



## 2015-2016 School Nominee Presentation Form

### ELIGIBILITY CERTIFICATIONS

#### School and District's Certifications

The signatures of the school principal and district superintendent (or equivalents) on the next page certify that each of the statements below concerning the school's eligibility and compliance with the following requirements is true and correct to the best of their knowledge. *In no case is a private school required to make any certification with regard to the public school district in which it is located.*

1. The school has some configuration that includes grades Pre-K-12.
2. The school has been evaluated and selected from among schools within the Nominating Authority's jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental education.
3. Neither the nominated public school nor its public school district is refusing the U.S. Department of Education Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a district wide compliance review. The Department of Defense Education Activity (DoDEA) is not subject to the jurisdiction of OCR. The nominated DoDEA schools, however, are subject to and in compliance with statutory and regulatory requirements to comply with Federal civil rights laws.
4. OCR has not issued a violation letter of findings to the public school district concluding that the nominated public school or the public school district as a whole has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan to remedy the violation.
5. The U.S. Department of Justice does not have a pending suit alleging that the public school or the public school district as a whole has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
6. There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the public school or public school district in question; or if there are such findings, the state or public school district has corrected, or agreed to correct, the findings.
7. The school meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

### U.S. Department of Education Green Ribbon Schools 2015-2016

Public  Charter  Title I  Magnet  Private  Independent  Rural

Name of Principal: Ms. Ayisha Ingram-Robinson

Official School Name: **Essex County West Caldwell Tech**

Official School Name Mailing Address: **620 Passaic Ave, West Caldwell, NJ 07470**

County: **Essex**

State School Code Number \*: **080**

Telephone: **973-412-2205**

Fax: **973-575-2680**

Web site/URL: **http://www.essextech.org/wc/wc\_index.php**

E-mail: **arobinson@essextech.org**

I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate.

Date: **1/29/16**

(Principal's Signature)



Name of Superintendent: **Dr. James M. Pedersen**  
 District Name: **Essex County Vocational Technical Schools**

I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate.

A handwritten signature in black ink, appearing to read "James M. Pedersen", written over a horizontal line.

Date: **1/29/16**

(Superintendent's Signature)

### **Nominating Authority's Certifications**

The signature by the Nominating Authority on this page certifies that each of the statements below concerning the school's eligibility and compliance with the following requirements is true and correct to the best of the Authority's knowledge.

1. The school has some configuration that includes grades Pre-K-12.
2. The school is one of those overseen by the Nominating Authority which is highest achieving in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
3. The school meets all applicable federal civil rights and federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

Name of Nominating Agency: **New Jersey Department of Education**

Name of Nominating Authority: **Mr. Bernard E. Piaia, Jr.**

(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

I have reviewed the information in this application and certify to the best of my knowledge that the school meets the provisions above.

A handwritten signature in black ink, appearing to read "Bernard E. Piaia Jr.", written over a horizontal line.

Date: **January 29, 2016**

(Nominating Authority's Signature)

### **SUMMARY AND DOCUMENTATION OF NOMINEE'S ACHIEVEMENTS**

Provide a coherent summary that describes how your school is representative of your jurisdiction's highest achieving green school efforts. Summarize your strengths and accomplishments in all three Pillars. Then, include concrete examples for work in every Pillar and Element. Only schools that document progress in every Pillar and Element can be considered for this award.

### **SUBMISSION**

The nomination package, including the signed certifications and documentation of evaluation in the three Pillars should be converted to a PDF file and emailed to [ed.green.ribbon.schools@ed.gov](mailto:ed.green.ribbon.schools@ed.gov) according to the instructions in the Nominee Submission Procedure.

OMB Control Number: 1860-0509

Expiration Date: March 31, 2018

### **Public Burden Statement**

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1860-0509. Public reporting burden for this collection of information is estimated to average 37 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The obligation to respond to this collection is required to obtain or retain benefit P.L. 107-110, Sec. 501, Innovative Programs and Parental Choice Provisions. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20202-4536 or email [ICDocketMgr@ed.gov](mailto:ICDocketMgr@ed.gov) and reference the OMB Control Number 1860-0509. Note: Please do not return the completed ED-Green Ribbon Schools application to this address.

**School Contact Information**

School Name: West Caldwell Tech

District Essex County Vocational Technical Schools

Street Address: 620 Passaic Avenue

City: West Caldwell

State: New Jersey

Zip: 07470

Website: [www.essextech.org](http://www.essextech.org)

Facebook page: [www.facebook.com/wctech/?fref=ts](http://www.facebook.com/wctech/?fref=ts)

Principal Name: Ayisha Ingram-Robinson

Principal Email Address: [arobinson@essextech.org](mailto:arobinson@essextech.org) Phone Number: 973-412-2210

Lead Applicant Name (if different): Salvatore Lima, Jr.

Lead Applicant Email: [slima@essextech.org](mailto:slima@essextech.org) Phone Number: 973-412-2292

Level <input type="checkbox"/> Early Learning Center <input type="checkbox"/> Elementary (PK - 5 or 6) <input type="checkbox"/> K - 8 <input type="checkbox"/> Middle (6 - 8 or 9) <input checked="" type="checkbox"/> High (9 or 10 - 12)	School Type <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private/Independent <input type="checkbox"/> Charter	How would you describe your school? <input checked="" type="checkbox"/> Urban <input type="checkbox"/> Suburban <input type="checkbox"/> Rural	District Name <b>Essex County Vocational Technical Schools</b>  <input type="checkbox"/> Largest 50 Districts in the nation?  Total Enrolled: <p style="text-align: center;"><b>343</b></p>
Does your school serve 40% or more students from disadvantaged households? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	% receiving FRPL <b>77.7%</b> % limited English proficient <b>0%</b> Other measures: <b>Special Education: 52%</b>		Graduation rate: <b>90.2%*</b> Attendance rate: <b>92.8%</b>  <b>*Number skewed due to Transition Center students graduating in 7 years opposed to traditional 4 year. Minus the transition center student retention, we would have a graduation rate of 95.1%.</b>

**SUMMARY NARRATIVE: Provide an 800 word maximum narrative for publication describing your school’s efforts to reduce environmental impact and costs, improve student and staff health, and provide effective environmental and sustainability education. Focus on unique and innovative practices and partnerships. (See [examples](#) from prior year)**

The West Caldwell Tech campus of the Essex County Vocational and Technical School District has been incorporating sustainable practices and green education over the past five years. Our process began with an energy audit by Camp Dresser and McKee to develop comprehensive Energy Conservation and Retrofit Measures. Since then, we have made substantial efforts to improve our energy efficiency, green and sustainable education, health wellness, and community outreach. Some highlights include a Farm to School lunch program, partnerships, a recycling program, family education, and curriculum changes. Through our green initiatives, we have reduced greenhouse gas emissions per person, decreased kBtu per person, and also lowered water consumption. Additionally, we have developed key partnerships with businesses with strong environmental convictions to improve our local habitats and to provide our students with invaluable experiences. Furthermore, we researched and implemented curriculum changes to expand our students’ understanding of green and sustainable practices.

