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.

xx Private

Name of Principal: Mr. Thomas Main
Official School Name: King School

Official School Name Mailing Address: 1450 Newfield Ave. Stamford, CT 06905

County: Fairfield  State School Code Number N/A
Telephone: (413) 429-7175 __ Fax:
Web site/URL: www.klht.org  E-mail: fbarros@klht.org

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

[Signature] Date: 1-14-16

Thomas Main (Principal’s Signature)

Name of Superintendent: N/A

District Name: N/A
I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate.

[Signature] Date:

(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: Connecticut State Department of Education

Name of Nominating Authority: Dr. Dianna R. Wentzell

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

[Signature] Date: 1/20/16

(Nominating Authority’s Signature)
SUMMARY AND DOCUMENTATION OF NOMINEE’S ACHIEVEMENTS

King is an independent co-ed college preparatory day school in Stamford, CT instructing 672 students from PreK-12. The breadth of our program, the challenge of our wide ranging educational programs, and the strength of our community all serve our students extremely well.

Two faculty/staff lead sustainability task forces, one responsible for promoting environmental stewardship and the other for promoting health and wellness. The parents association has a committee on Healthy and Sustainable Living. Student leaders at the Lower School (LS), Middle School (MS), and Upper School (US) divisions work directly with faculty to engage the student body on sustainability issues at least twice a month. All task forces and committees are coordinated through our full-time sustainability director.

We use the Sustainability Tracking, Assessment & Rating System (STARS) created by the Association for the Advancement of Sustainability in Higher Education (AASHE) to measure best practices in sustainability. King earned bronze status in 2014, and has adopted a sustainability plan that will bring it to gold status in 5 years. All King stakeholders, including senior administrators, parents, faculty, staff, and student where involved in the creation of the sustainability plan.

King officially defined sustainability in terms of social, environmental, and economic concerns, which meant looking beyond just environmental efforts to ensure graduates are sustainably literate. To that end, King adopted Education for Sustainably (EfS) standards published by the Cloud Institute at all grade levels K-12. This year, King is undergoing a more comprehensive K-12 curriculum review using Understanding by Design (UbD) strategies. All US departments are working with cross-divisional program leaders, including sustainability, to incorporate standards into their overarching, departmental transfer goals, understandings, and essential questions. Once adopted, departments will use backward design to incorporate sustainability standards even more intentionally in unit planning from 12 grade all the way back to Kindergarten.

Students in King’s Environmental Science and Sustainability elective work with the Sustainability Director to implement a Learning Environment Analysis (LEA) that includes the Environmental Protection Agency...
(EPA)'s Tools for Schools (TFS) Program. Students in the elective are split into groups, each group responsible for the data collection in a different campus building. The process engages just about every King employee, and the data is used to inform changes in indoor quality practices. In conjunction with the Tools for Schools program, King’s LEA also incorporates a majority of the parameters used by the Collaborative for High Performance Schools (CHPS) in its Operations Report Card (ORC). The ORC metrics use quantitative information that includes: carbon dioxide levels, Energy Star benchmarking, illumination levels, acoustic levels, and temperature and relative humidity measurements. King’s LEA uses all of this information, except for acoustic measurements, with the data from the Tools for Schools program to get a robust, overall understanding of how the buildings are performing. The LEA gives King’s administration, faculty, staff, and students the information it needs to improve building performance, maximizing the learning environment for students, and ensure an optimal workplace for employees.

Our Food Service Director has worked to increase its percentage of sustainably sourced food using metrics from the Real Food Challenge. Within one year, King doubled its sourcing of sustainably sourced food, and expects to double it again by 2020. To help forward the initiative, King is leading a group of ten schools in the Fairfield/Westchester county area, all of whom use the same dining service, to work together in increasing their procurement of sustainably sourced food.

King’s sustainability plan includes a very ambitious target of reducing carbon emission by 50% in five years. A comprehensive greenhouse gas inventory, going back to 2010, was calculated using the Carbon Management and Analysis Platform (Carbon MAP) maintained by the University of New Hampshire’s Sustainability Institute. In order to reach its carbon reduction goals, King’s strategies include increased energy efficiency with infrastructure modifications, increased energy efficiency with conservation behaviors, installation of renewable sources, and forwarding sustainable transportation strategies.

