PGCPS Property

- Rooftop solar will be installed on all six new P-3 schools in late fall 2024. Energy will be offset at 12 other PGCPS schools representing all Districts via ANEM (Aggregate Net Energy Metering).
- PGCPS will continue its work with ground solar array opportunities from Prince George's County government.
- PGCPS is exploring other solar opportunities for facilities that require new roofs

PRIORITY RECOMMENDATION #3 (cont.) Commit to Renewable Energy Sources for a Net-Zero Emissions Future

Sign onto Power Purchase Agreements (PPA) for Off-site Renewable Energy	PGCPS did not have any opportunities for this action in the 2024 fiscal year.
Explore Approaches to Integrate Battery Backup Power	PGCPS is exploring battery backup power at its inaugural Bus Depot for Clean School Buses (PGCPS-Mullikin Bus Lot).

PRIORITY RECOMMENDATION #4Commit to Low Carbon School Transportation

Modify Bus Route to Fuel Use	The transportation team is preparing a select number of routes for electric school buses in select areas for the 24-25 school year.
Electrify All Buses by 2040	 Mullikin Bus lot is being developed as a pilot location for a Microgrid bus charging infrastructure. Infrastructure is being constructed for 90 electric buses. Currently, we have 21 Electric buses and additional buses are being purchased with grant funding assistance.
Increase Walking/ Biking/Public Transit Use	PGCPS is working with the county's Department of Parks and Recreation to increase walking/biking spaces and support transit oriented development to facilitate more mass transit use.
Any Walking Or Biking Change Must Include A Safety Component	The state of Maryland is mandating this for all new schools and additions that increase enrollment by 100 students or more.



PRIORITY RECOMMENDATION #4 (cont.)Commit to Low Carbon School Transportation

Eliminate Unnecessary Idling from School Buses

• Awareness and educational Information is shared among staff at safety meetings throughout the school year to help reduce the amount of idling.

Increase the Safety and Other Amenities Available on School Buses

• PGCPS continues to install cameras, Global Positioning System (GPS) navigation, and other devices to increase safety.

Electrify All Light-Duty Vehicles and Other Equipment by 2040

 PGCPS has contracted consultant support to conduct feasibility and cost analysis in meeting this goal and continues to seek competivive grant funding to help meet the financial investment that will be required.

PRIORITY RECOMMENDATION #5Reduce Food Waste and Grow Climate-Friendly Food

Eliminate Unnecessary Idling from School Buses

• Incorporated Student, Parent, Staff and Community Stakeholder Input into PGCPS Menus

Reduce Food Waste and Increase Composting

- The composting program expanded this school year, bringing the total number of off-site composting schools to 29, with support from the city of Laurel and the Prince George's County Department of the Environment.
- Composting webpage created here.
- Building Services and the William Schmidt Center, with support from the Sustainability Office, were awarded a School Waste Reduction and Composting Grant from the Maryland State Department of Education to support our composting and waste reduction programs. Compost was delivered to participating composting schools to show students and staff what they are helping to produce and be able to include in lessons with students, and utilize on the school grounds.
- Composting coordinators (teachers) professional development on 10/17/23, and Building Supervisors on 10/19/23
- Composting Data



PRIORITY RECOMMENDATION #6Commit to Sustainable Materials Management and Procurement

Develop a Sustainable Purchasing Policy	 Gathering data to update the Purchasing Policy and solicitation templates.
Reduce School Meal Packaging Sent to the Landfill	 Several food service meal packaging items have been switched to recyclable or compostable versions including the spork packet, salad/fruit cup and lid, soup bowl, hinged container for salads, and paper boats.
Promote Recycling and Waste Reduction in PGCPS	 Priority 6 webpage created, with data included here. Composting webpage created here. Waste Wise field trip in May 2024 to the composting and recycling facilities with staff from Building Services, William S. Schmidt Outdoor Education Center, and CCAP workgroup with educational tours and hands-on experience to better understand the what, why and how to reduce waste in PGCPS. September 20, 2023, school Recycling Coordinator, Recycling Professional development Waste Diversion: The Right Version! Professional development for teachers on February 13, 2024 Winners of the 2023 Waste Diversion and Recycling Awards! Category: Composting Schools Bond Mill Elementary School, Bradbury Heights Elementary School Chesapeake Math and IT Academy North High School, Eleanor Roosevelt High School, Francis Scott Key Elementary School, Heather Hills Elementary School, Largo High School, Laurel Elementary School, Potomac High School, Robert Goddard Montessor, S. Schmidt Outdoor Education Center Scotchtown Hills Elementary School America Recycles Day events included: Several schools participated in America Recycles Day by holding events at their respective schools. Over 200 students took the PGCPS Recycling Pledge (many also took the Metropolitan Council of Governments Pledge). Multiple students from Suitland HS (including the overall winner) placed in the "Rethink Recycling" sculpture contest sponsored by the Maryland Department of the Environment. Recycling, composting and waste reduction incorporated into planning and execution of events such as the Student Environmental Alliance Summit, Climate-Ready Leadership event. In the K-5 Science curriculum, a 1-2 day lesson will be embedded, which supports waste diversion and conservation practices. Recycling Data

PRIORITY RECOMMENDATION #6 (cont.)Commit to Sustainable Materials Management and Procurement

Improve the Carbon Footprint of the Waste Collection System

 Increased the number of schools with three waste collection streams (landfill, compost, recycling) with the additional composting schools this school year.