To reduce our environmental impact and costs, we recently replaced our boilers for energy efficient ones and implemented a one-to-one laptop initiative to reduce paper usage. We also created partnerships with county and

state officials for financial support to renovate our school building. Some of these renovations include updating lighting fixtures, creating efficient classrooms, and implementing alternative energy sources. Members of our Green Team meet with architects and county officials to assist with the planning process. Our school also partnered up with Ricoh-USA's West Caldwell office to rid our surrounding areas of the invasive Phragmites australis plant and help promote biodiversity.

To improve health, West Caldwell Tech offers a full year of physical education and health courses. While New Jersey requires 3.75 credits of physical education and health each year, we provide our students with 5 credits to enhance their health and wellness. Concomitantly, we established a Health and Wellness Family Fun Day event. To promote healthy eating, West Caldwell Tech's Culinary program incorporates vegetables grown in our greenhouse and develops healthier alternatives to popular recipes. The Retail Career Academy, which operates our school store, replaced many snack options with healthier alternatives and eliminated sugary drinks altogether. Furthermore, our school cafeteria implemented a Farm to School program where we source all seasonal fruits and vegetables from local farms.

Our biggest achievement is the way in which we educate our stakeholders. Our mandatory Environmental Science course covers topics including sustainability, climate change, resource management, smart growth, green design, pollution leading to biomagnification and eutrophication, weather monitoring and biodiversity loss. In addition to the content, we also provide students with ample opportunities to collaborate with professionals regarding environmental issues. For instance, we have a yearly Skype conference with a participant in China to discuss air quality. We also bring in a Watershed Ambassador to speak about point and nonpoint pollution. Our biology course covers human impacts on the environment, interdependence, global warming, and review much of what was covered in environmental science.

As a vocational school, we are fortunate enough to also incorporate environmental and sustainability practices into our career majors. By doing so, we not only provide our students with the opportunity to implement what they learn, but we also reinforce the importance of being "green" in real-world settings. For example, our Culinary Academy participates in a Sustainable Homes and Habitats Gingerbread Contest with the Essex County Environmental Center. The purpose of this contest is to have students utilize their career and life skills to design sustainable gingerbread homes. In the past, student designs have included solar panels, farms, and windmills. Additionally, our Culinary students collaborate with our Agriscience department to grow and utilize produce in our building's greenhouse. The Horticulture and Agriscience students also participate in the Trout in the Classroom educational program where they raise trout from eggs, monitor tank water quality, engage in stream habitat study, and grow to have a greater appreciation for ecosystems. These same students are in charge of our recycling program at West Caldwell Tech.

Moreover, our Construction Trades Academy currently incorporates a Sustainable Construction curriculum that our district CTE Supervisor, Mr. Russell Mattoon, helped to develop while serving on the Sustainable Architecture and Design Advisory Committee. Our district is also proud to note that one of our teachers served on the NJ Green Program of Study for Sustainable Design, Construction, and Energy committee. Ultimately, our educational leaders, teachers, students, and community members are deeply committed to making a positive difference on our local and global society. We have developed key partnerships, activities, and outdoor learning spaces to expand the learning environment beyond the confines of the classroom. Our district's commitment to sustainable education is evidenced by the adoption of our Sustainability Policy as well as our Wellness and Nutrition Policy. Additionally, West Caldwell Tech recently received the Essex County Executive Certificate of Commendation for our green initiatives.

**Instructions for completing this form:** Please answer all of the questions below to the best of your ability, in a different text color. A more complete application will increase your chances of success. You may supplement the information in these questions by describing alternative benchmarks or indicators of progress (see final question in each section).

**SCHOOL PROFILE: GREEN SCHOOL PROGRAM AND AWARDS (Cross-Cutting Question)**

1. Has your school participated in a local, state, or national program, which asks you to benchmark progress in some fashion in any or all of the Pillars? **No** If yes, please explain what program(s) and what level you are currently at, and state the years you have been involved in these programs. (e.g. EPA Energy Star Portfolio Manager, Eco-Schools USA, PLT Green Schools, NJPALS, Green Schools Leadership Institute, NJ Sustainable Schools Project , and NJ Learns).

**Our school district helped develop the New Jersey Green Program of Study sponsored by the NJDOE and incorporated its Green Construction curriculum into our Construction Trades Program. We have also developed a school-wide recycling program (2013-Present) and began to utilize Energy Star’s Portfolio Manager.**

2. Has your school, staff or student body received any awards for facilities, health or environment?

**Yes** Award(s) and year(s) **Essex County Executive Certificate of Commendation - 2015 (For our initiatives and commitment to be more sustainable and to improve the environment).**

3. Has your school identified or created a place for teachers to go to share lessons on Sustainability?

**Yes** Where? **Our district has created a Google drive folder where staff can access, share, and collaborate on lesson plans, activities, resources, and labs aligned to sustainability and other green practices. Concomitantly, teachers can share lessons plans and activities on our district lesson plan portal, edConnect.**

4. Has your School Board adopted a Green Strategic Plan or sustainability policy? **Yes**

**Mission: Our mission is to promote environmental stewardship and good health through education, sustainable initiatives and community partnerships.**

**Goals: (1) Develop a shared appreciation and commitment towards sustainability through health, education, and our actions. (2) Develop green spaces within and outside of our schools to promote wellness and appreciate for the environment. (3) Conserve energy and natural resources to reduce environmental impact and costs. (4) Educate students, staff, and family members on the impact of our individual actions on the environment. (5) Promote a comfortable learning environment. (6) Encourage civic responsibility. (7) Facilitate the use of environmentally friendly products and avoid the use of environmentally damaging products when possible.**

5. Has your school created a Green Team? **Yes**

**Team Members:**

**Salvatore Lima Jr. – Liaison between central office administrators, school board, business partnerships and the Green Team. Oversees projects and manages tasks. Oversees the implementation of curricula in science courses.**

**Dicxiana Carbonell – Oversees and approves modifications to curricula with respect to sustainability and “Green” practices.**

**Daniel Delcher – Works with the Green Team to manage and operate the greenhouse.**

**Joseph DiVincenzo – Oversees implementation of projects on a day-to-day basis and ensures student and staff participation.**

**John Dolan and Russell Mattoon – Oversees the implementation of curricula in Career and Technical Education.**

**Ayisha Robinson** – Oversees implementation of day-to-day green initiatives as the building principal.

**Bonnie Rogers** – Nurse who works to monitor, educate and improve student and staff health.

**James Simonsen Jr.** – Works with Green Team students to develop courtyard

**Frank Schifano** – Collaborates with the Green Team and science department to develop sustainable projects.

**Cathleen Smith** – Identifies and applies for grants for green initiatives and publicizes information with community, staff, and parents via twitter, pamphlets, and videos.