The path towards renewable energy use began this past year in a cooperative, student-led effort between King’s Global Education Program and Sustainability Program. Twenty-one students are engaged in feasibility studies in renewable energy topics for King. The students were divided into seven groups of three. Each group is working on a specific study. The topics are solar photovoltaic energy, solar thermal, wind, fuel cells, biomass, geothermal and innovative ways to use kinetic energy. The students will develop Request for Proposals (RFPs), engage business in the CT-NY-NJ areas, collect proposals, and bring their research to the Global Student Leaders Summit taking place in Iceland in March 2016. Afterwards, they will present results to the board of trustees, giving King the opportunity to decide which renewable sources are most appropriate to utilize in the coming few years. Most of the students are using the project as their senior capstone project in earning Distinction in Global Education upon graduation.
Step 1: Green and Healthy Outlook

At King School we take a comprehensive view of sustainability. We are fortunate to have a full-time sustainability director to help guide all of our departments, from academics, to facilities as they integrate their efforts and maintain the focus on continually improving our program. Some of these activities include:

- Leading co-curricular sustainability programming to include orientation, marketing and pre-K through 12 initiatives
- Supporting the Curriculum Committee to sustain best practices as applicable to program development and assessment of program
- Setting and assessing sustainable guidelines to address new construction, renovations, building energy systems, in campus operations, retrofits, and school-wide supply chain/waste systems
- Assisting the Head of School and CFO with long-term risk management matters
- Setting and assessing guidelines that improve the health and well-being of employees

King uses the Sustainability Tracking, Assessment & Rating System (STARS) created by the Association for the Advancement of Sustainability in Higher Education (AASHE). It is a transparent, self-reporting framework to measure best practices in campus sustainability. Arguably the most comprehensive metrics used nationally, STARS enables meaningful comparisons over time and across institutions using a common set of measurements developed with broad participation from the internal campus sustainability community. King earned bronze status through STARS in 2014, and has adopted a sustainability plan that will bring it to gold status in 5 years, far exceeding the NAAEE guidelines for Environmental Excellence. The sustainability plan was designed using benchmarks informed by the STARS metrics. All King stakeholders, including senior administrators, parents, faculty, staff, and students were involved in the creation of the sustainability plan.

Since adopting the sustainability plan, King has already earned recognition from the Green School Alliance in its Green Cup Challenges for both recycling and energy use reduction. It also won top honors in Connecticut from Keep America Beautiful in its annual Recycle Bowl.

We work directly with the 8 Schools Association (Phillips Exeter Academy, Philips Andover Academy, Choate School, Lawrenceville School, St. Paul’s School, Northfield Mt. Hermon School, Hotchkiss School, and Deerfield Academy) to promote the use of STARS metrics in independent K12 schools. King is using the Connecticut Green Leaf network to build partnerships with schools that want to analyze common
supply chains and combine their purchasing power to use more sustainable vendors. King already has built partnerships with many of the schools in Connecticut’s Fairfield County. Finally, King has presented on best practices in sustainability at the annual conference sponsored by the National Association of Independent Schools (NAIS).

King maintains strong partnerships with the local community, through its Service Learning program, which helps students develop both environmental and social sustainability. Service Learning at King is a teaching and learning strategy that integrates meaningful community service with instruction and reflection, enriching the learning experience, promoting civic responsibility, and strengthening our environment. King cultivates a reciprocal service and a learning partnership among students, parents, faculty, staff and the surrounding community.

For example, King partners with Soundwaters, Animal Embassy, the Stamford Museum and Nature Center, the New Covenant House of Hospitality Soup Kitchen, Neighbors Link of Stamford which strengthens the whole community by actively integrating immigrants, and the Boys and Girls Club of Stamford. Last year, 300 of King’s students logged over 14,000 hours of service to organizations that embrace environmental and social sustainability.

