P-12 Schools - Clean Green Schools Initiative

PON 4924

Hannah Morgan, Senior Project Manager
Efficiency Planning & Engineering Team
5-4-22
Meeting Procedures

- Participation for Members of the Public:
  - Members of the public are muted upon entry.
  - Questions and comments may be submitted in writing through the Q&A feature at any time during the event.
  - Chat is disabled.
  - Today's materials along with a recording of the webinar will be posted to - nyserda.ny.gov/P-12-Clean-Green-Schools
  - If technical problems arise, please contact - Sal.Graven@nyserda.ny.gov
Overview of Clean Green Schools Initiative

• Budget:
  o $59M

• Program Goal:
  o The goal of the program is to help under-resourced public schools decarbonize their building portfolio and improve indoor air quality (IAQ) across their buildings. Schools participating in the program may also receive funding to support eligible activities that create or further clean energy educational opportunities for students, faculty, staff, and the surrounding community.

• Eligibility:
  o All existing public school buildings across NYS that are designated as High-Needs by the New York State Education Department or located in a disadvantaged community.
  o System Benefits Charge (SBC) contribution is not required for participation in this program.

• Building Aid:
  o A provision in the enacted FY2023 NYS Budget eliminates the reduction in Building Aid that districts would otherwise face for projects receiving a grant through NYSERDA’s Clean Green Schools Initiative.
This program provides funding in two tracks to support a school's pathway towards decarbonization.

- **Track I Planning**: Open Enrollment (accepting apps until 12/30/25)
  - Provides funding for services which will help schools evaluate, plan for and facilitate energy reduction projects, clean energy projects and indoor air quality projects.

- **Track II Installation**: Competitive (first round: proposals due 7/27/22)
  - Provides funding to implement construction projects which will help schools decarbonize their buildings.

- **Clean Energy Educational and Professional Development Opportunities**:
  - NYSERDA will provide funding to support a range of workforce development and student educational activities for P-12 students that explore, support or promote decarbonization efforts in their schools and communities. This is an optional service in Track I and Track II.

- Track I may be used towards project planning associated with Track II. Participation in Track I is not a requirement to participate in Track II.
• **Eligible services include, but are not limited to:**

  o Engineering & Architecture Services
    ▪ Energy Benchmarking
    ▪ Energy Studies
    ▪ Energy Efficiency and Clean Heating and Cooling Design Services
    ▪ Energy Master Planning and Decarbonization Roadmaps
    ▪ Clean Transportation Studies
    ▪ Indoor Air Quality Evaluation and Management
  o On-Site Energy Manager
    ▪ District level or across districts
  o Services Associated with Clean Energy Projects
    ▪ Grant Writer
    ▪ Fiscal Advisor
  o Clean Energy Educational and Professional Development Activities
    ▪ *This must be paired with an above bullet and is ineligible as a standalone project.*
<table>
<thead>
<tr>
<th>Track I NYSERDA Caps</th>
<th>District Annual Energy Spend</th>
<th>District Annual Energy Spend</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Less than $500,000</td>
<td>More than $500,000</td>
</tr>
<tr>
<td>Building Caps</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy Benchmarking 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$150,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metering (hardware costs only) 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>not to exceed 10% of Track I services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fiscal Advisor and/or Grant Writer 2</td>
<td>$30,000</td>
<td>$60,000</td>
</tr>
<tr>
<td>On-Site Energy Manager 2</td>
<td>$100,000</td>
<td>$200,000</td>
</tr>
<tr>
<td>Building Clean Energy Educational and Professional Development Activities Cap 4</td>
<td>$10,000</td>
<td></td>
</tr>
<tr>
<td>Maximum Building Caps</td>
<td>$260,000</td>
<td>$360,000</td>
</tr>
<tr>
<td>District Caps</td>
<td>$300,000</td>
<td>$500,000</td>
</tr>
<tr>
<td>District Clean Energy Educational and Professional Development Activities Cap 4</td>
<td>$50,000</td>
<td></td>
</tr>
<tr>
<td>Maximum District Caps</td>
<td>$450,000</td>
<td>$750,000</td>
</tr>
</tbody>
</table>

1. The cap is included in the Track I NYSERDA Cap of $150,000.
2. The cap is included in the Track I NYSERDA Cap of $150,000. This is the Building and District Cap.
3. This is a standalone cap and is in addition to funding for other Track I services. This is the Building and District Cap.
4. This is a standalone cap and is in addition to funding for other services.
A complete application package includes the following:

- Track I Program Application
- Scope of Work
- Budget

Applicants may be either the school or an authorized representative of the school.