**William Toombs** – Head of Grounds. In charge of most of the green projects implemented at the school with respect to maintenance, grounds, gas, electricity, and water consumption, as well as parking, ventilation, custodial practices and material safety.

**Delores Wallace** – Oversees parental outreach and organizes our Health and Wellness Family Fun Day.

**Several students** – Gathers support from peers and leads initiatives at the student level.

6. Has your school seen a cost savings from green initiatives? **No.** However, further savings as a result of our green initiatives will be realized this year as we made several changes this summer and do not yet have 12 months worth of data to evidence further projected savings. We have changed our boilers, which will create a very noticeable difference in natural gas usage this year and have raised funds from the county and state to implement further energy saving appliances, which will be installed this year as well. Currently, our natural gas usage has been reduced by 27% this year when compared to the same time period last year (1,766.106 therms for June through October '15 compared to 2420.092 therms for June through October '14).

	Electric Energy Consumption (kwh)	Natural Gas or Fuel Oil Consumption (therms)	Electric Utility Costs (\$)	Natural Gas Utility Costs (\$)	Total Utility Costs (\$)	Annual Savings (\$)	% Reduction from Baseline Year
FY '07-'08*	867,000	59,349	131,659	59,349	191,008	Baseline	Baseline
FY '13-'14	948,000	44,639.426	145,259.3	14,486.93	159,746	31,261.77	16.4%
FY '14-'15	1,020,365	52,724.196	158,315.73	38,595.76	196,911	-5,903	-3%

\* Information based on data input into Energy Star's Portfolio Manager by Camp Dresser and McKee during our Energy Audit.

**PILLAR I: REDUCED ENVIRONMENTAL IMPACT**

**Element 1A: Reduced or eliminated greenhouse gas (GHG) emissions**

**Energy**

7. Can your school document a reduction in **Greenhouse Gas emissions**? *Please fill in table below first.* **Yes, we have reduced our CO2 emissions per person by 13.9%.**

Table is based on School data taken from **Portfolio Manager**, as reported by **Matthew Goss of Camp Dresser and McKee (Baseline) and PSE&G utility bills.**

	Electric Energy Consumption (kwh)	Natural Gas Consumption (therms)	Fuel Oil Consumption (gallons)	Carbon Dioxide from Electric 1.52 lbs/kwh	Carbon Dioxide from Natural 11.7 lbs/therms	Carbon Dioxide from Fuel Oil 26.033 lbs/gal	Total # of Staff & Students	MT eCO2 /person	% Decrease
<b>Example</b>	100,000	15,000	5,000	100,000 x 1.52 = 152,000	15000 x 11.7 = 175,500	5000 x 26.033 = 130165	250	(152000+175500+130165)/250/1000 =1.83	(Current Yr – Pior Yr)/ Prior Yr
<b>FY '07-'08</b>	<b>867,000</b>	<b>59,349</b>	<b>0</b>	<b>1,317,840</b>	<b>694,383</b>	<b>0</b>	<b>322</b>	<b>6.25</b>	<b>Baseline</b>
<b>FY '13-'14</b>	<b>948,000</b>	<b>44,639</b>	<b>0</b>	<b>1,440,960</b>	<b>522,276</b>	<b>0</b>	<b>402</b>	<b>4.88</b>	<b>-21.9%</b>
<b>FY '14-'15</b>	<b>1,020,365</b>	<b>52,724</b>	<b>0</b>	<b>1,550,954</b>	<b>616,870</b>	<b>0</b>	<b>403</b>	<b>5.38</b>	<b>-13.9%</b>

8. Has your school conducted an energy audit of its facilities? **Yes**

Percent reduction: **-21.3%** Measurement unit used: **kBTU/student**

Time period measured: from **December 2007 to June 2015**

9. Has your school received EPA ENERGY STAR certification or does it meet the requirements for ENERGY STAR certification? (score of 75 or above) **No** Year(s) and score(s) received: **N/A**

10. What percentage of your school's energy is obtained from:

On-site renewable energy generation: **0%**

Purchased renewable energy: **We purchase electricity and natural gas according to the Alliance School Board Association for competitive pricing. Currently, we utilize South Jersey Energy Company and Direct Energy company for electric and gas respectively. Both companies employ economically and environmentally friendly practices as per their websites, including the use of renewable energy.**

Participation in USDA Fuel for Schools, DOE Wind for Schools or other federal or state school energy programs: (Ex. ACES) **No** If yes, what programs? **N/A**

11. Has your school reduced its total non-transportation energy use from an initial baseline? **Yes**

How did you document this reduction? **District Utility Bills**

	Electric Energy Consumption (kwh) 1kwh=3.412 kBtu	Natural Gas Consumption (therms) 1therm=100kBtu	Fuel Oil Consumption (gallons) 1 gal. = 139 kBtu	Total kBtu	kBTU/ Occupant	kBTU/sq .ft.	% Reduction From Baseline
<b>FY '07-'08</b>	<b>867,000</b>	<b>59,349</b>	<b>0</b>	<b>8,893,104</b>	<b>27,618.3</b>	<b>110.48</b>	<b>Baseline</b>

FY '13-'14	948,000	44,639	0	7,698,476	19,150.4	95.6	-30.7%*
FY '14-'15	1,020,365	52,724	0	8,753,885	21,721.8	108.75	-21.3%*

\* Based on a reduction in kBTU/Occupant

12. What year was school originally constructed? **1957** Total building area – **80,493 sq.ft**

13. Has your school constructed or renovated building(s) in the past ten years? **No**

Element 1B: Improved water quality, efficiency, and conservation

**Water and Grounds**

14. Can you demonstrate a reduction in your school’s total water consumption (measured in gal/square foot) from an initial baseline? **Yes**

	Water Consumption (gallons)	Total Occupants	Gallons Per Occupant	% Reduction from FY 2011
FY '13-'14	195400	322	606.83	Baseline
FY '14-'15	188000	403	466.50	-23.16%

Do you include after-hour activities in your water consumption calculations? (adult sport leagues, adult education, scouting, other community events etc.?) **Yes, as well as summer activities. Our building is open year round.**

How did you document this reduction? **Utility Bills**

15. Describe any strategies you use to discourage single-use beverage containers on school property. Describe how you assure the recycling of those containers if/when purchased and used at athletic locations, or other outdoor events.

**In an attempt to discourage single-use beverage containers, the district provides staff and student athletes with reusable water bottles. Visiting teams are provided with a cooler and recyclable cups next to a recycling bin for all games. Water coolers and fountains are throughout the building with recycling bins near as well.**

16. What percentage of your landscaping is considered water-efficient and/or regionally appropriate? **100%**  
 What types of plants are used and where are they located? Have you preserved any areas with native vegetation with minimal disturbance? **Our school has native and ornamental plants on the property all zoned for our climate region. They include maples, boxwoods, and conifers. Although not our property, we will be removing invasive species from the adjacent lots, particularly the *Phragmites australis* plant to help restore native vegetation and improve biodiversity.**

17. How have you incorporated plants that are native to your geographic location into your landscaping? **Our landscaping is in the process of being redone. As part of this transformation process, we will have students from**

our Agriscience and Horticulture program research native species to be planted. We have also arranged a partnership with RICOH-USA to remove invasive species from our surrounding area and replace them with native species.