In order to communicate and promote sustainability efforts, King designs and disseminates 13 Infographics spread throughout the school year. The data-driven infographics cover the following topics: Waste, Service Work, Food, Curriculum, Energy, Greenhouse Gas Emissions, Transportation, Water, Purchasing, Affordability and Access, Support for Underrepresented Groups, Investment, and Health/Wellbeing. Roughly once every two weeks, an Infographic is sent to all upper and middle school advisors, and to lower school homeroom teachers. Accompanying each Infographic are three yes/no questions prompting discussion about sustainable behaviors. The results are sent back to the sustainability director, aggregated, and shared with student leaders of each division. The student leaders then give feedback to their respective divisions. All Infographics and results are posted to social media outlets for all King parents and alumni.

**Step 2: Environmental and Sustainability Literacy**

In 2012, King officially adopted a definition of sustainability that says, “At King, Sustainability means appreciating the interconnectedness of all things. We believe our actions are sustainable when they take an appropriately balanced view of social, environmental, and economic concerns”.

Defining sustainability in terms of social, environmental, and economic concerns meant looking beyond just environmental efforts to ensure graduates are sustainably literate. To that end, King
adopted Education for Sustainably (EfS) standards published by the Cloud Institute. The knowledge, skills, and habits of mind of EfS are embedded within these standards, which are aligned to national and state educational standards. The EfS standards include: Cultural Preservation & Transformation, Responsible Local & Global Citizenship, The Dynamics of Systems & Change, Sustainable Economics, Healthy Commons, Natural Laws & Ecological Principles, Inventing & Affecting the Future, Multiple Perspectives, and Strong Sense of Place.

King supported a faculty and staff conversation through appreciative inquiry to identify where the standards naturally existed in the K-12 curriculum, using the opportunity to both educate faculty and contextualize units so that sustainable education could be more intentional and embedded within the curriculum. All grade levels K-8 and all academic departments 9-12 use one or more of the standards in their units and lessons, covering all within the K-12 spectrum of learning.

We are currently undergoing a more comprehensive K-12 curriculum review using Understanding by Design (UbD) strategies. All upper school departments are working with cross-divisional program leaders, including sustainability, to incorporate standards into their overarching, departmental transfer goals, understandings, and essential questions. Once adopted, departments will use backward design to incorporate sustainability standards even more intentionally in unit planning from grade 12 all the way back to Kindergarten.

New students that enroll at King are engaged in sustainability education before classes even begin. In fact, student orientation to sustainability begins over the summer months. All new students are expected to sit with their parents and measure the sustainability of their own households using King’s Sustainable Household Certification tool. The tool is designed to promote sustainable practices at home. The tool offers action items in water, health and wellness, transportation, community engagement, energy, purchasing and waste and it certifies households as platinum, gold, silver or bronze. In 2015, over 80% of new families completed the tool. This tool becomes a framework for discussions

![Sustainability at King Infographic](image)
about sustainability, in the school, with students, and with their families.

As explained above, students’ sustainability understanding is developed both within and outside the curriculum. Of course, though sustainability integration efforts are concentrated with the adoption of EfS standards, there are a myriad of thoughtful, targeted efforts that are more traditionally associated with sustainability such as:

- **Grade K-5:** Growing lettuce in the lower school garden and entering it in the Stamford Garden Club’s “Lettuce Challenge Contest”

- **Grade K-5:** Growing herbs, cabbage, and kale in the LS garden that is used in the LS cafeteria for lunch. Compost produced from King’s school waste is used to grow the vegetables.

- **Grade 6:** Students gain hands-on experience with STEM initiatives on the Long Island Sound, including STEM labs dealing with navigation, animal adaptations, plankton & the food web, and human impact. In addition, they collect data for their year-long research project on the Invasive Asian Shore Crab.

- **US Global Art:** Students explore the work of contemporary environmental artists such as Andy Goldworthy, Nils-Udo, and Chris Jordan. Last year, Alan Weisman, author of *The World Without US* and *Countdown*, came to King and shared his understanding about the complex issues around the environment and sustainability.