Applicants may include one or more Track I services in their Scope of Work.

Applicants may submit one application on behalf of multiple buildings within a district.

Template documents are available on the Clean Green Schools Initiative documents and resources website.
• Clean Heating and Cooling Projects:
  o Ground Source Heat Pump
  o Air Source Heat Pump
  o Variable Refrigerant Flow System

• Capital Projects to Move Towards Decarbonization:
  o Comprehensive retrofits that impact energy consumption and overall building load
  o Electrification of building systems (e.g., kitchen equipment & domestic hot water heaters)
  o Building electrification readiness projects:
    ▪ High performance building envelope (e.g., air sealing, insulation, window film)
    ▪ Heating/cooling projects
    ▪ Conversion of distribution systems (e.g., steam to hot water) to support potential future electrification
  o Transition to low carbon fuels (e.g., biofuel blends)

• Clean Energy Educational and Professional Development Activities

Ineligible Projects:
- System conversion to natural gas
- Full system replacement to new fossil fuel-based system
Track II Installation: Funding

- **Per Building:**
  - $500,000 - $3,000,000 for eligible project types and
  - Up to $30,000 for Clean Energy Educational and Professional Development Activities
  - Up to another $1,000,000 for projects that either propose to install ground source heat pumps or that propose to fully electrify both space and domestic hot water equipment with any eligible Clean Heating and Cooling Technologies.
  - **Total max funding** per school building is $4,030,000

- **Per District:**
  - $500,000 - $5,000,000 for eligible project types and
  - Up to $100,000 for Clean Energy Educational and Professional Development Activities
  - Up to another $1,000,000 for projects that either propose to install ground source heat pumps or that propose to fully electrify both space and domestic hot water equipment in at least one school with any of the Clean Heating and Cooling Technologies listed above
  - **Total max funding** per district is $6,100,000

- **Additional Incentives:**
  - Additional incentives may be available through your local utility.

*Project costs are up to 100% funded, net other funding sources.*
A complete Track II Proposal package includes the following:

- Completion of the series of questions presented in NYSERDA’s online portal submission platform
- School Authorization Form, if applicable (Attachment B)
- Track II Proposal Template (Attachment D)
- Track II Budget Template (Attachment E)

- Applicants may be either the school or an authorized representative of the school.

- Applicants must not have entered into a contract with a construction firm prior to applying.

- First Round: Proposals are due on 7/27/22 by 3:00 pm EST.

- Read the PON and ask questions!
Proposals will be evaluated by a Scoring Committee based on their overall responsiveness and specifically based on the Evaluation Criteria below, which are listed in order of importance:

- Project Impact (40 points)
- Project Team and Stakeholder Commitment (20 points)
- Project Scope of Work (20 points)
- Clarity of Budget (15 points)
- Clean Energy Educational and Professional Development Activities (5 points)

Track II Installation: Proposal Evaluation
Track II Proposal Template – Table of Contents

I. Project Impact ................................................................................................................................. 2
   a. Background and Objective (*1 page*) .................................................................................... 2
   b. Project Description (*2 pages*) ............................................................................................... 2
   c. Project Impact Methodology .................................................................................................. 3
   d. Project Energy and Carbon Savings Impact .......................................................................... 3

II. Project Scope of Work .................................................................................................................. 4

III. Project Team and Stakeholder Commitment ........................................................................... 7
    a. Project Team ......................................................................................................................... 7
    b. Letters of Support from Community Stakeholders (if applicable) ...................................... 8

IV. Key Target Dates .......................................................................................................................... 8

V. Budget ........................................................................................................................................... 8
   a. Task Budget and Schedule ..................................................................................................... 8
   b. Other Funding Sources ......................................................................................................... 8
Track II Installation: Proposal Evaluation