18. Describe alternate Non-potable water sources used for irrigation (e.g. roof or parking lot runoff). (50-words max) **We have designed a rainwater collection system that we utilize in our greenhouse upon its renovation. Other than our greenhouse, no other part of the property utilizes irrigation.**
19. Describe efforts to reduce stormwater runoff or reduce impervious pavement (e.g. rain gardens, bio swales, storm water basins). (50-words max) **None**
20. Our school's drinking water comes from:  Municipal water source
21. Describe how the water source for your school is protected from potential contaminants. (Ex. Backflow preventers) (50-words max) **Our water source is public. We have backflow preventers on the point of entry.**
22. Describe the program you have in place to control lead in drinking water (e.g., pipe flushing, old plumbing solder). (50-words max) **Our domestic water is lab tested annually. A Filtration system is also installed in our culinary class.**
23. Describe how your school's site grading, irrigation system and schedule is appropriate for your climate, soil conditions, and plant materials, with an emphasis on water conservation and/or improved stormwater management. (50-word max) **Site grading is pitched towards a common ditch which is in an easement at the westerly end of our property. We do not utilize an irrigation system because all of our vegetation is adapted to our climate zone and annual amount of precipitation.**
24. What percentage of school grounds are devoted to ecologically beneficial (ex. Green roof, rain gardens, native plantings, native plants, solar panels, fish farms, etc.)? (50 word max) **20% of our property is devoted to green learning spaces, our greenhouse, and vegetation.**

Element 1C: Reduce waste production – Waste/Hazardous Waste

25. What percentage of solid waste (including food service waste) is diverted from landfills or incinerating due to reduction, recycling and/or composting? Complete all the calculations below to receive points.
- A - Monthly garbage service in cubic yards (garbage dumpster size(s) x number of collections per month x percentage full when emptied or collected): **30 Cu. Yd. dumpster once a month at 100% full**
- B - Monthly recycling volume in cubic yards (recycling dumpster sizes(s) x number of collections per month x percentage full when emptied or collected): **5 Cu. Yd. compactor twice a month at 100% full**
- C - Monthly compostable materials volume(s) in cubic yards (food scrap/food soiled paper dumpster size(s) x number of collections per month x percentage full when emptied or collected): **Composted on site**
- Recycling Rate =  $((B + C) \div (A + B + C) \times 100)$ :  **$((10 \text{ Cu. Yd} / 40 \text{ Cu. Yd}) * 100) = 25\%$**
- Monthly waste generated per person =  $(A / \text{number of students and staff})$ : **.074 Cu. Yd./person**
26. What percentage of your school's total office/classroom paper content contains at least 30% post-consumer material, or fiber from forests certified as responsibly managed and/or chlorine-free? **Currently, our school is using paper from a surplus order made previously over the summer. This paper is chlorine free but not made of**

post-consumer material. All (100%) of our future office and classroom paper will be W.B. Mason's Flagship Recycled paper, which contains at least 30% post-consumer material and is chlorine-free.

27. Do you include after-hour activities in your garbage reduction calculations? (adult sport leagues, adult education, scouting, other community events etc.?) **Yes**

28. Describe how you have reduced your paper consumption, and how you measured that reduction or other uses you created for the materials (e.g. working and reviewing online, white boards). **Our school has implemented a one-to-one laptop initiative, resulting in a major reduction in paper consumption over the years. Much of the school's work is completed via software and online resources. We also fit every class with a SmartBoard and/or whiteboards. Paper reduction can be noted from the frequency of our purchase orders.**

29. List the types and amounts of hazardous waste generated at your school:

Flammable liquids	Corrosive liquids	Toxics	Mercury	Other:
waste oils and solvents from auto-mechanic shops 0-220g/month	0	0	0	Regulated medical waste

How is this calculated? **By an outsourced vendor, determined by amount of product that goes into vendor shipping containers**

How is hazardous waste disposal tracked? **Outsourced vendor / paper invoicing**

30. Describe other measures taken to reduce or eliminate solid waste and hazardous waste. **West Caldwell Tech has developed a recycling program and placed bins in every classroom. We received a recycling dumpster from Waste Management to include paper, cardboard, plastics, glass, and aluminum, tin, and/or steel. We also compost vegetative waste produced in Agriscience/Horticulture and Culinary.**

31. Which green cleaning custodial standard is used? **We currently utilize portions of the Green Seal Standard.**

What percentage of all products is certified? **25% with intentions of improving on future purchases**

What specific third party certified green cleaning product standard does your school use? **We utilize parts of the Green Seal Standard for Commercial and Institutional Cleaning Services, which aligns with the NJ Governor's Executive Order #76 for the purchasing of environmentally and healthier cleaning products.**

Describe the measures your school has taken to use only green cleaning product. **Our custodial and career academies have access to the Green Seal standards and purchase Green Seal Certified products when possible.**

32. If your school has a nurse's office, how does the nurse track regulated medical waste? Describe the [tools or mechanisms](#) used to track this waste. **The nurse utilizes a sharps container and biohazard bags to collect and properly dispose of waste. All staff receives bloodborne pathogen training.**

Does the school have a Generator ID number, unless exempted; **Yes**

Does the school manage the regulated medical waste on-site properly? (Use the proper containers, properly segregate the regulated medical waste, and properly store the containers) **Yes**

Does the school use a licensed and registered regulated medical waste transporter, unless exempted? **Yes**

Does the school ship the regulated medical waste to a facility authorized to accept the regulated medical waste? **Yes**

Does the school complete the proper paperwork to document the shipment and maintain records for 3 years? **Yes**

Does the school file the generator annual report, unless exempted? **Yes**

33. Is a Hazardous Waste Policy for storage, management and disposal of chemicals in laboratories and other areas with hazardous waste, in place and actively enforced? **Yes**

34. Do you have Underground Storage Tanks located at your School? **No**

35. Is your school compliant with the New Jersey Department of Environmental Protection's (DEP) Air Quality Permit requirement? (Equipment at schools that require air permits include boilers, emergency generators, space heaters and hot water heaters that have a maximum rated heat input of 1 million BTU/Hr or greater, to the burning chamber. Also, some schools might require an air permit for certain woodshop operations. Most of these pieces of equipment can be [permitted](#).) **West Caldwell Tech does not require permits due the small size of the high efficiency boilers.**