- **US Ancient History:** Students take on roles in historical simulations, i.e. the Athenian Assembly before the Peloponnesian War, bringing their personal, family, and community issues to the assembly, based on job descriptions and civic duties as Athenian citizens. The simulations always highlight sustainability issues, most often relating to natural resource management or the health and wellness of the population.

- **US Advanced 3D Design:** One of King’s STEM related courses, students are designing and constructing a modern version the Windmill. The process includes research, design and prototyping a wind turbine and tower, followed by construction of a full scale, working model. Our students will understand the technology through this building process. Each year, the STEM course focuses on a different sustainability related project.

- **US Digital Mobile APP Development:** One of King’s newest STEM related courses, students are making mobile apps that allow King employees to track the sustainability of their workplaces,
coaches to track the sustainability of their athletic teams, and event organizers to track the sustainability of their events.

These initiatives highlight just a small few of the long list of units and lessons that engage students in sustainability topics. King very purposefully does not offer AP Environmental Science. Instead, it offers two over-enrolled sections of Environmental Science and Sustainability. The distinction allows King to include a robust service-learning element in the curriculum where students administer our Learning Environment Analysis (see the next section on Healthy School Environment).

King is currently developing a portfolio assessment model of student achievement using curriculum-embedded cornerstone tasks, intended to engage students in applying their knowledge and skills in an authentic and relevant context. The assessments are meant to anchor the curriculum around EfS standards. The model will help the curriculum committee to identify weaknesses in the K-12 curriculum and assist in making necessary changes.

Staff and Faculty receive sustainability orientation at the beginning of every school year. Sustainability policies and guidelines are outlined in the employee handbook. All faculty and staff are involved in our Learning Environment Analysis (see the next section on Healthy School Environment). Finally, active participation in King’s sustainability commitment is addressed in employees’ annual performance review, which is tied directly to salary increases. King School provides funding to staff to develop and implement sustainability initiatives.

**Step 3: Healthy School Environment**

Students in King’s Environmental Science and Sustainability elective work with the Sustainability Director to implement a Learning Environment Analysis (LEA) that includes the Environmental Protection
Agency (EPA)’s Tools for Schools (TfS) Program. Student groups are responsible for the TfS data collection. The process engages nearly every King employee, and the data is used to inform changes in indoor quality practices.

Sustainable practices at King School ensure that we comply with CT School Bus Emission Law and CT School Pesticide Law. King published no-idling guidelines in the employee handbook, and these are emphasized at opening meetings every September. Bus companies hired by King for transportation are not allowed to idle when on campus. King follows a comprehensive integrated pest management plan to minimize the use of pesticides. In line with IPM principles and practices, King uses a system of pest identification, monitoring and assessing pest numbers and damage, guidelines for when management action is needed, preventing pest programs, and a combination of biological, cultural, physical/mechanical and chemical management tools.

King’s maintenance and housekeeping staff work to ensure compliance with CT Indoor Air Quality in Schools Law and CT Green Cleaning Products in Schools Law. King uses an Energy Management System installed by Trane to help monitor HVAC systems and ensure that they are running efficiently, optimizing the ventilation systems while minimizing energy use. Among King’s Green Purchasing Guidelines is the directive to use Green Seal Certified cleaning products. Over 90% of King’s cleaning products are now Green Seal Certified.

In conjunction with the Tools for Schools program, King’s Learning Environment Analysis (LEA) also incorporates a majority of the parameters used by the Collaborative for High Performance Schools (CHPS) in its Operations Report Card (ORC). The ORC metrics use quantitative information that includes: carbon dioxide levels, Energy Star benchmarking, illumination levels, acoustic levels, and temperature and relative humidity measurements. King’s LEA uses all of this information, except for acoustic measurements, with the data from the Tools for Schools program to get a robust, overall understanding of how the buildings are performing. The LEA gives King’s administration, faculty, staff, and students the information it needs to improve building performance, not just minimizing students and staff exposure to hazardous contaminants, but maximizing the learning environment for students and ensuring an optimal workplace for employees.

