

# NC GreenPower Solar Schools 2019

## *Application Questions for NC GreenPower Solar Schools Pilot For North Carolina K-12 Schools*

Issue Date: **January 2, 2019**

Application Deadline: **February 28, 2019, 5:00 PM EST**

**The full application can be found online at:**

<https://goo.gl/forms/O4nxYL9fCRrJ6e7s2>

### Section 1: Acceptance of system type

The NC GreenPower Solar Schools Pilot Program is currently installing top-of-pole mounted systems, ranging from 8 to 12 panels (3 kW - 5 kW) on one galvanized steel pole. However, roof-mounted arrays may be considered if they can be installed in prominent, visible locations of the school (e.g. front of the school).

Our school agrees to accept a top-of-pole mounted system or a roof-mounted system, if applicable.

### Section 2: General Information

1. Applicant information:
  - a. Name of school
  - b. Physical address
  - c. City, zip code and district
  - d. County
  - e. In what Tier is your school located? Designated by the [NC Commerce Department](#). (Tier 1, 2 or 3)?
  - f. Is your school eligible for or have you received Title 1 funding?
  - g. Is school a 501(c)(3) non-profit or a designated 170(c)(1) governmental agency?
2. Primary contact:
  - a. Name
  - b. Title
  - c. Telephone



- d. Cell phone
- e. Email

*Be sure to provide all appropriate contact information in case NC GreenPower needs to reach you during school breaks.*

3. School Principal or Administrator:
  - a. Name
  - b. Title
  - c. Telephone
  - d. Cell phone
  - e. Email
4. Type of school (list public or private, plus any other designations: charter, STEM, magnet, other)?
5. Check the grade levels at your school: (e.g. K-5, 6-8, 9-12)
6. Is your school urban, suburban, or rural?
7. Total number of students enrolled:
8. Percent of population in your community that is served by your school, if available:  
(answer not required):
9. Total percentage of students on free and reduced lunch:
10. Electric utility provider:
11. Name of owner of school property, if not school:
12. Does your school have fundraising organizations such as a PTA/PTO or Booster Club?  
If yes, please list:
13. Do you or your students participate in any fundraising efforts throughout the year? If so, how many?
14. What has been your most successful fundraising campaign in the past five years? How long did it take to raise the funds and how much was raised?

*Before answering the next question, please review the “NC GreenPower Solar Schools 2018, Information for NC K-12 Schools Regarding the NC GreenPower Solar Schools Pilot Application” document, referring to the “Funding” section on p. 4, first and second paragraphs.*



15. System costs vary depending on a number of variables, such as siting, soil conditions, wind ratings, etc. School fundraising goals have ranged from \$6,400 - \$19,700 with the average being around \$12,100. We typically allow for a 20 week fundraising period. How long do you think it would take your school to raise funds? \_\_\_\_\_
16. Provide fundraising plans your school would implement if selected for the pilot to include:
  - a. anticipated completion date to raise necessary funds, and
  - b. anticipated timeline for installation of solar PV system

### Section 3: Demonstrated Commitment to Sustainability, Energy Efficiency and Environmental Education

1. Has your school participated in a local, state, or national program such as EPA ENERGY STAR Portfolio Manager, EcoSchools, Green Ribbon School or others? If yes, please list:
2. Has your school, staff, or student body received any awards for energy efficiency or environmental programs?
3. Does your school have an energy or facilities manager on-site or have a district/area manager available for consultation?
4. Has the school undertaken any energy efficiency measures within the last five years? If so, please list:
5. For schools with grades 9-12 who offer AP Environmental Science, provide:
  - a. Percentage of last year's eligible graduates who completed the course during their high school career
  - b. Percentage who scored 3 or higher
6. Does your school already have classes that could be supplemented by a solar PV system and related curriculum? If so, please list the classes:
7. Describe any other ways that your school integrates core environment, sustainability, STEM, green technology and/or career skills into curricula:
8. Participating schools are required to send 3-5 teachers to our curriculum training so they are comfortable using solar materials in the classroom. How many teachers will



commit to attend a training class on the associated curricula that would be provided by NC GreenPower?

9. Do you have a teacher(s) or staff person(s) who could be trained to provide basic daily maintenance of the solar PV system and related monitoring equipment?

#### Section 4: Expected Educational and Environmental Benefits

1. Please describe how the installation of solar PV at your school aligns with your mission or goals.
2. Please describe your plans to incorporate student and community outreach and/or education into the installation and operation of the solar PV project.
3. Please describe how you will track and measure the environmental and educational benefits from the PV system for the Post-Installation Solar Evaluation. (This is a requirement of the program.)
4. Summarize any expected educational benefits from the on-site solar PV installation, such as how your school may integrate the demonstration project into the learning and teaching mission of the school.

#### Section 5: Technical Questions

1. NC GreenPower prefers that systems be top-of-pole-mounted to maximize visibility and safety for students. Does your school have a shade-free location for the installation of a pole-mounted solar PV system?
2. Provide the proposed specific location(s) of top-of-pole-mounted solar PV system, such as a link to Google maps location, provide longitude and latitude or link to photo/aerial image with location highlighted. NC GreenPower reserves the right to select the final location.
3. Would your school be willing to install a roof-mounted PV system at the front of the school?
4. Does your school have the staffing resources to handle an on-site solar PV project (both administratively and for system maintenance)?
5. Do you anticipate any barriers on the school's side? If so, how confident are you that they can be addressed?
6. Have you asked for and received approval from your city or county to install solar PV?