#### Element 1D: Use of Alternative Transportation

36. What percentage of your students walk/bike/skateboard, ride a school bus/use public transportation, or carpool (2+ students per car) to/from school? (Note if your school does not use school buses). How were these percentages collected and calculated? (50-word max) **100% of our students arrive by school bus, public transportation, or carpool. We are a county vocational school and sending districts provide bus transportation for all students. Those who do not arrive via school busses use public transportation or carpool in school vans.**

37. Has your school implemented?

- Designated carpool parking spaces
- A well-publicized no idling policy that applies to all vehicles (including school buses, cars and delivery trucks)**
- A policy that encourages walking and/or bicycling to school
- Vehicle loading/unloading areas are at least 25 feet from building air intakes, doors, and windows**
- A Safe Routes to School program or a School Travel Plan. Describe: (max 100 words) \_\_\_\_\_
- Walk and Bike to School Days
- A Walking School Bus program
- Walking and bicycling safety curriculum
- Electric vehicle charging stations have been installed to encourage the use of these vehicles
- Secure bicycle storage (such as bicycle lockers, racks, or rooms) is provided to encourage bicycling to school

39. If your school has only bus transportation, describe how your school transportation use is efficient and has reduced its environmental impact (e.g. more efficient bus routes, diesel retrofits for buses, use of biodiesel fuel, electric vehicles). (50-word max) **Our students are transported to our facility via public transportation, school busses designated by their sending district, or carpool. All sending districts use the most efficient routes to transport our students to school.**

## Summary Question for Pillar 1

40. Describe any other efforts toward reducing environmental impact, focusing on innovative or unique practices and partnerships. (100-word max) **Our school has partnered up with one of our sister schools in-district who offers a green energy program to share resources and lesson plans focused around green and sustainable practices. We also partnered up with RICOH-USA to help develop community awareness and betterment. Together, we are ridding our respective properties of the invasive *Phragmites australis* plant and replacing it with native ones. We have also partnered up with county government officials to raise money to retrofit our building with new lighting and HVAC systems, outdoor learning areas, a courtyard, greenhouse, and more to reduce our footprint. Our career academies have also shifted towards more sustainable practices including the use of local produce in culinary and ridding our building of Styrofoam containers, trays, and wax-coated cups, green construction implementation in carpentry, hydroponics and trout raising in agriscience, and offering healthy alternatives in retail careers.**

## PILLAR 2: IMPROVE THE HEALTH AND WELLNESS OF STUDENTS AND STAFF

### Element 2A: Integrated School Environmental Health program

#### Environmental Health

1. Has your school conducted any "Occupant Survey" with teachers and students? If so, please state the date(s) and over results of the survey.(CHPS Occupant Survey) **Yes, staff and students participated in a district-wide "Occupant Survey" in September of 2015, a school-based one in December of 2015, and will be complete another survey in January as per the superintendent. Results indicated bell-curved results, shifted towards satisfaction. The biggest concern was thermal comfort, which is being addressed with an improvement to the HVAC system with the money raised to improve our schools efficiency.**
2. Do you have an Operations & Maintenance Policy for your building? **Yes**
3. Does your school have an Integrated Pest Management plan? **Yes** Date last updated: **September 2015**
4. Which of the following practices does your school employ to minimize exposure to hazardous contaminants? Provide specific examples of actions taken for each checked practice.
  - Our school conducts both indoor (structural) and outdoor (turf and ornamental) IPM to reduce student exposure to chemical pesticides. **Our school does not use any pesticides.**
  - Our school reduces or does not use fertilizer on our property. **Our school does not utilize any artificially created fertilizers. Our landscaper does use a 100% organic tea fertilizer one time a year.**
  - Our school prohibits smoking on campus and in public school buses
  - Our school has identified and properly removed sources of elemental mercury and prohibits its purchase and use in the school. **Our school completes an annual chemical sweep. Anything that contains mercury has long been removed.**
  - Our school uses fuel burning appliances and has taken steps to protect occupants from carbon monoxide (CO) **Our school has placed CO detectors in the boiler rooms.**
  - Our school does not have any fuel burning combustion appliances (e.g. boilers, emergency generators, hot water heaters, etc.)
  - Our school has tested all frequently occupied rooms in contact with the ground, and first floor rooms above basement spaces that are not frequently occupied for radon gas and has fixed and retested rooms with levels that tested at or above 4 pCi/L . [NJ Recommends School Radon Testing](#) \_\_\_ Yes \_\_\_ No
  - Our school was built with radon resistant construction features and tested to confirm levels below 4 pCi/L.
  - Our school has identified any wood playground or other structures that contain chromate copper arsenate and has taken steps to eliminate exposure to this pesticide/wood sealing preservative. **We removed a deck**

**and gazebo, which were falling apart, hazardous, and made with pressure treated wood, located in our courtyard area.**

6. Describe how your school controls and manages chemicals routinely used in the school, as well as construction or cleaning activity that produces odors or dust, to minimize student and staff exposure. (100-word max) **Our school has two chemical hygiene officers and employs Rullo and Juliet Associates Inc., who complete an annual walkthrough for chemical hygiene. We also have exhaust fans and dust collectors installed in the necessary shops, as well as a fume hood in our chemistry room. All purchased chemicals are approved prior to their purchase.**

7. Describe actions your school takes to prevent exposure to asthma triggers in and around the school. (100-word max) **Our school has exhaust fans installed in many of the shops to prevent allergens and other hazards from building up.**

Is your school signed up to receive air quality alerts through [Enviroflash](#) which issues notifications of days when poor air quality is forecasted to occur? [Learn more](#) **Yes, all of our science teachers and administrators have signed up with Enviroflash.**

Has your school developed a plan for implementation to modify activities to protect the health of students and teachers when poor air quality is forecasted? **Yes, outdoor activities are suspended when the AQI value is over 150.**

Have you provided [brochures](#) to students, teachers and parents to educate them about air quality and steps they can take to protect their health and decrease their contribution to ozone pollution? **Yes, at the time of this application, the environmental science teachers are holding a contest for students to create a brochure to educate people about the AQI. The winning brochure will be replicated and disseminated to the school.**

8. Describe actions your school takes to control moisture from leaks, condensation, and excess humidity and promptly cleanup any visible mold or remove moldy materials when found. (100-word max) **Our school conducts routine maintenance of the HVAC systems and visual inspections of the systems and classrooms. Teachers also are able to report any issues that need to be addressed through an Air Quality Concern form. All requests are remediated as soon as possible.**

9. Our school has installed local exhaust systems for major airborne contaminant sources. **Yes, we have exhaust systems installed in the necessary career academy and science classrooms to prevent exposure of major airborne contaminants.**

10. Describe your school's practices for inspecting and maintaining the building's ventilation system and all unit ventilators to ensure they are clean and operating properly. (100-word max) **Our school maintenance department follows our district's Indoor Air Quality Program, and conducts routine inspections and performs preventative maintenance on the building's ventilation systems.**

