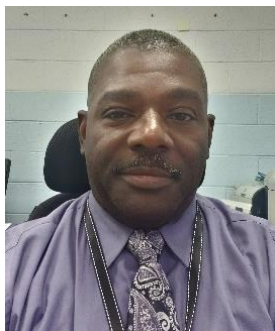


SUSTAINABILITY HERO

November 2020



Rodney L. Williams, SFP, CEFM
Director of Energy and Sustainability
Office of Facilities Management, Newark Public Schools

Serving 32 years working for New Jersey public schools, Rodney Williams is a sustainability leader who has made immeasurable contributions to advancing solutions in school facilities that save energy and money. Rodney is currently the Director of Energy and Sustainability for the Newark Public Schools' Office of Facilities Management. From 2017-19, the district saved nearly \$1.9 million from energy efficiency projects. Rodney's technological knowledge and strategic approach has reduced the district's carbon footprint while enabling Newark Public Schools, the state's largest school district, to become innovators using school facilities to promote green technology in the building, classrooms and the community. Rodney is also a certified Sustainable Facilities Professional (SFP) with the International Facilities Management Association, an accomplishment of which he is proud.

In 1988, Rodney was hired as a thermostat mechanic by Newark Public Schools. "I started in the tunnels with the pipes and worked my way up to be a leader in the boardroom," Rodney said. A natural manager of people with an engaging personality, Rodney has an expert understanding of facilities and the focus to see projects to completion. He manages 400 utility meters throughout the district's 80 plus facilities.

Newark Public Schools embarked on one of the largest solar projects of any urban school district in New Jersey and was the first district to incorporate geo-thermal heating and cooling as well as ice storage in an urban environment. Thanks to Rodney's leadership, 61 schools in Newark Public Schools were certified with the [Sustainable Jersey for Schools](#) program in 2020 and the district has been awarded the 2020 Sustainability Makes \$ense Award. Newark Public Schools is the only district in the nation that has won the [Association of School Business Officials International \(ASBO\)](#) Masters Award five times; the award recognizes facility plant professionals who show quality performance to maintain healthier, safer and more efficient facilities.



With a great team of colleagues, Rodney is quick to credit the accomplishments to others. "Sustainability is an achievable goal. But it must be a team effort. Community partners like PSEG, Newark Public School staff, students, parents and educators are working together to achieve sustainability in Newark." He is glad to have enthusiastic support from the Newark Board of Education and Superintendent Roger León who is also a graduate of the Newark Public Schools. "Since 2014, this initiative has been six years in the making, and we're so glad that we're able to accomplish such a tremendous feat," Superintendent León said. "We love doing programs involving the whole Newark Public Schools community. This isn't just words or another program, but an opportunity for the schools of Newark to benefit from Sustainable Jersey, which in turn will benefit the city of Newark."

When asked about his motivation, Rodney said, "While I live on this amazing planet, it is my duty to take care of it. It is a gift we were given and sustainability pursuits are the best way to honor my family, community and God."

61 Newark Schools Achieve Sustainable Jersey for Schools Certification:

Rodney has been involved in Sustainable Jersey for Schools since the beginning. In 2013, he participated in the first meeting of Sustainable Jersey for Schools and has helped to develop the program and the actions involved with facilities management. But it was not until 2020 that Rodney was able to get a team together to complete the certification documentation work.



As a member of the newly formed Newark Board of Education Green Team, Rodney worked with Jason Ballard, the Newark Board of Education Operations Department Head, to achieve certification. The green team is comprised of representatives from the Board of Education, the Facilities Department and the building manager for each school. Newark Public Schools also had consulting assistance from the [Go Green Initiative](#). Rodney is thankful for his close partnership with Steve Morlino who serves as the Newark Public Schools Facilities Executive Director. Sixty-one schools in the district achieved Sustainable Jersey for Schools certification in 2020. Each school was certified at the bronze level after submitting documentation to show it had completed a balanced portfolio of the program's [sustainability actions](#). With 61 certified schools, the district leads Essex County in certifications; only three other schools in the county are currently certified.

Newark Board of Education Conservation Sustainability and Green Initiatives Policy: An Energy Steering Committee was formed with a cross-section of school departments and the community to oversee energy programs. The Newark Board of Education recently regained local control after 25 years of state receivership, and as a result, the elected members of the Board of Education are updating and creating new policies to reflect the values and priorities of the community. The district realized they needed a formal District Sustainability Policy to guide the work of the energy steering committee and other efforts. On August 27, 2020, the Newark Board of Education met virtually to unanimously approve the [Conservation Sustainability and Green Initiatives Policy](#).

Connecting Student Learning to Energy Projects: As a graduate of the Newark Public Schools, Rodney is committed to student involvement and education in his work. Over ten years ago, Rodney started an internship program for high school students that provides opportunities to apply education to real life while developing partnerships with key business leaders. The program has a successful track record of graduated students that have followed career paths in energy, engineering and building management. Rodney said, "When a student gets to shadow a solar developer, the lessons are so valuable; these kids get to see from beginning to end how solar panels are installed and energy is tracked."