Going forward, King is standardizing its maintenance and operations with Leadership in Energy and Environmental Design (LEED) Buildings Operations and Maintenance guidelines. King’s Sustainability Director is working directly with Facilities and the school’s Chief Financial Officer to make sure the guidelines are articulated, recorded, and enforced. It is the school’s expectation that this effort will give
the school an operations and maintenance manual that will steer decisions long after the present staff has left us.

**Step 4: Healthy Nutrition**

King uses Flik Independent School Dining Services. Flik’s philosophy is summed up in the phrase “Eat. Learn. Live.” Their Balanced Choices program ensures a diverse, balanced menu, using fresh ingredients, limiting the use of processed foods and avoiding artificial colorings, flavorings, M.S.G., preservatives, or trans fats. Flik roasts deli beef and turkey on-site, uses seasonal fruit and vegetables grown by local farmers, and meets a wide range of nutrition requirements and standards, including Vegan, Vegetarian, Orthodox Kosher and Halal.

Flik helps students understand the important of a healthy lifestyle by giving kids information through in-classroom and in-dining room activities, including their Color Your Plate Healthy program, which is a simple, color-coded guide for students to selecting balanced meals. Flik uses foodways of different cultures to bring other parts of the world into the dining room with a monthly focus on an unfamiliar cuisine. Flik supports The Food Allergy Initiative, the first organization dedicated to strategic, comprehensive, approach to protecting those at risk of food allergies, by listing food ingredients daily in the dining hall.

Flik helps students better understand the relationship between the farm and the dining room by preparing and serving produce from the school’s garden. Flik incorporates Slow Food initiatives (protecting the foods we eat and the pleasures of dining against the homogenization of modern fast food and life) into the dining hall. All of the seafood is purchased in accordance with the Monterey Bay Aquarium’s Seafood watch guidelines. Only Humane Farm Animal Care (HFAC) certified cage-free shell eggs are used. All chicken in the dining hall has been produced with restricted use of antibiotics, especially as a growth additive in feed, adhering to specific criteria developed in partnership with The Environmental Defense Fund. Fresh fluid milk comes from cows that have certified to be free of the artificial hormones rBGH/rBST. Finally, coffee is of Fair Trade brands.

![Figure 4 Sustainable Procurement of Food infographic](image-url)
The Sustainability Director at King works closely with the Food Service Director to increase its percentage of sustainably sourced food using metrics from the Real Food Challenge. The Real Food Challenge leverages the power of youth, independent schools, and universities to create a healthy, fair and green food system. Their primary campaign is to shift $1 billion of existing institution food budgets away from industrial farms and junk food and towards local/community-based, fair, ecologically sound and humane food sources by 2020.

King’s 2014 analysis of food invoices using the Real Food Challenge metrics revealed that 10% of the food was procured using sustainable sources, which is considered a very good start by the Real Food Organization. Within one year, King doubled its sourcing of sustainably sourced food, and expects to double it again by 2020. To help forward the initiative, King is leading a group of ten Flik schools in the Fairfield/Westchester county area, two of which have already received Green Ribbon recognition, to work together in increasing their procurement of sustainably sourced food.

All students in grades 6, 7, 8, 9 and 11 must take Life Skills, which incorporates healthy nutrition into the curriculum. The course is discussion-based and concentrates on topics related to personal wellness, including taking care of all aspects of the self in the physical, mental, and social realms.

In the Lower School, the garden is used in science classes at all levels (K-5) to teach principles in nutrition. To supplement efforts in the Lower School to teach sustainability topics in both nutrition and environmental stewardship, faculty in the Upper School art department have created Environmental Ant, “the world’s smallest superhero ever”. A wonderfully illustrated book, along with dozens of associated comic strips, will highlight this superhero that lives in King’s garden and is determined to save the earth. Environmental Ant, and his many animated friends, will guide Lower School students in making better informed choices in taking care of themselves and the King environment.

**Figure 5 King School’s Environmental Ant teaches Lower School students**

**Step 5: Physical Well-Being**

King School athletic programs are integral parts of every student’s experience. The Athletic Department offers a diverse and competitive program designed as a critical component of each
student’s overall education program. The range of offerings provides students with the opportunity to compete in variety of Varsity and JV team sports.