11. Describe actions your school takes to ensure that all classrooms and other spaces are adequately ventilated with filtered outside air, consistent with state or local codes, or national ventilation guidelines. (100-word max) **Our maintenance department adheres to all AHERA standards and routinely conducts maintenance on, and replaces the filters to our ventilation system. Visual inspections are done routinely of outside air intakes and other areas of possible point-source contaminants.**

12. What steps has your school taken to protect indoor environmental quality?

- Implementing US EPA IAQ Tools for Schools and/or

- Conducting other periodic, comprehensive inspections of the school facility to identify environmental health and safety issues and take corrective action. **Our school has an IAQ policy in place to be adhered to. Shops and science classes also conduct safety lessons and assessments at the beginning of the year.**
- Participating in the Pediatric/Adult Coalition of NJ's Asthmas Friendly Awareness Program  
Other (max 100 words)

13. Does your school engage in green procurement practices as it pertains to the following? (Buy Recycled / Buy Green)

- |                                    |                        |                           |
|------------------------------------|------------------------|---------------------------|
| <b>Building &amp; Construction</b> | Fleets                 | <b>Office Supplies</b>    |
| Carpets                            | <b>Food Services</b>   | <b>Paper</b>              |
| <b>Cleaning</b>                    | <b>Landscaping</b>     | Other _____ (50 word max) |
| <b>Electronics</b>                 | Meetings & Conferences |                           |

14. What system do you use to determine if the above products and services are considered sustainable?  
 DOE Purchasing for Energy Efficient Products  
 CHPS High Performance Database  
 Electronic Product Environmental Assessment Tool (EPEAT)  
 Other **Vendor information, websites, and product list, as well as support from our Green Team.**

Element 2B: Nutrition and Fitness

**Food and Nutrition, Fitness and Outdoor time**

15. Which practices does your school employ to promote nutrition, physical activity and overall school health?  
 Provide specific examples of actions taken for each checked practice, focusing on innovative or unique practices and partnerships. (100-word max each)

Our school participates in the USDA's Heathier US School Challenge. Level and year: \_\_\_\_\_

**[X]** Our school participates in a Farm to School program to use local, fresh food. **Our vendor, Maschio's Food Services,**

**Inc. procures locally grown fruits and vegetables to provide students with healthy and nutritious food choices.**

**[X]** Our school has an on-site food garden that teaches nutrition and environmental education, describe. **Our school has a greenhouse that grows fruits and vegetables that are incorporated into our culinary program and used to teach students sustainable farming methods.**

**[X]** Our school garden supplies food for our students in the cafeteria, a cooking or garden class or to the community. **See above**

**[X]** Our students spent at least 120 minutes per week over the past year in school supervised physical education. **Our school provides students with well over 120 minutes per week of physical education or health, every year.**

At least 50% of our students' annual physical education takes place outdoors. **Our location does not have an area where outdoor physical education can take place. However, health classes can be taught outside in our courtyard when weather permits.**

Our school participates in the NJ Safe Routes to School Resource Center. Level and year: \_\_\_\_\_

Our school participates in International Walk to School Day in October or National Bike to School Day in May. Year(s): \_\_\_\_\_.

**[X]** Our school has a School Wellness Policy that addresses both nutrition AND physical activity. **The Board of Education of the ECVTS recognizes that child and adolescent obesity has reached epidemic levels in the United States and that poor diet combined with the lack of physical activity negatively impacts on students' health, and their ability and motivation to learn. The Board is Committed To: Providing students with healthy and nutritious**

foods; Encouraging the consumption of fresh fruits and vegetables, low fat milk and whole grains; Supporting healthy eating through nutrition education; Encouraging students to select and consume all components of the school meal; and Providing students with the opportunity to engage in daily physical activity.

**[X]** Our school has a School Wellness Committee that meets at least once a year.

Health measures are integrated into assessments. \_\_\_\_\_

At least 50% of our students have participated in the EPA's Sunwise, or equivalent program.

**[X]** Some food purchased by our school food service is locally sourced from regional farms.

**Our school receives all of its fruits and vegetables through Maschio's Farm to School lunch program, utilizing locally sourced produce from NJ farms.**

16. Does your school compost lunch waste on-site? **Yes** What percent? **TBD** How much is used in your outdoor classroom? **Our students have just started collecting compostable materials from the cafeteria and culinary program and is expected to be usable next year.**

17. What environmental technology is used at your school? (e.g. weather station, energy monitoring systems, etc.) **Our school has a weather monitoring app on our website, receive AQI values daily through email and text alerts, and a hydroponics farming system. Our Agriscience course also utilizes the National Curriculum for Agricultural Science Education (CASE), which emphasizes current scientific practices, agricultural research, and sustainable practices in agriculture.**

18. Describe the type of outdoor education, exercise and recreation available. (100-word max) **Our Agriscience program participates in the Trout in the Classroom Program. They visit the State Trout Hatchery where students discuss the life cycle of the trout with a state biologist, and toured the hatchery. Students also participated in a five day seminar program with the Essex County Branch Brook Park Greenhouse in April/May 2015. The seminar focused on understanding principles of sustainable agriculture and commercial hydroponic production. We also have classes volunteer at the St. John's Soup Kitchen in Newark, Stepping Stones School in Roseland, and the Montclair Historical Society Community Garden. We also are developing two learning spaces in our courtyard for outdoor education.**

#### **Coordinated School Health, Mental Health, School Climate, and Safety**

19. Does your school use a Coordinated School Health approach or other health-related initiatives to address overall school health issues? **Yes** If yes, describe the health-related initiatives or approaches used by the school: **Our school uses a Coordinated School Health approach to address health related initiatives through various activities. We utilize outside resources, Planned Parenthood, Newark Emergency services, and local health departments for immunizations, screenings and other health services. Additionally, our school provides psychological and social support to students, as well as their family members. We also have a good partnership with Maschio's Food Service to ensure healthy lunches are served daily. Maschio's manager meets with our building-based Health Committee, which is made up of a staff member and four students, to discuss the nutritional guidelines set forth from the USDA. Together, they develop a monthly lunch menu that the overall student body will enjoy while also being nutritious. To continue to promote school health, our nutritional guidelines have been posted in the student cafeteria. Our culinary arts program also teaches students the benefits of creating and preparing menus that promote all the food groups. Nutrition is a unit in the district-based health curriculum in which all of the students take part. Students analyze how culture, health status, age, and eating environment influences personal eating patterns and research ways to provide a nutritional balance. Designing a weekly nutritional plan for families with different lifestyles, resources, special**

needs, and cultural backgrounds is a unit project that the students complete. Finally, another main focus is analyzing the importance of each nutrient class (fats, carbohydrates, protein, water, vitamins, and minerals) to one's health.

