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|              | Adjusted Allocation |         | Remaining                     | -212,490.00 |
Applicants shall respond to the prompts or questions in the areas listed below in a narrative form.

A) APPLICANT INFORMATION - General Information, Experience and Capacity

1. Project Title: "Building an Educational Foundation for the Future with a Sustainable Peer to Peer Curriculum Focus"

2. Executive summary: Provide an executive summary of your project proposal and which goal(s) in question 9 you seek to achieve. Please limit your responses to no more than three sentences.

The project will engage teachers in innovative energy educational program with a resourceful use of school facilities. Students at all levels of education will benefit by using their school building as a hands-on learning lab, working collaboratively with energy audit professionals to investigate, incorporate scientific reasoning, analysis and develop a report with energy savings recommendations. Through this audit process, school districts will save significant dollars on energy usage by implementing recommendations which can then be redirected back into the classroom for other needs.

6061
3. Total Students Impacted:

4. Lead applicant primary contact: - Provide the following information:

First Name, last Name of contact for lead applicant: Rick Smith
Organizational name of lead applicant: Springfield-Clark CTC
Unique Identifier (RN/Fed Tax ID): 200011
Address of lead applicant: 1902 Selma Road, Springfield, OH 45505
Phone Number of lead applicant: 937-325-7368
Email Address of lead applicant: rick.smith@scctc.org

5. Secondary applicant contact: - Provide the following information, if applicable:

First Name, last Name of contact for secondary applicant: Dan Schall
Organizational name of secondary applicant: Vandalia-Butler School District
Unique Identifier (RN/Fed Tax ID): 044958
Address of secondary applicant: 306 S. Dixie Drive Vandalia, OH 45377
Phone number of secondary applicant: 937-415-6415
Email address of secondary applicant: Daniel.Schall@vbcsd.com

6. List all other participating entities by name: Provide the following information for each additional participating entity, if applicable: Mention First Name, Last Name, Organizational Name, Unique Identifier (IRN/Fed Tax ID), Address, Phone Number, Email Address of Contact for All Secondary Applicants in the box below:

Rick Smith, Superintendent, Springfield Career Technical School 200111 1902 Selma Road, Springfield, Ohio 45505 rick.smith@scctc.org 937-325-7368 Vandalia-Butler Local School District RN/Federal Tax ID: 245852 Address: 306 S. Dixie Drive, OH 45537 Bradley Neaver 937-415-6415 William Kirby Valley View Local School District #045744 59 Peffly Street Germantown, Ohio 45327 yakoby@mvvcsd.org 937-855-6518 Isaac Seever Greeneview Local School District #047266 4 South Charlotte Road, Jamestown, Ohio 45332 isaac.seever@gjisd.org 937-675-2778 Jeff Patrick Franklin-Monroe Local School District #046643 P.O. Box 78 Pitsburg, Ohio 45358 Jeff Patrick jeff_pattick@damko12.oh.us 937-947-1212 Judy Wells Apollo Career Center Technical Center 3325 Shawnee Road, Lima, Ohio 45806 judy.wells@apollocareer.org 937-598-2910

7. Partnership and consortia agreements and letters of support: - (Click on the link below to upload necessary documents).

* Letters of support are for districts in academic or fiscal distress only. If school or district is in academic or fiscal distress and has a commission assigned, please include a resolution from the commission in support of the project.

* If a partnership or consortium will be established, please include the signed Straight A Description of Nature of Partnership or Description of Nature of Consortium Agreement.

UploadGrantApplicationAttachment.aspx

8. Please provide a brief description of the team or individuals responsible for the implementation of this project including relevant experience in other innovative projects. You should also include descriptions and experiences of partnering entities.

