Massachusetts Green Ribbon Schools Application (2015-2016)

Thank you for your interest in completing the Massachusetts application for nomination to U.S. Department of Education Green Ribbon Schools (ED-GRS). In order to complete this application, you will need to collect data about your school's facility, health and safety policies; food service; and environmental and sustainability curriculum.

ED-GRS recognizes schools taking a comprehensive approach to greening their school. A comprehensive approach incorporates environmental learning with improving environmental and health impacts. Becoming a U.S. Department of Education Green Ribbon School is a two-step process. The first step is to complete and submit this form to be selected as a nominee by Massachusetts Department of Elementary and Secondary Education (ESE). If selected, ESE then submits the nominee package to the U.S. Department of Education (ED).

ED selects honorees from those presented by states and other eligible nominating authorities nationwide. Selection will be based on documentation of the applicant's high achievement in the three ED-GRS Pillars:

Pillar I: Reduce environmental impact and costs.
Pillar II: Improve the health and wellness of students and staff.
Pillar III: Provide effective environmental and sustainability education, incorporating STEM, civic skills and green career pathways.

Schools demonstrating exemplary achievement in all three Pillars will receive highest rankings. It is important to document concrete achievement.

It will help you to assemble a team to complete the application. This team might include: a facilities manager, physical education director, food services director, curriculum director, finance department representatives, teachers and students. You should consult the ESE Green Ribbon Schools page for Massachusetts specific resources and the ED-GRS resources page for standards, programs and grants related to each Pillar, Element and question. This is an excellent clearinghouse of resources for all schools, not just those who apply. ESE encourages schools to reach out to the contacts provided if you are not able to provide documentation in certain areas. They are willing to assist you in compiling and accessing this information.

The questions in this application will help you demonstrate your high achievement in these Pillars as well as provide space for you to include pertinent documentation. Applicants should be as comprehensive as possible. If the application does not touch upon a program or initiative that your school is participating in, please include further information. Please be advised applications must be under 20 pages. Massachusetts provided an appendix section for schools to submit additional documentation for the state level review (maximum of 5 pages). Applications are due to ESE by Monday, January 4, 2016. Applications may be sent electronically to Lauren Greene at lgreene@doe.mass.edu (781-338-3107)

Note that if selected for nomination to ED-GRS, the school principal and district superintendent must be prepared to certify that each of the statements below concerning the school’s eligibility and compliance with the following requirements is true; however, 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 one or more of grades Pre-K-12. (Schools on the same campus with one principal, even a Pre-K-12 school, must apply as an entire school.)

2. The school has been evaluated and selected from among schools within the Nominating Authority’s jurisdiction as 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. 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.

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.

School Contact Information

School Name: ____________________________________________

Street Address: __________________________________________

City: ___________________________ State: _______ Zip: _______________

Website: _______________________________ Facebook page: ____________________________________________

Principal Name: ____________________________________________

Principal Email Address: _______________________________ Phone Number:_________________________________

Lead Applicant Name (if different): ____________________________________________

Lead Applicant Email: _______________________________ Phone Number:_________________________________
### Application Outline:

<table>
<thead>
<tr>
<th>ED-GRS Pillars and Elements</th>
<th>Points</th>
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<tbody>
<tr>
<td><strong>Pillar I: Reduce environmental impact and costs:</strong> 30%</td>
<td></td>
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<tr>
<td>Element 1A: Reduced or eliminated greenhouse gas (GHG) emissions</td>
<td></td>
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<tr>
<td>Energy</td>
<td></td>
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<tr>
<td>Buildings</td>
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<tr>
<td>Transportation</td>
<td>10 points</td>
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<tr>
<td>Element 1B: Improved water quality, efficiency, and conservation</td>
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<tr>
<td>Water</td>
<td></td>
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<tr>
<td>Grounds</td>
<td>10 points</td>
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<tr>
<td>Element 1C: Reduced waste production</td>
<td></td>
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<tr>
<td>Waste</td>
<td></td>
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<tr>
<td>Hazardous waste</td>
<td>10 points</td>
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<td><strong>Pillar II: Improve the health and wellness of students and staff:</strong> 30%</td>
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<tr>
<td>Element 2A: Integrated school environmental health program</td>
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<tr>
<td>Integrated Pest Management</td>
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<tr>
<td>Contaminant controls and Ventilation</td>
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<tr>
<td>Asthma control</td>
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<td>Indoor air quality</td>
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<td>Moisture control</td>
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<tr>
<td>Chemical management</td>
<td>15 points</td>
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<tr>
<td>Element 2B: Nutrition and fitness</td>
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<tr>
<td>Fitness and outdoor time</td>
<td></td>
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<tr>
<td>Food and Nutrition</td>
<td></td>
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<tr>
<td>Other coordinated school health programming</td>
<td>15 points</td>
</tr>
<tr>
<td><strong>Pillar III: Provide effective environmental and sustainability education, incorporating STEM, civic skills and green career pathways:</strong> 40%</td>
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<tr>
<td>Element 3A: Interdisciplinary learning about the key relationships between dynamic environmental, energy and human systems</td>
<td>20 points</td>
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<tr>
<td>Element 3B: Use of the environment and sustainability to develop STEM content, knowledge, and thinking skills</td>
<td>10 points</td>
</tr>
<tr>
<td>Element 3C: Development and application of civic knowledge and skills</td>
<td>10 points</td>
</tr>
<tr>
<td>Total</td>
<td>100 points</td>
</tr>
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</table>

**Level**
- [ ] Early Learning Center
- [ ] Elementary (PK - 5 or 6)
- [ ] K - 8

**School Type**
- ( ) Public
- ( ) Private/Independent
- ( ) Charter

**How would you describe your school?**
- ( ) Urban
- ( ) Suburban

**District Name**
__________________

Is your school in one of the largest 50 districts in the nation?
- ( ) Yes  ( ) No
Summary Narrative: Provide a narrative 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 (approx. 800-1,000 words).

1. Is your school participating in a local, state or national school program, such as EPA ENERGY STAR Portfolio Manager, MA-CHPS, EcoSchools, Project Learning Tree, or others, which asks you to benchmark progress in some fashion in any or all of the Pillars?
   ( ) Yes ( ) No  Program(s) and level(s) achieved: ____________________________________________

2. Has your school, staff or student body received any awards for facilities, health or environment?
   ( ) Yes ( ) No  Award(s) and year(s) _____________________________________________________

3. Does your school participate in any Massachusetts environmental, health, or STEM programs/partnerships?
   ____________________________________________________________________________________

Pillar I: Reduced Environmental Impact and Costs

Energy

Building Specifications

| Building Constructed (year):       | Meets green building standard: |
| Area:                             | Year certified:               |
| Renovations:                      | Total area certified:         |
| Year                              | Green/Efficiency Features (heating, windows, insulation, etc.): |
| % of building renovated:          |

Please note: If your city or town is a Massachusetts Green Community, energy reduction and other information should already be available through your municipality, please see- http://www.mass.gov/eea/energy-utilities-clean-tech/green-communities/.

1. Can your school demonstrate a reduction in Greenhouse Gas emissions?
   ( ) Yes ( ) No  Percentage reduction: ___________ Over (m/yy - m/yy): ______________________

   Initial GHG emissions rate (MT eCO2/person): ____________________________
Final GHG emissions rate (MT eCO2/person): _________________________
Offsets: ________________________ How did you calculate the reduction? _________________________

2. Do you track resource use in EPA ENERGY STAR Portfolio Manager? ( ) Yes ( ) No

If no, do you use a different energy portfolio? _________________________________

If yes, what is your score? ______ If score is above a 75, have you applied for and received ENERGY STAR certification? ( ) Yes ( ) No Year: ______

3. Has your school reduced its total non-transportation energy use from an initial baseline? ( ) Yes ( ) No

Current energy usage (kBTU/student/year): _________________________

Current energy usage (kBTU/sq. ft./year): _________________________

Percentage reduction: _________________________ over (m/yy - mm/yy): _________________________