Lower School students are encouraged to focus on their own abilities, to develop a strong sense of good sportsmanship and cooperation with in their interactions with classmates. Students in PreK through 5 have supervised physical education (roughly 60 minutes) every day. Students also have daily “recess” time to play on King’s playground, which is one of the largest playgrounds in Fairfield County.

In Grades 3 and 4, classes are more sports oriented, with developmental skills, rules, and strategies of sports taught, along with good sportsmanship. Students in grade 5 and 6 participate in advanced physical education classes five days per week. The program is designed to give the students experience in multiple sports and to acquire athletic skills that will help them in the sports they choose in grade 7 and 8, and beyond.

The Middle School physical education program focuses on game skills, team play, and sportsmanship. Students choose sports in 3 seasons, with teams that compete against other independent schools in the area. The program includes practice four times per week, with games one or two times per week depending on the sport.

Students in the Upper School participate in at least one athletic season, or an off-campus sport for a minimum of 100 hours each year.

King’s Sustainability Task Force on Health and Wellness, serving all employees at King, provides education, bringing resources to campus, fitness incentives, use of community resources, and stress relief initiatives. The Health and Wellness program cross-promotes efforts from the Office of Community Affairs, King’s Professional Development Program, and the Parent Association’s Committee on Healthy and Sustainable Living. The program is currently developing a system of mapping information flow in internal and external communications at King with the intention of highlighting and minimizing wasteful activities such as duplication of efforts, waiting, unnecessary information handling, correction, and inappropriate use of talents. The system is based on the value-stream mapping processes used in manufacturing industries. The general motive being that when information flow is efficient, and wasteful activities minimized, King will reduce stress levels in employees.

**Step 6: Energy Efficiency and Water Conservation**

King officially adopted a comprehensive one, three, and five-year sustainability plan in 2014. The plan includes a very ambitious target of reducing carbon emission by 50% in five years. A comprehensive greenhouse gas inventory, going back to 2010, was calculated using the Carbon
Management and Analysis Platform (Carbon MAP) maintained by the University of New Hampshire’s Sustainability Institute. Following guidelines established by The Greenhouse Gas protocol of the World Resources Institute, the inventory includes all scope 1, scope 2, and major scope 3 emissions. In King's situation, scope 1 emissions includes emissions from the combustion of natural gas to heat buildings, from the combustion of gasoline or diesel to run King owned vehicles, from refrigerants, and from the fertilizers used to maintain our campus grounds and athletic fields. Scope 2 emissions are solely from electricity use. Scope 3 emissions are largely from commuting traffic of faculty, staff and students, airline usage associated with King programs, and buses for athletic teams and field trips.

In order to reach its carbon reduction goals, King’s strategies include increased energy efficiency with infrastructure modifications and conservation behaviors, installation of renewable sources, and implementing sustainable transportation strategies. Our facilities efforts focus on efficiency. Some recent efforts include installing timer thermostats and central digital controls, occupancy and daylight sensing for lighting, LED lighting, increased insulation, higher-preforming windows, high efficiency HVAC equipment and boilers, economizer cooling, and variable drive motors.

In 2014, King completed an energy audit and retro-commissioning for all of our academic buildings. King has already worked through the Survey and Investigation phases of the program. In early spring of 2016, King will complete infrastructure additions to our Energy Management System so that we can have better control over our HVAC Systems. These changes will lead to buildings with much better learning environments.

King’s energy conservation policies are clearly stated in the employee handbook, including setting occupied space temperatures at 68° during the heating season and 76° during the cooling season. Faculty and staff are instructed about leaving windows open and where they place furnishings in relation to the heating/cooling devices in a space. Facilities tracks changes to building use schedules so that they can be reprogrammed to conserve during unoccupied times. King also promotes use of daylighting, and turning off lights and electronics when leaving an unoccupied classroom or office.

