

Sustainable Jersey for Schools Certification Report

This is the Sustainable Jersey for Schools Certification Report of Delran High School (Burlington), a Sustainable Jersey for Schools bronze certified applicant.

Delran High School has morphed two clubs, the Environmental Club and the Horticulture Club, in the 2015-2016 school year into a highly functioning Green Team. The work of the newly developed team, Jennifer DiCesare and Aaron Fiordimondo, have been working towards the tenants of People, Planet and Practices for many years, both in the classroom and with their students. Jennifer, an art teacher, and Aaron, a biology and horticulture teacher, have been working towards curricular endeavors for many years. This fall, the students were trained in the Sustainable Jersey for Schools process and have begun working on Google Docs and actions in order to attain bronze level certification in the 2016-2017 cycle.

Contact Information

The designated Sustainable Jersey for Schools contact for Delran High School (Burlington) is:

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Actions Implemented

Each approved action and supporting documentation for which Delran High School (Burlington) was approved for in 2022 appears below. Note: Standards for the actions below may have changed and the documentation listed may no longer satisfy requirements for that action. Additionally, points associated with actions prior to 2013 certifications may not be accurate.

Board Leadership & Planning

Bronze Priority Silver Priority District

Program Summary: In 2018, the Board of Education, after attending the New Jersey Schools Boards Convention in Atlantic City, asked the Business Administrator, Derek Mead, and the Sustainability Project Coordinator, Erica DeMichele, to collaborate with Support Services Director, Mike DiGiovanni, to review the Sustainability Policies of other nearby districts, to determine what parts of the policies we were already completing. After a year and a half of the Board review and revisions, we accepted the Board motion for the policy on July 20, 2020 (see attached document, page 5, 13A). The Board of Education policies and minutes are shared with the community via the Burlington County Times each month. Our Superintendent, Dr. Brian Brotschul was named Superintendent of Burlington County in 2021 and 2022 NJASA Region III Superintendent of the Year. His video clarifies the commitment to sustainability in his video linked here: https://drive.google.com/file/d/19N42LXDMEI47 WAQ-SmYiEpJYAvkhg9f/view?usp=sharing This video also https://www.youtube.com/watch?v=HiuOD7A6Agc demonstrates the commitment to the work of our alliance. The BOE policy online, within the Delran Township Board of Education Policy and Regulation documents, lies within the following weblink: https://www.delranschools.org/b o e/policies and regulations Policy 7461 District Sustainability Policy is found under the first 7000 tab Within that link, on page 45, starts the policy for the district's requirements for sustainability initiatives and programming. This includes verbiage: Sustainability is defined as meeting the needs of the present without compromising the ability of future generations to meet their own needs. It considers the interrelationship of economic, social, and environmental factors that protect and enhance present and future quality of life. The Board of Education desires to conduct its operations and make decisions with identified sustainability priorities that include at a minimum: protecting students, staff, and community from environmental harm; preparing students for the future by educating for sustainability (knowledge of concepts and practices of environmental, social, and economic responsibility and sustainability); and include an intent to preserve current and future resources. The Board believes by incorporating sustainable practices into school policies and operations it can make an immediate impact on student health, academic performance, and teacher

PDF: DELRAN SUSTAINABILITY POLICY 7461 JUNE 2020.PDF

PDF: JULY 20 2020 WORK SESSION REGULAR PUBLIC 072120 FINAL.PDF

School District Foundation

10 Points

School District

Program Summary: The Delran Education Foundation, Inc., a 501(c)(3) nonprofit corporation, was formed early in 2015 with the support of the Delran Board of Education and the district's superintendent, Dr. Brian Brotschul. Their website can be found at www.delranedfoundation.org (Although the Foundation has the district's support, they operate independently.) The Foundation was modeled after other local education foundations, such as the Medford Education Foundation, the Moorestown Education Foundation and the Mount Laurel Public Education Fund, all of which have provided significant financial support to their respective districts. Since New Jersey schools face constant funding challenges and operating costs are increasing rapidly, government our funding is decreasing. With such tight resources, school districts are often unable to fund the kinds of innovative programs that would develop and enhance skills necessary for success in the 21st century. In order to combat these financial strains, the Foundation raises money from local businesses, corporate sponsors, parents, alumni, and other supporters throughout the community. These contributions are used to support educationally sound, cutting-edge programs designed to better prepare Delran students for the rapidly-changing world. One of the main

initiatives of the foundation is to support our programs in sustainability and STEAM initiatives. Each year, teachers and other professionals within the district are encouraged to apply for grants to be used for innovative educational programs. Grants are awarded competitively for projects and ideas that will have the greatest positive impact on students' educational experience. Teachers and Delran administrators filled out a Google Form to submit their project requests: https://docs.google.com/forms/d/e/1FAIpQLSeP64VYhPf4ai-DflfJgz-J-JP8k-f9jhUopAjBX1DB1BXpcg/viewform?vc=0&c=0&w=1&flr=0 This is the DEF's explanatory video: https://youtu.be/IXVtNE8Q1vU The upload below shows the summary from the Education Foundation of the chosen projects which are made available to ALL staff in the Delran Township Public Schools in the opening day of school. The foundation also provided a more detailed speech to staff about the winners of this grant cycles grant. Finally , Tweets from Delran Township Schools as well as Principal Broadcasts note the achievements. A grant FAQ for this year's grant cycle can be accessed here: https://www.delranedfoundation.org/grants/faq/