- **Project Impact (40 points):**
  - Reduces or eliminates fossil fuel consumption (e.g., by reducing thermal load and/or demand, improving equipment efficiency, electrification of certain loads).
  - Methodology to quantify energy impacts is clear, well-defined, and sound.
  - Includes activities that will lead to reduced long-term dependence on fossil fuels.
  - Appropriate ventilation and filtration as a result of the decarbonization project.
  - Viability of the proposed project.
  - Project includes installation of clean heating and cooling system(s) that will supply a portion of the school building’s heating and cooling load.
  - Resiliency is discussed as it relates to the project which will help the school adapt to climate-related risks.
  - Project has added context to the technology transfer plan.
  - Project has added context to the engagement of or a plan to engage with environmental justice or disadvantaged communities. If applicable, stakeholder input is incorporated into or addressed by the project plan.
I. Project Impact
   a. Background and Objective (1 page)
   Provide a brief statement about the existing condition and performance of the building(s.)

   Provide a brief description summarizing how the proposal will improve the environmental sustainability of the school by reducing energy loads, decarbonizing the building(s), improving indoor air quality (IAQ), and incorporating the use of clean energy educational opportunities.

   Include a list of key actions to be undertaken as part of this project.

   For example:
   - Design and install a new ground-source heat pump system (GSHP) to replace central heating and cooling plant at XYZ School.
   - Commission new system after installation.
   - Train facilities team on how to operate new HVAC system.
   - Develop and implement educational materials leveraging data from the ground source heat pump system to be shared with the school district.

b. Project Description (2 pages)
   Proposers should provide clear and concise descriptions to address the following bullets. Note, additional pertinent details about the project shall be populated in the Scope of Work tasks (see Section II):

   - Describe the building upgrades or actions that are expected to impact electricity and fossil fuel consumption. If applicable, what portion of the school building’s heating and cooling load and/or domestic hot water is proposed to be served by a clean heating and cooling system(s)?
   - Describe the project’s viability, including potential risks and challenges, financing solutions, stage of project (e.g. conceptual design, referendum approved, submitted to SED, etc.) or other key aspects of the project proposal.
   - Please describe how the ventilation and filtration impacts are considered and documented.
   - Describe the project resiliency components, if any, that will help the school, and if applicable the community, adapt to climate-related risks.
c. Project Impact Methodology
Detail the methodology and assumptions used to calculate the proposed project impact identified in the attached table (Table A.1). This should include:

- The type of analysis used to develop savings estimates (e.g. BIN analysis, computer modeling, etc.)
- Major assumptions used as basis for energy calculations

d. Project Energy and Carbon Savings Impact
Provide an estimate of project’s annual energy within the building(s) by completing Table A.1. Annual energy savings shall be presented as positive values. Increases in consumption shall be presented as negative values.

Table A.1 – Building Impacts
Double click the table below to input values.

<table>
<thead>
<tr>
<th>Metric</th>
<th>Annual Baseline Usage</th>
<th>Energy Savings (positive values)</th>
<th>Increased Consumption (negative values)</th>
<th>% Impact to Baseline</th>
<th>Carbon Savings (metric tons CO2)</th>
<th>Cost Impact ($$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual kWh</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual MMBtu (natural gas)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual MMBtu (other fossil fuel)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please identify other fossil fuel:
• Project Team and Stakeholder Commitment (20 points)
  o The extent to which the Project Team meets the necessary background and experience to ensure project success and likelihood of installation of project as proposed.
  o Preference will be given to projects implemented by contractors that are participating in New York State Department of Labor (NYS DOL) recognized pre-apprenticeship programs or NYS DOL registered apprenticeship programs.
  o Preference will be given to projects occurring at schools that are both High-Needs and located in a Disadvantaged Community (DAC).
  o Letters of support demonstrating stakeholder support for the project from the school, community, NYSED Facilities Planning Office and other relevant stakeholders.
III. Project Team and Stakeholder Commitment

a. Project Team

- Provide a list or organizational chart of all team members. For each team member, summarize the members’:
  - Roles and responsibilities – in effectively implementing the project.
  - Experience – to demonstrate the value and skill they bring to the team and how their participation strengthens the overall project.
- Describe if the Contractors selected for the project will be using NYS Department of Labor (DOL) recognized pre-apprenticeship programs or NYS Department of Labor registered apprenticeship programs. (e.g. language will be included in bid documents)
- State if the building included in the project is designated as High-Needs, located in a Disadvantaged Community (DAC) or both.