20. Does your school partner with any postsecondary institutions, businesses, nonprofit organizations, or community groups to support student health, school garden education and/or safety? **Yes** If yes, describe these partnerships: **Presently we have a partnership with Real Talk Women's Resource Center in which a representative is a guest speaker for our health classes on how to build healthy balanced relationships. Major themes of the discussions are choice of friends, consequences of your actions in a dating relationship, saying No and meaning it. We also have a representative from The Essex County College Public Safety Academy speak to our sophomores on the unsafe risk taking behavior that some youth participate in when operating a motor vehicle. This is an important program for our students who are taking driver's education in our health II curriculum. Our culinary arts students participate in the Johnson and Whales, Serve-Safe, which is a food safety certification. In our Agricultural Science class, students work with the Essex County Greenhouse to learn how to incorporate hydroponics into our greenhouse. Produce made in our greenhouse is also donated to St. John's Soup Kitchen in Newark, NJ. Other entities that have partnerships or work in conjunction with include Rutgers University School of Environmental and Biological Sciences, Delaware Valley University, and County College of Morris for students studying agricultural science. We have additional partnerships with the Essex County Board of Agriculture; Essex, Hudson, Passaic Soil Conservation District; Essex County Cooperative Extension Office; Essex County 4-H; Montclair Historical Society; State Trout Hatchery; and Essex County Greenhouse at Branch Brook Park.**
21. Does your school have a school nurse and/or a school-based health center? **Yes. Our school has an onsite school nurse who takes an active role in the overall health of our entire student body. She diligently communicates with doctors and hospitals with our students who have childhood onset illnesses and require daily medical care. Our nurse takes an active role to ensure that our students are emotionally and mentally well and if a youngster needs a service she is the liaison for this. We also have a child psychologist and social worker on site that provides services to our students in need. We have a strong program to ensure our students are emotionally/mentally, socially and physically healthy.**
22. Describe your school's efforts to support student mental health and school climate (e.g. anti-bullying programs, peer counseling, etc.): **For the past two years we have had a building-based program for National Respect week which has been successful. Each day there are activities planned for students to participate and "stomp out bullying in our school." Students also participated in grade level activities to promote self-respect, as well as respect and tolerance of others. We also created activities for National Anti-Violence Week which focused on staying away from high-risk behaviors and learning how to identify when we are angry and using techniques to control our anger. During National Suicide Prevention Week, our school educated students about the dangers and signs of teenagers who suffer from depression. Additionally, students learned more about the affects of bullying and cyberbullying. If a student is depressed we offer many resources such as child psychologist, social worker and guidance counselor who are onsite to meet the needs of our diverse student population. We also have a district-based psychologist who offers one-to-one counseling for students who have a hard time coping with school and home life. When necessary we will offer students outside resources, such as the COPE Center and the Performed Care Mobile Crisis Unit (PCMCU) to assist families at home who have issues with transportation or other issues that may prevent them from coming into the school.**

### **Summary Question for Pillar 2**

23. Describe any other efforts to improve coordinate health and safety, nutrition and fitness, highlighting innovative or unique practices and partnerships. (100-word max) **Our school is constantly looking to improve our**

educational program and school health plays a large part in that. We evaluate our curricula and programs every year to decide the effectiveness or their implementation and adjust them accordingly. We have brought in consultants and guest speakers to enrich our lessons as well. Our Health Wellness committee meets with our food service provider to develop menus that offer nutritious options that students choose to eat, identify and schedule guest speakers to talk to the student body, and plan school wide activities to help inform students of the benefits of eating well. Our physical education department works with our students daily to provide them with regular activity or health education to promote fitness as well. Our partnerships with the COPE Center and the PCMCU are also great for promoting overall health with the students and their families at home when necessary.

### **PILLAR 3: EFFECTIVE ENVIRONMENTAL AND SUSTAINABILITY EDUCATION**

#### Element 3A: Interdisciplinary learning about the key relationships between dynamic environmental, energy and human systems.

1. Which practices does your school employ to help ensure effective environmental and sustainability education? Provide specific examples of actions taken for each checked practice, highlighting innovative or unique practices and partnerships.

**X** Our school has an environmental or sustainability literacy requirement. (200-word max) **Our school incorporates environmental literacy into our biology and environmental science courses. Environmental science covers topics including human impact on natural resources, calculating ecological footprints, “Tragedy of the Commons,” groundwater depletion, eutrophication, humans impact on the carbon cycle, the ozone layer, land, air, and water pollution, climate change, energy production (renewable vs. nonrenewable), biomagnification, as well as urbanization and smart growth. Biology covers topics biodiversity loss, succession, GMO’s and the uses of pesticides and fertilizers, human impacts on the biogeochemical cycles and food webs, climate change, sustainability, and what measures humans can take to achieve sustainability and reduce our impact on the environment. Our career classes utilize sustainable practices including sustainable construction, hydroponics, healthy eating, physical activity, as well as engineering and technology practices.**

**X** Recurring environmental and sustainability concepts are integrated widely throughout an interdisciplinary curriculum. (200-word max) **Our students cover topics of sustainability in their science courses every year, as well as in their career shop, and build upon the information learned in the preceding year. Projects have been created with collaboration between the science and career program teachers to highlight sustainable practices and methods in every shop. School improvement projects are also complete annually as a collaboration between the content and career subject areas. Our science curriculum is geared towards incorporating science, technology, engineering, and mathematics into each course and is currently being re-written to highlight these interrelationships as per the Next Generation Science Standards. Students also participate in hands-on experiences**

**X** Student learning of environmental and sustainability concepts is evidenced by authentic assessments. (200-word max) **Quarterly benchmarks are given in every subject area. Environmental and sustainability concepts are tests and all of the biology and environmental science benchmarks. Data is gathered by the content area supervisor, who shares the findings with their respective teachers who find ways to address any misconceptions or shortcomings.**

**X** Students evidence high levels of proficiency in these assessments. (100-word max) **Students show expected growth on each benchmark when compared to a diagnostic they took in September. Students also test well above the state average on standards relating to the environment on the New Jersey Biology Competency Test.**

- X** Professional development in environmental and sustainability education are provided to teachers. (200-words) **Administration has set up dates where guest speakers come in and speak to the science staff and their students to provide them information on environmental issues. We have also had speakers from the Liberty Science Center come in a provide professional development to the science staff on topics including environmental issues. Our science teachers have also attended professional development workshops at the NJ Teacher's Convention that covered topics including the implementation of green energy and NJ Sustainable Schools.**
- X** Environmental/Sustainability Education is offered in after-hour school programs **Our school offers a Saturday enrichment program for sophomores in preparation for the New Jersey Biology Competency Test, which covers topics of environmental/sustainability as per the curriculum. We also hold an annual family day event where information is shared with the students and their parents/guardians. Our school is limited with the amount of after school programs we can hold due to the fact that the vast majority of our students are bussed to school.**

Element 3B: Use of the environment and sustainability to develop STEM content, knowledge, and thinking skills

**2. For schools serving grades 9-12, provide:**

Percentage of last year's eligible graduates who completed the Environmental Science / Earth Systems (or similar environmental course) course during their high school career: **Environmental science is given to all of our students. We are also in the motions to offer AP Environmental Science next year for the first time in our district.**