WORD: AWARD SPEECH.DOCX

PDF: 2021-2022 DEF GRANT AWARD RECIPIENTS.PDF

Climate Mitigation & Renewable Energy

Onsite Renewable Generation System - Solar

30 Points

School

Program Summary: As part of the Energy Savings Improvement Program (ESIP), Delran Township Public Schools went through a competitive RFP process to hire a power purchase agreement provider (PPA). The goals were to reduce energy costs, transition to sustainable energy, and if possible, help fund roofing replacements (where necessary). All of these goals are currently being met through the PPA. Delran High School saves 43% energy with their installed solar panels. This action sends a powerful message to the community about fiscal stability and sustainability. See the attached documentation for more information.

PDF: SOLAR LAYOUTS

PDF: SOLAR CERTIFICATION LETTER

PDF: PPA CALCULATIONS
EXCEL: SOLAR OFFSET

Energy Efficiency

Energy Efficiency for School Facilities

50 Points

🙎 Bronze Priority 🙎 Silver Priority School District

Program Summary: Delran Township School District has seen significant energy savings by

implementing several energy conservation measures as part of their ESIP project with Schneider Electric. Together, the district successfully installed solar panels on all four school buildings. After obtaining the solar power, they were able to reduce energy consumption by 32.57% across the district. This has helped to reallocate energy and capital elsewhere. The EUI spreadsheet shows a significant reduction of 32.57% from 2016 to 2018, the time periods before the ESIP project, and after 1 year of measurement and verification.

PDF: LGEA

EXCEL: EUI SPREADSHEET - 12/16 - 8/18

Food & Nutrition

School Gardens

20 Points

School

Program Summary: Delran High School was blessed to pass a referendum to build a state of the art science wing in 2012. This included a biotechnology facility and high tech green house. The green house is currently staffed by a full time Delran High School teacher, Aaron Fiordimondo. He is the teacher of Horticulture and a Co-DHS Green Team Sustainability Project Manager for 2021-2022. Rooftop Garden and Greenhouse Students regulate their own experiments using the scientific method to carefully collect to produce research driven experiments.Of note, in June 2019, the First Lady of NJ, Tammy Murphy, stopped by both Millbridge Elementary and Delran High School, to visit our sustainability initiatives. She was taking a tour of the State, promoting the Climate Change Standards initiative. We began adding on to our green house roof deck garden when Delran High School won a NJEA Grant through Sustainable Jersey for schools for an outdoor, permaculture Back to Eden Garden. Outside Back-to-Eden Garden By 2019, Delran High School was in need of a space to expand the burgeoning Horticulture and Technology programs, and provide the students with a way to integrate with their community. The Back to Eden gardening method was developed to create an environment in which ecosystem dynamics were understood, thrived, without the need for human intervention (i.e. watering or weeding). With the addition of deer fencing, homemade soil and native plant species, this outdoor space includes edible gardens and an outdoor classroom space for K-12 students and community to gather and learn about the natural course of the ecosystem.

PDF: BACK TO EDEN GARDEN PLAN PDF
PDF: COMMUNITY INVOLVMENT.PDF

PDF: <u>DELRAN HIGH SCHOOL GREEN HOUSE GARDEN REPORT 2022.PDF</u>
WORD: <u>DELRAN HIGH SCHOOL BACK TO EDEN GARDEN REPORT 2022.DOCX</u>

Green Cleaning

Green Cleaning Equipment

10 Points

Program Summary: Delran Township Public Schools and T.U.C.S Cleaning services began their service contract for the 2015-2016 school year. The details of the contract specified Green Cleaning Supplies as a requirement for the bid to be accepted. The RFP included Custodial and Black Seal Operator Services to ensure proper training and protocols. T.U.C.S servicing contract outlines management, custodial operations, Green equipment utilized includes the attached list of scrubbers, vacuums and extractors. The T.U.C.S Green Cleaning Program utilizes products that are non-toxic, biodegradable and made from renewable resources, as well as microfiber systems and powdered equipment that capture and/or collects particulates while operating at a sound level of less than 70dBA. The custodial staff inspect the dust bag every two hours and replace the bag when hall full to ensure proper dust collection and removal. Auto scrubbers limit worker exposure to chemicals and the green solutions used by the staff are non-toxic and non-corrosive. Most importantly, these products are effective, in addition to the benefits of being environmentally safe. The Green Cleaning Equipment includes: the Advance EcoFlex system floor scrubber model SC750 REV, Tennant Floor Machine FM-17SS, Tennant Upright Vacuum V-SMU-14, Nobles Dry/Wet Vacuum V-WD-15 and 16B, and the Tennant Self-Contained Extractor EX-SC-412. The contract with T.U.C.S is contract dated in the attachment through June 30, 2022. the latest BOE approval for their service is attached, dated 6/14/21 as public notice. Additionally, the documented equipment is what is used for the purposes of the contracted cleaning agreement.