b. Letters of Support from Community Stakeholders (if applicable)

Provide letters of support as appropriate to demonstrate commitment from the school, community, NYSED Facilities Planning Office and other relevant stakeholders. Letters should be supplied for any critical partner (e.g. partnering school, service providers, specific vendor, not-for-profit, community organization, etc.) identified in this proposal.
• Project Scope of Work (20 points)
  o SOW has well-defined Tasks and Deliverables and demonstrates clear and thoughtful understanding of how the proposed project will be implemented.
  o Tasks cover activities needed to complete the proposed project.
II. Project Scope of Work

Complete the following Project Scope of Work Task and Deliverable template as described. Tasks should cover all aspects of the project. Tasks and Deliverables should be well-defined and should demonstrate clear and thoughtful understanding of how the proposed project will be implemented. NYSERDA makes no promise of additional funding for actions not included in the Project Scope of Work.

- Tasks 1 and 2 are completed for you, however the proposer should assign a budget to each task in Attachment E: Track II Budget Template.
- Task 3 and 4 are required elements of the proposal and budget. Please add project details and a budget for this task.
- Task 5 is an optional element of the proposal and budget. If applicable, please add project details and a budget for this task.
II. Project Scope of Work

Additional project specific tasks shall follow the following format. Referencing the list provided under the 1a. Project Impact – Background and Objective may provide assistance in creating the tasks. **Repeat** the Task and Deliverable format as often as needed to cover all aspects of the proposed project. Add tasks, deliverables, and associated budget to Attachment E – Track II Budget Template.

**Tasks 6-XX** – Title of Project Task(s) (Proposer to add relevant details & deliverables to each task)

Briefly describe the Task to be completed. Focus on the specific actions that will be taken and who will be responsible. Each Task should:

- Be worded using action phrases. For example, "XYZ School CSD will lead design of the new GSHP system to be installed"
- If the Proposer is working with a consultant, subcontractor, or similar outside organization, it should be clear who is completing the action. For example, "XYZ School CSD will develop an RFP to procure a general contractor to install the GSHP system."
- Be linear, so later tasks build on earlier tasks and earlier tasks inform work being completed in later tasks, to the extent possible.
- Avoid using phrases such as "etc." or "including, but not limited to" as these phrases are ambiguous and may lead to misinterpretation and incorrect assumptions during proposal evaluation.
- When referring to actions and/or deliverables completed in other Tasks, clearly draw that connection. For example, "Students will evaluate potential replicability opportunities in other school buildings based on data from the GSHP system installed in Task 3."

**Task 6-XX Deliverables**

At least one (1) Deliverable must be identified for each Task. Deliverables should:

- Be a direct result of work completed in the associated Task.
- Be a tangible item: a report, presentation, meeting minutes, web posting, completed installation, etc. For example, "Report detailing GSHP installation. Report shall include …"
- Clearly demonstrate to NYSERDA that the work outlined in the Task was completed. Submission and approval of Deliverables will trigger NYSERDA Payments (see PON 4924 Section V).
• Clarity of Budget (15 points)
  o Budget demonstrates total project cost, including breakdown of funding from investor-owned utilities, state aid, or any other funding source anticipated to be utilized, including the timeframe for securing the funding.
  o Budget is broken down by Task and includes granularity on each cost, as required in the Track II Budget Template (Attachment E).
  o Budget appears to be reasonable in cost and align with the SOW.
  o Budget section includes description of other funding sources

Track II Installation: Proposal Evaluation
V. Budget

a. Task Budget and Schedule
Every Task in the Project Scope of Work (see Section II) is required to have a cost and schedule associated with it. Provide a project budget and schedule by completing Attachment E: Track II Budget Template.

b. Other Funding Sources
Proposers shall include a description of the known or expected sources of capital within this section of the proposal template. This description shall align with the funding sources included in the Track II Budget Template (Attachment E). If the required project capital has not yet been secured, the proposer shall identify the anticipated timing of receiving the necessary funding.
## Track II Installation: Budget Template

Please populate other known or anticipated funding sources for this project:

<table>
<thead>
<tr>
<th>Source</th>
<th>Dollars ($)</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal Funding</td>
<td>$0</td>
<td></td>
</tr>
<tr>
<td>NYSED Building Aid Project Funding</td>
<td>$0</td>
<td></td>
</tr>
<tr>
<td>Utility Funding</td>
<td>$0</td>
<td></td>
</tr>
<tr>
<td>Other Third-Party Funding</td>
<td>$0</td>
<td></td>
</tr>
</tbody>
</table>

Please note: Include a description of each funding source in Attachment D (Track II Proposal Template), Section V (Budget).