Rick Smith, Superintendent, Springfield Career Technical Schools, has also served as Interim Superintendent and Executive Director of the CTC, Anthony Fraley, Treasurer, Springfield Career Technical Schools, was named Treasurer/COO after serving as the district’s Business Manager and the Assistant Treasurer, Chris James, Director of Career Technical Education, Springfield Career Technical Schools. He oversees the Career Tech part of Springfield CTC’s Embedded English program which includes labs that get an English credit by completing project-based assignments and are the only CTC in Ohio doing this. Dan Schall, Treasurer/COO of Vandalia-Butler City Schools, is well respected by colleagues around the state for his innovative approach to finance. Debby Yerkes, Executive Director, Ohio Energy Project, previously served as a high school science teacher. OEP trained 700 teachers on their curriculum. She has a strong collaboration with universities. OEP utility partners include: AEP Foundation, AEP Ohio, DP&L, Vectren, Buckeye Power, American Municipal Power, Marathon Oil, and Honda of America. OEP was recently recognized by EPA for outstanding project: Careers for Ohio High School Students. Created by teachers for teachers, OEP energizes classrooms with hands-on, interactive learning tools and programs. OEP facilitates students’ and teachers’ understanding of the science of energy and its efficient use in order to empower the next generation of energy consumers. They bring the latest in the energy field in a way that makes everyone take notice by working with utilities, the State of Ohio, non profits, energy organizations, universities, manufacturers and others. OEP's energy education programs follow Ohio Department of Education requirements. They provide lesson plans, professional development, special events and workshops. OEP is the state affiliate of the National Energy Education Development Project (NEED) and partner with them to provide Ohio educators with excellent curriculums, resources and programs. In helping school districts achieve energy savings through energy audits and implementation of energy conservation measures. His company has helped school districts start student-led district “Green Teams” in which students work with staff to develop district-wide energy management plans, organize energy fairs for students, families and the community, and other STEM-education related activities. His projects have resulted in more than $3.8 million in energy savings since 2011. He was named a Legend in Energy in 2008 by the World Energy Engineering Congress and is a frequent presenter at statewide and national conferences, including the 2013 World Energy Engineering Congress. Energy Optimizers, USA, LLC is a vendor neutral energy efficiency and conservation company specializing in assisting K-12 school districts to reduce energy usages and costs. They are passionate about assisting school districts in reducing operational costs so they can use these funds to improve the educational processes or provide essential services without raising taxes. They believe that education and occupant involvement are key components of increasing and sustaining the efficiency of a building and feel that implementing a behavioral and energy education program into the organization is imperative to achieving and maintaining energy conservation goals. Doug Trimbach, Vice President, Energy Optimizers, USA, performs lighting audits and develops recommendations for efficient lighting projects for government agencies, K-12 schools, colleges and universities, and commercial and industrial facilities. Trimbach is a frequent presenter at professional conferences, including the Buckeye Association of School Administrators and Ohio Public Facilities Maintenance Association, and the Ohio Energy Management

B) PROJECT DESCRIPTION - Overall description of project and alignment with Outcomes

9. Which of the stated Straight A Fund goals does the proposal aim to achieve? - (Check all that apply)

- Student achievement
- Spending reductions in the five-year fiscal forecast
- Utilization of a greater share of resources in the classroom

10. Which of the following best describes the proposed project? - (Select one:)

- New - never before implemented
- Existing and researched-based - never implemented in your district or community school but proven successful in other educational environments
- Mixed Concept - incorporates new and existing elements
- Enhancing/Scale Up - elevating or expanding an effective program that is already implemented in your district, school, or consortia partnership
11. Describe the innovative project.