Expand Tracking of Waste and Diversion Rates

- Recycling and composting data for each facility posted on the website on the composting, recycling, Priority 5, and Priority 6 webpages.
- Composting data for each facility



PRIORITY RECOMMENDATION #7Commit to Sustainable Materials Management and Procurement

Conduct a Systemwide Landscape Inventory and Develop a Plan for Green Infrastructure and Sustainable Landscape Management	 Inventory has been completed. We are working on an agreement with the Contractor Corvias to assist with green infrastructure development.
Establish a Systemwide Project Database with Tracking and Monitoring for All Green Infrastructure and Conservation Landscapes	 This database has been created and is publicly accessible Recycling photo to be adjusted to show names of bins here.
Incorporate Stormwater Management Activities into School Curriculum to Enhance Climate Science	 There was a student summit on green infrastructure. In addition, students from various schools have participated in programming. We will also be incorporating building dashboards into all new building construction.
Streamline the Review Process for Green Infrastructure Projects and Separate the Review Process from the Current Site Permitting Process	Utilizing the contractor Corvias may allow us to speed up the approval of some green infrastructure projects.



PRIORITY RECOMMENDATION #7 (cont.) Commit to Sustainable Materials Management and Procurement

Plant More Trees at Each School and Across the School System	 There are several school-based tree-planting projects that are being conducted each year. The Department of Capital Programs (DCP) and Office of Alternative Infrastructure Planning and Development (OAIPD) projects are adding trees to each new school project due to changes in M-NCPPC forest management requirements. We also preserve as much of the tree canopy as possible on all construction sites.
Plant Native Plants and Create Conservation Landscapes for Stormwater and Multiple Benefits	OAIPD has required designers to incorporate native plants and rain gardens into 7 of its 8 new schools.
Increase the Number of School-Based Green Infrastructure Projects	These projects are tied to new construction and renovation projects as the tempo increases on those projects so will the pace of the projects.
Transition Sports Field Surfaces to Natural Turf	We are evaluating new varieties of grass; however, the community in areas with heavy use fields have expressed a desire for turf fields.

PRIORITY RECOMMENDATION #7 (cont.)Commit to Sustainable Materials Management and Procurement

Reduce Paved Surfaces and Replace Remaining Impervious Parking Areas with Pervious Paving	This design is being incorporated into new school designs.
Investigate Building Structures and Retrofit Green Roofs Where Feasible	We are focusing on adding Solar to roofs and are entering into PPAs for all of our new schools.
Preserve Existing Trees and Woodlands During Site Development Process	We also preserve as much of the tree canopy as possible on all construction sites.
Reuse Already Developed Properties for School Sites	This goal is incorporated into the Educational Facilities Master Plan.

Lead by Example to Support Transformational Change

Create a Sustainability & Resiliency Officer Position in the PGCPS Administration	 As of the fall of 2023, The Director of Sustainability and Resiliency was appointed and the new Department is currently recruiting Program Managers and has acquired additional staff from reorganization within the Division of Operations.
Ensure that Equity Permeates Through All Decisions Implementing the CCAP	Through a collaborative effort of internal and external stakeholders, PGCPS developed its first Sustainability Principles, which outline equity as core value in our service delivery.
Ensure Equitable, Meaningful Student and Community Engagement	Throughout the year, students have been presented opportunities to engage in climate change activities and conversations. A campaign - "Do ONE Thing" - has been initiated to engage students, families and school administration staff.
Ensure that Negotiated Workforce Contracts Respond to the CCAP Recommendations	 There are plans underway to work with Human Resources to ensure implementation.
Lobby for Necessary Changes to State, County and Federal Law and Regulations	Climate change and sustainability legislation were monitored during the 2024 State of Maryland Legislative session. One notable legislation is requiring all agencies to develop a climate action plan and provide an officer to oversee each agency's implementation plan. PGCPS will continue engagement with state and federal legislation that align with PGCPS strategic goals.

Lead by Example to Support Transformational Change

Ensure that Capital Program and Other Budgetary Decisions Keep the CCAP Goals A Sustainability Strategic Planning Committee composed of departmental heads and key decision-makers has been established, which will convene at regular frequency to facilitate greater coordination in program planning and budget allocation to support CCAP goals.

Update Inaugural Climate Change Action Plan

 Annual reviews and deliberation of current prioritized actions within the Climate Change Action Plan will be conducted starting July 2024 to reflect feasibility and applicability to evolving science and changing scenarios.