7. Have you asked for and received approval to apply for our grant from your school district facilities office?
8. Have you investigated obtaining the necessary city/county building and zoning permits? (List may include but is not limited to: electrical, building and zoning permits; Notice of Proposed Construction with NC Utilities Commission, utility Power Purchase Agreement (PPA) or similar agreement.)

NC GreenPower representative or solar installers will be responsible for obtaining any necessary licenses and/or permits and for complying with all applicable federal, state and municipal laws, codes and regulations in connection with the solar PV installation.

NC GreenPower representative will also be responsible for executing an Interconnection Agreement with the appropriate electric utility. Power output from the solar installation that is placed on the electrical grid may be purchased by the utility currently serving the school. The school will be responsible for working with the utility to determine that information through a Power Purchase Agreement (PPA).

NC GreenPower will pay the contractor upon satisfactory installation of the solar PV system. Monitoring equipment and curriculum will also be provided to school upon completion of the solar PV installation.

## Section 6: Post-Installation Evaluation Plan

Applicants will be evaluated on the strength of their plan for evaluating the success of the project, including how well the pilot achieved educational goals. Within one year of completion of the project installation, awarded schools must provide a Post-Installation Evaluation to NC GreenPower, including the following:

- Monthly output of the solar PV system, compared with monthly total energy consumed by the school since the solar PV project came online.
- Summary of any technical lessons learned during the installation process.
- Report of educational benefits of the on-site solar PV installation, such as a summary of the ways in which the project has become a part of the learning/teaching mission of the school or any curricula developed as a result of the solar PV installation.
- Summary of the environmental benefits of the solar PV installation shown in terms of greenhouse gas emissions avoided, metric tons of CO<sub>2</sub> displaced, number of equivalent miles not driven, etc.



## Other Important Information

**Approval and Installation Requirement:** NC GreenPower, in its sole and absolute discretion, may accept or reject any Application for any reason. Upon NC GreenPower’s acceptance of an Application, NC GreenPower will notify the Applicant. System installation must begin within ninety (90) days of fundraising deadline, unless approved by NC GreenPower. **If solar PV system construction or installation occurs before Application acceptance, then NC GreenPower may, in its sole and absolute discretion, determine that the Applicant’s system is ineligible. In such event, NC GreenPower shall have no obligation to make any grant payment to or on behalf of the Applicant.**

**Crowd-Source Fundraising with myNCGreenPower.org:** For crowd-source raised funds through my.NCGreenPower.org and for all other funds posted on school’s campaign at my.NCGreenPower.org, NC GreenPower will retain 10% to cover program costs and the remaining 90% will be used to fund the solar PV system at the awarded school.

**Unsuccessful Fundraising:** If a school does not raise enough funds, it may have options such as extending their fundraising deadline by 30 days, decreasing the size of solar PV system to decrease project costs, or asking NC GreenPower to use the funds to purchase renewable energy educational materials and classroom kits for the school from NEED.org. Additional options may be available to assist a school in its fundraising efforts.

**Eligibility:** North Carolina K-12 schools served by Duke Energy Carolinas, Duke Energy Progress, Dominion Energy North Carolina, North Carolina’s Electric Cooperatives or Electricities of North Carolina are eligible to apply.

**System Requirements:** The solar PV system must be: (1) installed on real property owned by applying school, located in North Carolina with electric service to the site being supplied by aforementioned utilities from “Eligibility” section, (2) installed and operated in accordance with governmental and industry standards and comply with the National Electric Code requirements, and (3) between three kilowatts (kW) DC and five kW DC capacity rating (on an aggregate basis). If applying school does not own the real property on which the solar PV system is to be installed, applying school must have authorized approval by property owner.

## Section 7: Authorization

By submitting this application, I agree that all of the information provided herein is true and correct and that I have the legal authority to submit this application and receive the solar PV project, if awarded. I understand that receipt of NC GreenPower grant funding is dependent on provision of at least 50% match from other sources. If my school is unable to obtain the required matching funds by the deadline, I understand that NC GreenPower funds will not be provided.



I have read and agree to all of the requirements as stated above. I understand that NC GreenPower is not responsible for any errors, delays in transmission, or delays in the processing of my form caused by email or a server issue. I further confirm that the organization I represent owns the property at the above address upon which the solar PV system is installed or will receive prior approval from the property owner, if awarded.

I certify that my school will maintain and operate the solar PV system and monitoring equipment for a period of not less than ten (10) years. I also understand and agree to have select educators from my school attend curriculum and system maintenance training.

**I agree that NC GreenPower shall have no responsibility or liability for any loss, injury, claim, liability or damage of any kind resulting from, arising out of, or in any way related to operation or the quality, condition or delivery of the solar PV system at my school or for any acts or omissions of the installer, and NC GreenPower shall have no responsibility or liability for any warranty, express or implied, including without limitation any implied warranty of merchantability or fitness for a particular purpose.**

Please submit the completed NC GreenPower Solar Schools application by 5:00 PM EST on Thursday, February 28, 2019.

You will automatically receive an email with a copy of your submitted answers. We will also respond to confirm receipt of your submission within 2 business days.

## Questions

Inquiries about the process are requested to be sent via email to [solarschools@ncgreenpower.org](mailto:solarschools@ncgreenpower.org). Responses will be posted on the NC GreenPower so that all applicants have access to the same information. Any updates to the application or process will also be posted on our [website](#).