How did you document this reduction? _________________________________

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

On-site renewable energy generation: ____________ Type___________________

Purchased renewable energy: _________ Type___________________

Participation in USDA Fuel for Schools, DOE Wind for Schools or other federal or state school energy program: __________________________________________

Water and Grounds

5. Can you demonstrate a reduction in your school's total water consumption from an initial baseline? (If you are not tracking on a school level, please contact the district or town)

Average Baseline water use (gallons per occupant): ____________

Current water use (gallons per occupant): _________________________

Percentage reduction in domestic water use: _________________________

Percentage reduction in irrigation water use: _________________________

Time period measured (mm/yyyy - mm/yyyy): _________________________

How did you document this reduction (ie. ENERGY STAR Portfolio Manager, utility bills, school district reports)?: _________________________________

Our school's drinking water comes from: ( ) Municipal water source ( ) Well on school property ( ) Other:

6. What percentage or your landscaping is considered water-efficient and/or regionally appropriate?: ____________ Types of plants used and location: _________________________
7. Describe alternate water sources used for irrigation.

8. Describe how the water source is protected from potential contaminants, including lead and efforts to reduce stormwater runoff and/or reduce impermeable surfaces.

9. What percentage of the school grounds are devoted to ecologically beneficial uses?

**Waste**

Do you have waste reduction, recycling, or composting programs? Try the math:

10. What percentage of solid waste is diverted from landfills or incinerating due to reduction, recycling and/or composting?

   
   
   A - Monthly garbage service in cubic yards (garbage dumpster size(s) x number of collections per month x percentage full when emptied or collected): _________________________

   B - Monthly recycling volume in cubic yards (recycling dumpster sizes(s) x number of collections per month x percentage full when emptied or collected): _________________________

   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):

   _________________________

   Recycling Rate = ((B + C) ÷ (A + B + C) x 100): _________________________

   Monthly waste generated per person = (A/number of students and staff): _____________________

11. Do you use any other post-consumer, recycled, responsibly managed or organic materials in your school (paper, napkins, silverware, building or supply materials etc)?

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

<table>
<thead>
<tr>
<th>Flammable liquids</th>
<th>Corrosive liquids</th>
<th>Toxics</th>
<th>Mercury</th>
<th>Other:</th>
</tr>
</thead>
</table>

   How is this measured? ____________________________________________

   How is hazardous waste disposal tracked? ____________________________

   Any other measures taken to reduce solid waste and eliminate hazardous waste ____________________________________________

13. Which green cleaning custodial standard is used? _________________________

   What percentage of all products is certified? _________________________

   What specific third party certified green cleaning product standard does your school use? _________________________
Alternative Transportation

14. What percentage of your students walk, bike, bus, or carpool (2 + student in the car) to/from school? (Note if your school does not use school buses) ____________________________________________

15. Has your school implemented?

[ ] organized carpool program
[ ] designated carpool parking stalls
[ ] a well-publicized no idling policy that applies to all vehicles (including school buses)
[ ] Vehicle loading/unloading areas are at least 25 feet from building air intakes, doors, and windows.
[ ] Safe Pedestrian Routes to school or Safe Routes to School
[ ] eco-friendly buses (clean burning, electric, etc)

16. Describe how your school transportation use is efficient and has reduced its environmental impact, including any innovative or unique practiced and partnerships.

Pillar 2: Improve the health and wellness of students and staff

Environmental Health

All Massachusetts schools are required to file an IPM plan, and review on an annual basis. To create, edit, or view your plan, please see- http://massnrc.org/ipm/

1. Describe your school’s Integrated Pest Management efforts, including IPM/green certifications earned, routine inspections, pest identification, monitoring, record-keeping, etc.:
_________________________________________________________________________________

2. What is the volume of your annual pesticide use (gal/student/year)? Describe efforts to reduce use:
_________________________________________________________________________________

3. 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 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 uses fuel burning appliances and has taken steps to protect occupants from carbon monoxide (CO)

[ ] Our school does not have any fuel burning combustion appliances

[ ] Our school has tested all frequently occupied rooms at or below ground level for radon gas and has fixed and retested all rooms with levels that tested at or above 4 pCi/L OR our school was built with
radon resistant construction features and tested to confirm levels below 4 pCi/L. For more information, please see [http://www.epa.gov/radon/pubs/schoolrn.html](http://www.epa.gov/radon/pubs/schoolrn.html).