PDF: GREEN CLEAN PROGRAM TUCS (1).PDF
PDF: TUCS TABLE OF CONTENTS (1).PDF
PDF: TUCS 21-22 CONTRACT (1).PDF

Student & Community Outreach

Green Team

15 Points

Bronze Required School District

Program Summary: Since 2009, the Green Team at Millbridge became the precursor to all work being done throughout the district. As energy savings became an important district initiative, the Business Administrator, Dr. Chris Russo established the need for continuing to develop our sustainability goals. When Dr. Brian Brotschul, Superintendent of Schools, started in the summer of 2014, he also made it clear that Delran Schools would put human resource into our programs in sustainability. As a result, he developed a Sustainability Leader position, which incorporates two stipend positions for each of the four schools. The responsibilities of the Sustainability Leader include school level duties, as well as attendance and contribution in district wide initiatives. Professional development opportunities for these leaders has begun in earnest in the 2016-2017 school year. The community outreach and curricular connections being built by these leaders with our partners in administration, support services, food service (Nutriserve), and our Energy Savings Improvement Program, with Schneider Electric, have proven to be quite successful. The iteration between our leaders at the four schools, both cooperatively and competitively (such as our Energy Savings Week program), provides excitement and a new cultural experience in Delran. Additionally, all four schools maintain their own Annual Summary pages, websites and the district provides quarterly meetings for all important parties to collaborate. Each year, Sustainability Project Managers are chosen through a submission of intent to the building principal at each of the four schools. These eight individuals are Board approved in the spring meeting (May/June) each year, for the proceeding year. See the documentation for the meetings in the Annual

Summaries- * The attached Board of Education approval for the Sustainability Project Managers for 2021-2022 * The letter of support from Superintendent, Dr. Brian Brotschul * Delran Township Schools District Green Team Strategic Plan 2021-2022: * Two district level meetings with their presentations to all Green Team members * A BOE presentation from October of this year showing success of the teams and the work upcoming in 2021-2022

PDF: <u>JUNE 14 2021 DELRAN BOE MEETING.PDF</u>
PDF: <u>DELRAN GREEN TEAM LETTER 6 6 22.PDF</u>

PDF: BOE PRESENTATION DMS CTE CAREER GRANT & FOOD WASTE PILOT.PDF

PDF: DISTRICT GREEN TEAM STRATEGIC PLAN 2021-2022.PDF

PDF: DISTRICT GREEN TEAM MEETING #2 PRESENTATION 12_6_21.PDF

PDF: DHS ACHIEVES SUSTAINABILITY CERTIFICATION 2019.PDF

Green Fair



School

Program Summary: We held a STEM Fair to showcase local business projects and student work in science, technology, engineering, and math projects in order to educate the community on how innovative technologies can reduce environmental degradation and enable all of us to live more sustainable, "greener" lives. We had educational presentations from student groups (Delran STEMbassadors, Robotics Teams from Millbridge, DIS, DMS, and DHS, empowered presentations from Green Teams from Millbridge, DIS, DMS, DHS and Delran Municipal Green Team, DMS & DHS Science Fair Winners, Computer Science/Coding Students, and our 5th grade NJIT eSTEM Challenge Winners). We ran educational activities (Mobile vans for STEM learning, Explore an electric car, Explore our Fab Lab's digital fabrication space, MindByte's interactive learning table, Green screen chromatography & photos). We held a clothing and household items donations drives and an used prescription drug drop off. We even hosted sales of student created "green products" including student-designed reusable water bottle sales, reusable grocery bag orders, candy vase sales and plant sales. We also hosted various partner companies including Lockheed Martin, Teq, Mindbytes, Green Drop, Burlington County Parks, Delran Fire Department, Delran Police Department, NJ Americorps Watershed Ambassadors, the Delran Municipal Green Team, Mary's Mobile Diner, and Kona Ice Peak. The event drew in tons of people from the community and provided a safe and productive environment to explore and learn about the present and future of sustainable technologies

PDF: STEM FAIR FLYER
PDF: STEM FAIR WEBSITE

PDF: GREEN DROP AT STEM FAIR

PDF: STEM FAIR EMAILS
PDF: STEM FAIR IMAGES LINK