3. How does your school use sustainability and the environment as a context for learning science, technology, engineering and mathematics (STEM), and art thinking skills and content knowledge? (200-word max) **Our school incorporated sustainability and environmental health into our academic and career and technical education courses. Being a vocational high school, we are fortunate to be able to encourage cross-curricular and collaborative activities between the core academic subjects and their related technical programs, therefore incorporating science, technology, engineering, and mathematics into many of our curricula and activities. Our teachers have developed projects where students collect data and make measurements in their science classes and then analyze and graph the data in their respective math courses. After which they write articles in their language arts classes to propose solutions to address their findings or to present their information. Our academic classes also collaborate with our career programs to create solutions to some of their problems and to improve our school climate and reduce our environmental impact. Some projects that were recently done include the renovation of our courtyard, garden beds around the school, murals painted on the walls, a green theme song, hydroponics gardening, a recycling program, a sustainable homes gingerbread house competition, and much more! Our school-wide green initiative has allowed for all of our academic and career programs to participate and contribute towards our mission to reduce our environmental impact.**
4. How does your school use sustainability and the environment as a context for learning green technologies and career pathways? (200-word max) **Our school's green initiative has shifted our focus of college and career readiness to college and career readiness with respect to environmental sustainability. With our green initiative, we have made sustainability and environmental awareness an intrinsic part of every career pathway we offer. Our carpentry program incorporates green design and construction into its curriculum, the agriscience and culinary program utilize hydroponics, composting, and farm-to-table practices, and our other career clusters utilize sustainability and the environment as a central theme for many of their projects. Our content area subjects also have a focus around "Going Green," especially our science courses which offer students hands-on experiences where they can get out of the classroom and discover real-world applications of the knowledge they learn and how they can be used to help the environment. Our programs have also benefited from our partnerships with local businesses that show students that companies can be responsible and give back to the**

environment. They also learn from our contacts , which allow our students to experience the multitude of careers that can be pursued that will have a positive impact on the environment.

Element 3C: Development and application of civic knowledge and skills

5. Describe students' civic/community engagement projects integrating environment, environmental justice ([as defined by EPA](#)) and sustainability topics. (200-word max) **Our students participate annually in the Trout in the Classroom program where they raise, monitor and care for trout, fostering an understanding of our water resources and a strong sense of conservation ethics. Our students also partnered up with RICOH-USA with the intentions on removing invasive species and replanting native ones this spring to improve biodiversity. Additionally, our students enrolled in science classes have taken the Energy Star Pledge and share information regarding energy and resource conservation with their families. We are a commuter school located in a suburb region, however our student population is composed primarily with students from urban backgrounds. When we work to improve our communities, we work to improve all of Essex County, as our diverse student population comes from all over the county, including families of all races, color, religion and/or income. Our students volunteer at, and donate food and produce to, St. John's Soup Kitchen in Newark, Stepping Stones School in Roseland, and the Montclair Historical Society Community Garden.**
6. Describe how outdoor learning is used to teach an array of subjects in contexts, engage the broader community, and develop civic skills. (200-word max) (ex. citizen science, field trips, overnight camping, retreats) **Our students have participated in a retreat to Camp Bernie in Port Murray, NJ for several years where they learn camaraderie and develop confidence to overcome mental and physical obstacles together in various outdoor settings. We also allotted two areas in our outdoor courtyard to hold classes outside and an area for students to eat their lunches and walk around. Our academies also have developed numerous partnerships with businesses and institutions throughout our community and state to broaden our students exposure to various jobs, opportunities, and experiences. Most important, our schools visit various habitats throughout the year in their various programs to observe and practice what they are learning in their classes.**
7. Describe students' meaningful outdoor learning experiences at every grade level. (200 word max) **Grade specific events include the freshman Camp Bernie trip and environmental science trips and activities. Sophomores participated in several activities and trips with their biology class. All grades participate in the activities geared towards their career academies, including visiting the Essex County Greenhouse, working in our greenhouse, the Trout in the classroom program, St. John's Soup Kitchen, Montclair Historical Society Community Garden, reclaiming our courtyard, and maintaining our outdoor garden beds. Our transition center students leave the building two days every week to volunteer and receive job training as well.**
8. Describe how your partnerships helps your school and other schools achieve in the 3 Pillars. Include both the scope and impact of these partnerships. (Maximum 200-words) (Ex. student exchange forum, sister school program, global project based learning program, state-wide professional learning communities) **Our partnerships are a point of pride for our school and have helped us excel in each of the 3 Pillars. Our various partnerships promote environmental and sustainable education, health and nutrition, and help us reduce our environmental impact. Our educational program is augmented by our guest speakers and relationships with outside institutions. Our students are given the opportunity to participate in competitions, observe possible careers, and engage in hands-on experiences all aligned towards the environment. Our health and nutrition programs are effective and provide students with an amazing arsenal of resources to be utilized during school and at home. We strive to ensure every student's physical and mental health are in peak condition to allow for optimal learning without any hindrances. These partnerships also allow students to physically improve the environment, giving them a sense of pride and appreciation that they then bring home and propagate in their communities.**

### Summary Questions for Pillar 3

8. Describe any other ways that your school integrates core environment, sustainability, STEM, equity and environmental justice issues ([as defined by EPA](#)), green technology and civics into curricula to provide effective environmental and sustainability education, highlighting on innovative or unique practices and partnerships. (Maximum 200-words) **Every student takes environmental science and biology, which covers environmental laws and policies, EPA, sustainable practices, pollution, human impacts on environment, and sustainable energy. Our construction trades course utilizes parts of the NJ Green Program of Study curriculum for sustainable construction and partnered with Fairfield Gardens to renovate our courtyard. Our horticulture and agscience program works with the county greenhouse, Pequest Trout Farm, and the Essex County Environmental Center to supplement their curriculum and provide students with hands-on opportunities. Our culinary program joins healthy eating and sustainable homes competitions yearly. Our school body partnered with RICOH-USA to remove invasive species from our local ecosystems and restore native vegetation. We Skype conference contacts in China to have a discussion regarding air pollution.**
9. How are your descriptions in number 8 supported or enhanced by your efforts in Pillar 1 to reduce environmental impact and costs for your school. (Maximum 100-words) **Sustainable education is keystone. Our building was not created to be efficient, as it was not even originally built to be a school, but a factory. Our projects, partnerships, and education have all worked to help reduce waste, conserve energy, and has taught us to reflect about our impact on the environment. Our students and staff have all adopted our policy to improve the environment and it helped us receive support from the county government to raise money to further reduce our costs and environmental impact.**
10. In what ways is your school sharing & promoting (outside of school) its efforts to uphold all 3 Pillars? **We have established a twitter page to update our followers on our actions and to share information, developed pamphlets to educate parents on methods to reduce their energy and waste consumption, and getting more involved with the community.**