This innovative project builds upon quantifiable data which shows that students vastly increase their knowledge and learning when they are immersed in a hands-on learning environment and are charged with finding solutions to real-world problems. This project seeks to expose students to the science of energy at a very young age and build a foundation of knowledge and understanding of innovation collaboration: contextual learning; and information and media literacy. Students will learn to create, acquire, analyze, synthesize, evaluate, understand and communicate knowledge and information in a global context. Younger students will learn basics about energy efficiency while also being empowered as part of a "Green Team" to teach fellow students about how they can cut energy costs by making positive decisions throughout their day. This helps expose younger students to their potential career interest early. School districts conducting energy audits on a regular schedule realize sustainable energy savings. This program will pair audit engineers directly with older students to work on the school facility audits. Students will be empowered to conduct energy audits (with guidance from energy professionals) and provide recommendations on how to cut energy usage and make facilities more energy efficient. Students will write and present their recommendations (with guidance from certified energy professionals) to the district school board. The student energy audit report will include providing an American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE) level commissioning of the facility. The district will establish student-driven "Green Teams" that will be responsible for: - Energy Waste Patrol - issuing energy waste tickets to teachers and administrators when they are not following the agreed upon districts’ “Energy and Environmental Efficiency Plan” - Energy Education Team - establish a team of High-School and Middle School students to each younger students about energy and the environment Community Colleges and universities participating in the project will provide academic resources and exposure to higher education students. The program includes the installation of next generation classroom lighting into a school's self-contained special needs/autism spectrum classroom. Next generation LED lighting will replace the current fluorescent lighting in least one classroom. Teachers and evaluators will be able to assess the effect of the next generation lighting on their students. Students will gain more knowledge of physical science, environmental and engineering professionals. The curriculum will provide tools for teachers to help meet Common Core State Standards and Ohio Revised Science Content Standards. Districts will save costs through the auditing process, and teachers will be provided with materials that can be utilized year after year, as well as skills in service learning, environmental and community stewardship. The project will be used as a model for future energy education programs in school facilities. - Shift some of the energy savings from utility bills to support energy education program - Students as problem solvers - Students provided an in-district real world learning experience

12. Describe how it will meet the goal(s) selected above.

a. Enter a project budget
b. Upload the Straight A Financial Impact Template forecasting the expected changes to the five-year forecast resulting from implementation of this project. If applying as a consortia or partnership, please include the five-year forecasts of each school district, community school or STEM school member for review.

13. Financial Documentation - All applicants must enter or update the following supporting information. Responses should refer to specific information in the financial documents when applicable:

a. Enter a project budget
b. Upload the Straight A Financial Impact Template forecasting the expected changes to the five-year forecast resulting from implementation of this project. If applying as a consortia or partnership, please include the five-year forecasts of each school district, community school or STEM school member for review.

14. What is the total cost for implementing the innovative project?

14.0.522 0.00 Total project cost

Provide a brief narrative explanation of the overall budget. The narrative should include the source and amount of other funds that may be used to support this concept (e.g., Title I funding, RTT money, local funding, foundation support, etc.), and provide details on the cost of items included in the budget (i.e. staff counts and salary/benefits, equipment to be purchased and cost, etc).

Each facility will achieve an average energy savings $6,680/year based upon the actual current energy usage. A one-time energy audit will provide for energy savings that will continue over the five fiscal years that conduct energy audits achieve 4.65% gas savings and 6.20% electric energy savings. Districts achieve sustainable results and realize energy savings of $6,680 per facility. This project is proven to produce quantifiable results that can be benchmarked. The repetition of the energy audit process will provide for early identification of potential problems allowing the facility manager to schedule corrective actions. Utilization of a greater share of the classroom - Cost savings from this project will help both students and teachers alike by providing additional resources to support increased learning. Not only will the savings support the energy education program but it will free up additional resources that can be used for things like additional labs, online access to STEM tools and curriculum materials are reusable and promote the sharing of tools and to empower students to become energy leaders beginning in elementary school and continuing through high school graduation. Curriculum and programs developed by the Ohio Energy Project brings relevant, topical materials that are hands-on. OEP partners with teachers to provide training for special needs students. The project will provide support for the program and build upon it by involving energy professionals to infuse students with their facility energy audit process. The project will incorporate real world experience for the students by performing a professional energy audit of their building. Teachers will be supported by Mentor Coaches (MC) who will assist them in integrating energy education, energy audits, and service learning educational approaches. MC’s will be former teachers who can serve in a Peer to Peer capacity. OEP’s energy education programs follow Ohio Department of Education requirements and courses meet specific Common Core Literacy and Technical Standards. This project is directly aligned with the STEM approach to education - building upon students’ capacity for innovation, invention and creative problem solving by providing challenging, student-centered, inquiry-based educational experiences. The project will provide teachers with professional development materials and curriculum. Teachers will have innovative and relevant tools that they can integrate into their lessons. They will have access and support of industry experts in conducting professional audits in the classroom. Some audits will be performed by industry professionals for students. This project aims at driving more students towards “successful completion” of courses. MC’s will assist the teacher facilitate the energy-based curricula and the energy audit into the lesson plans. Spending reductions in the five-year fiscal forecast: - The program will provide the districts with a total of $86,725 savings from reduced energy consumption over the five year forecast period. This savings is calculated by projecting the cost savings resulting from energy efficient fixtures and permanent load reductions by shifting the energy cost from the district to the utility budget. The project will achieve energy savings sufficient to cover the cost of the education program. National statistics support that performing ASHRAE level facility energy audits produce on average 16% energy savings. Ohio case studies show energy audits that contractors perform achieve 4.6% gas savings and 6.20% electric energy savings. Energy waste and energy conservation plans that contain energy performance goals for the buildings that they serve.