Last date of radon testing: __________________________________________

[ ] Our school has identified any wood playground or other structures that contain chromate copper arsenate and has taken steps to eliminate exposure

4. Describe actions your school takes to prevent exposure to asthma triggers in and around the school.

5. Describe actions your school takes to: manages and controls student and staff exposure to chemicals (including pesticides) routinely used in the school; control moisture from leaks, condensation, and excess humidity and promptly cleanup mold or removes moldy materials when it is found; inspect and maintain the building’s ventilation system and all unit ventilators to ensure they are clean and operating properly; actions to ensure that all classrooms and other spaces are adequately ventilated with outside air, consistent with state or local codes, or national ventilation standards.

6. Describe any other steps your school takes to protect indoor environmental quality such as implementing 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.

**Nutrition and Fitness**

7. 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.

[ ] Our school participates in the USDA’s Heathier US School Challenge. Level and year: __________________________________________

[ ] Our school participates in a Farm to School program to use local, fresh food

[ ] Our school has an on-site food garden __________________________________________

[ ] Our school garden supplies food for our students in the cafeteria, a cooking or garden class or to the community ______________________________________

[ ] Food purchased by our school is certified as "environmentally preferable"
Percentage: ______ Type: ________________________________

[ ] Our students spent at least 120 minutes per week over the past year in school supervised physical education ______________________________________

[ ] At least 50% of our students' annual physical education takes place outdoors ________________

[ ] Health measures are integrated into assessments ______________________________________
Students have participated in the EPA’s Sunwise (or equivalent program)

8. Describe the type of outdoor education, exercise and recreation available.

9. Describe any other efforts to improve nutrition and fitness, highlighting innovative or unique practices and partnerships.

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

10. Does your school use a Coordinated School Health approach or other health-related initiatives to address overall school health issues? ( ) Yes ( ) No

If yes, describe the health-related initiatives or approaches used by the school:

11. Does your school partner with any postsecondary institutions, businesses, nonprofit organizations, or community groups to support student health and/or safety? ( ) Yes ( ) No

If yes, describe these partnerships:

12. Does your school have a school nurse and/or a school-based health center? ( ) Yes ( ) No

13. Describe your school’s efforts to support student mental health and school climate (e.g. anti-bullying programs, stress reduction, peer counseling, etc.):

Please note: All Massachusetts schools are required to have bullying prevention and intervention plans and collect and report the data to the MA DESE, http://www.doe.mass.edu/bullying/.

Pillar 3: Effective Environmental and Sustainability Education

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.
   [ ] Our school has an environmental or sustainability literacy requirement.

   [ ] Environmental and sustainability concepts are integrated throughout the curriculum and assessments.
[ ] Students evidence high levels of proficiency in these courses and assessments.

[ ] Professional development in environmental and sustainability education are provided to teachers.

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

   Percentage of last year’s eligible graduates who completed the AP Environmental Science course during their high school career: ____________ Percentage scoring a 3 or higher: _________________

   Additional AP courses offered in the STEM area:

3. How does your school use sustainability and the environment as a context for learning science, technology, engineering and mathematics thinking skills and content knowledge?

4. How does your school use sustainability and the environment as a context for learning green technologies and career pathways?

5. Describe students’ civic/community engagement projects integrating environment and sustainability topics.

6. Describe students’ meaningful outdoor learning experiences at every grade level.

7. Describe how outdoor learning is used to teach an array of subjects in contexts, engage the broader community, and develop civic skills.

8. Describe your partnerships to help your school and other schools achieve in the 3 Pillars. Include both the scope and impact of these partnerships.

9. Describe any other ways that your school integrates core environment, sustainability, STEM, green technology and civics into curricula to provide effective environmental and sustainability education, highlighting on innovative or unique practices and partnerships.
APPENDIX

Schools may provide additional information or documentation including photos, videos, brochures, and participation in Massachusetts specific programs. Limit 5 pages.