Please populate expected Local Share or Remaining Project Cost after NYSERDA and Other Funding:

<table>
<thead>
<tr>
<th>Source</th>
<th>Dollars ($)</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Local Share</td>
<td>$0</td>
<td></td>
</tr>
<tr>
<td>Remaining Cost</td>
<td>$0</td>
<td></td>
</tr>
</tbody>
</table>

### Budget by Task

<table>
<thead>
<tr>
<th>Task</th>
<th>Task Name</th>
<th>Deliverable(s)</th>
<th>Task Anticipated Date Range</th>
<th>Capital and Equipment Costs ($)</th>
<th>Professional Service Costs ($)</th>
<th>Profesional Service Hours</th>
<th>In-Kind Contribution ($)</th>
<th>In-Kind Contribution Hours</th>
<th>Total Task Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task 1</td>
<td>Project Management and Progress Reporting</td>
<td>Project Management &amp; Quarterly Progress Calls, Annual Progress Memo, Project Final Report</td>
<td>Ongoing</td>
<td>NA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$</td>
</tr>
<tr>
<td>Task 2</td>
<td>Tracking Impact</td>
<td>Attendance at periodic meetings, Tracking and maintenance of data</td>
<td>Ongoing</td>
<td>NA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$</td>
</tr>
<tr>
<td>Task 3</td>
<td>Technology Transfer</td>
<td>Development of technology transfer materials, Attendance at periodic meetings</td>
<td>NA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$</td>
</tr>
<tr>
<td>Task 4</td>
<td>Environmental Justice and Disadvantaged Community Stakeholder Engagement</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$</td>
</tr>
<tr>
<td>Task 5</td>
<td>Clean Energy Educational and Professional Development Activities (optional)</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$</td>
</tr>
<tr>
<td>Task 6</td>
<td></td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$</td>
</tr>
</tbody>
</table>
Clean Energy Educational and Professional Development Activities (5 points):

- Student educational engagement, professional development, and/or career pathway opportunities.
II. Project Scope of Work

Task 5 - Clean Energy Educational and Professional Development Activities (Proposer to add relevant details to this task, if applicable)
Describe the student educational engagement, professional development, career pathway opportunities, and/or other activities to be included in this project. Discuss how each activity positively impacts the participating students, faculty, and staff.
NYSERDA will provide funding to support a range of workforce development and student educational activities for P-12 students that explore, support or promote decarbonization efforts in their schools and communities.

The Educational and Professional Development Activities Pathway document, which is located on the Clean and Green Schools Initiative documents and resources website:

- Should be consulted for assistance in designing these activities
- Includes existing programs, tools, and resources

Eligible activity costs include, but are not limited to:

- Curriculum development, program/license fees, software subscription fees, project supplies/tools/equipment, field trips, promotional material, speakers, teacher stipends, internship wages, textbooks, signage, clean energy toolkits, registration/entrance fees (conferences, camps, workshops), space rental, consultants/trainers fees, professional development fees, food, travel and lodging.
Clean Energy Educational and Professional Development Opportunities: Additional Funding

• **Track I Planning:**
  - Per Building – $10,000
  - Per District - $50,000

• **Track II Installation:**
  - Per Building - $30,000
  - Per District - $100,000
• **Round #1 Proposal Due Date for Track II Installation:**
  - Wednesday (7/27/22) by 3:00 pm EST

• **Informational webinars:**
  - Tuesday (5/24/22) at 10:00 am

• **Clean Green Schools Initiative Website**
  - Visit the Clean Green Schools Initiative website to see the most current list of Program resources, specific to eligibility, template documents, guidance documents and more.
    - Link: nyserda.ny.gov/P-12-Clean-Green-Schools
Questions

P12Schools@nyserda.ny.gov