As mentioned under “Healthy School Environment”, King’s student led LEA uses carbon dioxide levels, Energy Star benchmarking, illumination levels, and temperature and relative humidity measurements to get a robust, overall understanding of how the buildings are performing. Students also collect qualitative information directly from faculty and staff. The quantitative and qualitative information together is used to troubleshoot issues that surface as facilities staff implement King’s energy conservation policies. The LEA is performed twice a year, providing an ongoing, evolving feedback loop between King stakeholders on energy conservation issues.
Our path towards renewable energy use began in 2015-2016, in a cooperative, student-led effort between our Global Education Program and Sustainability Program. Twenty-one students are engaged in feasibility studies for renewable energy use at King, investigating solar photovoltaic energy, solar thermal, wind, fuel cells, biomass, geothermal and innovative ways to use kinetic energy. The students will develop Request for Proposals (RFPs), engage businesses in the CT-NY-NJ areas, collect proposals, and bring their research to the Global Student Leaders Summit taking place in Iceland in March 2016. Afterwards, they will present results to the board of trustees, giving King the opportunity to decide which renewable sources are most appropriate to utilize in the coming few years. Most of the students are using the project as their senior capstone project in earning Distinction in Global Education upon graduation.

Emissions due to transportation only account for 26% of King’s total carbon footprint. 57% of our students and 14% of our students commute using more sustainable commuting options. We promote carpooling to school and match families based on location. Our Landscape Master Plan includes walkways to make the campus more pedestrian friendly. As specified in the sustainability plan, King will administer three additional strategies that encourage more sustainable modes of transportation and reduce the impact of student and employee commuting by year three (2018) and five by year five (2020). The strategies will be chosen from free or reduced price transit passes, a guaranteed return trip (GRT) program, preferential parking, car sharing program, telecommuting, condensed work week option, or an incentive program to live closer to campus. In addition, by year three, King plans to adopt a policy requiring school vehicle purchases to be hybrids, electric, hydrogen-fueled, or fueled with B20 or higher for more than 4 months of the year. King’s employee handbook stresses the importance of conserving water and expects faculty and staff to exemplify best practices in water use. Every building is individually metered to track water use. King installed bottle filling stations in all academic buildings. King uses Low Impact Development (LID) practices to manage rainwater, replenish natural aquifers, reduce erosion impacts and decrease pressure on public infrastructure in all renovations and construction. King has employed many water use practices including bioretention facilities and setting strict limits on the square feet of impermeable pavements on the campus.
Step 7: Green Purchasing and Waste Management

King supports the triple bottom line of economic prosperity, environmental health, and social equity through procurement activities. Historically, local businesses have always been preferred.

As written in the employee handbook, every effort must be made to share, save, and reuse commodities at King. King expects departments to share office appliances such as printers, coffee pots, and refrigerators. Environmental and social impacts of manufacture and distribution is considered with purchases. Computers are EPEAT registered, and cleaning products are Green Seal or UL Environment (EcoLogo) certified. Office paper has either has 100% recycled content or Stewardship Council certification, and we purchase only Energy Star certified appliances.

King’s Sustainability Task Force for Environmental Stewardship investigates the supply chains associated with commodities purchased. Every year, members do substantial research to explore the social, economic, and environmental impacts of current vendors and then begin the process towards switching to more sustainable vendors. In 2015-2016, the task force is focused on online textbooks, coffee, science lab materials, and office supplies employing Life Cycle Cost Analysis to establish whole-system thinking as a cultural norm in resource planning.

Our school complies with the Connecticut recycling laws. Every classroom and office has a recycling bin, and they are placed in common areas and by building entrances and athletic fields to collect materials. Our town has single-stream recycling. Last year, King diverted over 77% of its waste.
from disposal, with 57% of its waste sent for recycling, and 20% of the total which was food waste for composting.

King was the first independent school to hire our compost contractor, New England Compost. Before doing so, King had to create a market in Fairfield County to make it economically feasible for the company to expand its operations into southern Connecticut. Our outreach to over a dozen independent schools in the area planted the seeds for what became a very successfully composting infrastructure.

Finally, electronic waste, batteries, and printer cartridges are collected and picked up by Upcycle, LLC in New Jersey for proper recycling.