Rodney tries to include a curriculum connection for students in his project contracts. He said, "When Newark Public Schools embarked on one of the largest solar projects in any urban school district, we made sure to include an academic component. Through a public/private partnership with PSEG, Newark Public Schools installed 2.6 megawatts of solar electricity on school roofs and carpools. Funding was incorporated to give students the opportunity to be Energy Ambassadors in their schools promoting energy awareness and conservation. The students have input into the solar energy technology at their schools and continue to gain valuable knowledge about careers in those fields."

In the fall of 2019, Rodney met with [Aris Wind](#) to discuss renewable energy solutions for the district. The district decided to add a wind and solar-powered streetlight, called a Remote Power Unit (RPU), outside of the flagship Science Park High School. The district understood that the investment would provide a great learning opportunity for the student body while the wind turbine and solar panel on the RPU would deliver 100 percent renewable clean energy. Improving the safety and security of the grounds, it will provide power and light, even in the event of a grid outage. The district is incorporating the unit's wind and solar data into its STEM curriculum at Science Park High School.

Rodney also makes time for the younger students by giving presentations to the after-school program. “I like to teach the three “Ps” of power: power source, power load and power lines. Then we do creative things like building mini wind turbines. The students had their work featured on the second floor of the Liberty Science Center.”

Journey to Sustainability Video: Newark Public School students and staff produced an Energy Awareness video that included middle school students demonstrating how to conserve energy. This video was shown district-wide and on the community cable channel and has encouraged a district wide awareness of saving energy. A few years later, students and staff produced an educational documentary: [Journey to Sustainability](#). The video and project received a 2012 [Edison Green Award](#), which is an international competition that honors excellence in new product and service development, marketing, human-centered design and innovation.



Energy Efficiency for School Facilities: A significant part of the Newark Public Schools certification applications was the completion of the Sustainable Jersey priority action: [Efficiency for School Facilities](#). Each school completed an energy audit through New Jersey’s Clean Energy Program (NJCEP) “Local Government Energy Audit (LGEA)” program. The Newark Public School District also instituted an Energy Savings Improvement Program (ESIP) through New Jersey’s Clean Energy Program. “The project encompasses 63 Energy Conservation Measures (ECMs) over 1.4 million square feet. Actions included lighting retrofits, boiler replacement, roof replacement, solar installation, upgrading systems and components to improve the safety of energy use, and performance monitoring. Weequahic High School, in particular, achieved an impressive 30.3 percent energy savings. From 2017-19, the district saved \$1.9 million, 4.7 million kWh, and 460,000 therms of gas,” said Rodney.

Energy Tracking & Management: Rodney tracks all of the Newark Public Schools’ energy using the [ENERGY STAR Portfolio Manager®](#). In 2008, Newark Public Schools installed [Noveda’s](#) Portfolio Tracker and the EnergyFlow Monitor web-based technology to provide real-time energy monitoring. While EnergyFlow monitors real-time energy usage in each building, the PortfolioTracker displays all the school’s 84 buildings and systems in one customizable view with built-in 24/7 alerts. Rodney shares the energy tracking information with the building managers and energy consultants who are working on the Energy Savings Improvement Program (ESIP) for the district. This helps the district identify anomalies in energy use on a month-by-month, year-over-year basis, as well as track building performance after energy efficiency and renewable energy projects have been completed. For this effort, the schools received certification points for the Sustainable Jersey action: [Energy Tracking and Management](#).



Paterson Public Schools (Passaic County): Rodney spent four years as the Director of Energy and Project Control for Paterson Public Schools. In Paterson, he implemented the district’s Energy Savings Improvement Program (ESIP), which is projected to save the district more than \$15 million in energy costs during the 18-year term of the program. Rodney explained, “Bringing in the Energy Savings Improvement Program to all 56 buildings made Paterson School District the largest ESIP project for schools in New Jersey at that time.” This project included a six-week Saturday STEAM (science, technology, engineering, art and math) program in which over 80 students learned about solar power.

More About Rodney: Before joining Newark Public Schools, Rodney received a degree in Air Conditioning, Refrigeration and Small Appliances from Apex Technical School and a BA in Business Management from American Intercontinental University. He is a graduate of Newark’s Performing Arts High School and is an accomplished trumpet player. Before the pandemic, his band, The Crew, was active, playing pop and jazz music. In his free time, Rodney enjoys golf and riding his burgundy Honda VTX 1300 Cruiser motorcycle. He currently lives in Dover, New Jersey with his wife Andrea of 30 years. They have three grown children. When asked if he applies his energy management skills at home, he said yes. His family has generally supported his energy efficiency campaign at home. “Compliance in turning off electronics definitely improved after that one time when I got fed up with my energy wasting teenagers. I actually cut the cord to the television. That did the trick,” he said with a big laugh.