15. What new/recurring costs of your innovative project will continue once the grant has expired? If there are no new/recurring costs, please explain why.

0.00 Specific amount of new/recurring cost (annual cost after project is implemented)

16. Are there expected savings that may result from the implementation of the innovative project?

104.070.00 Specific amount of expected savings (annual)

Energy savings will result from the teacher led work of the student who conduct the facility based energy audits. Audit results and recommendations will be reviewed by the project CEMs, faculty mentors, and administrators. These recommendations will be presented to the school principal. The school auditors performing an ASHRAE level energy audit will identify building operations and equipment that is not operating to peak performance. Students will learn why these issues are important and what to do to improve their performance and save energy. Students will study and measure the operations and performance of the school facility heating and air conditioning systems, building automation controls, and lighting. The student audit process will provide data and recommendations to be used by the facility department to make changes and adjustments to the building systems that will provide for improved efficiency and building comfort. Students generally speaking, the provided energy education curriculum materials and energy education specific supplies are reusable and therefore are little to no recurring educational costs to apply to the concepts. Once the program is fully implemented, the program goals become the teacher goals and are integrated into their lesson planning each semester. Benefits are maximized to the students, teachers and the measured energy performance of the school facilities. The industry standard is for school facilities to be audited or commissioned once every three years. The students will be performing an American Society of Heating Refrigeration, and Air Conditioning Engineers (ASHRAE) level energy audit using the curriculum provided tools provided The energy education tools and supplies to take the learning out beyond the classroom into the students’ school environment. Some school districts organizational structure allows for all costs incurred to be absorbed into daily operations with no cost increase. Others have included around $5,000 for recurring stipends, engagement of facility managers in the classroom, and ongoing updates. This is an issue we can better evaluate once
will confirm the energy savings by measuring the building performance after the initial audit findings are implemented by the faculty department. The identified energy savings and the value of recommended future actions will be calculated and reported by the students. There will be savings that will go back to the school district to be reallocated by the district measure. Each school will identify an average energy savings $6,880 based on the actual current energy usage. A one-time energy audit will provide for energy savings that will continue over the five year projection period (Energy Efficiency Programs in K-12 Schools: A guide to developing and implementing, greenhouse gas reduction programs; U.S. Environmental Protection Agency, 2011).

Longer term energy savings will be sustained by the continuation of the program from year to year. The cost savings is easily identifiable and traceable. The energy savings from the district utility bills are used as the basis for the study. (Analysis, Project Title: Ohio Energy Project; $1,412 per district. The project will aid in spending reductions by shifting administrative/operational dollars from the utility bill over to the educational delivery budget. The proposed program will achieve energy savings sufficient to cover the cost of the energy audit program. National statistics support the fact that performing American Society of Heating Refrigeration and Air Conditioning Engineers (ASHRAE) level facility energy audits produce a median savings of 16% (Lawrence Berkeley study on commissioning, 2009, 2011). The U.S EPA reports that districts can achieve up to 25% improved energy cost savings using simple behavioral and operational modifications. School district spends on average $75/student for gas and $130/student on electric. (Energy Efficiency Programs in K-12 Schools: A guide to developing and implementing, greenhouse gas reduction programs; U.S. Environmental Protection Agency, 2011). This program proposes to achieve a 4-6% natural gas cost savings and 6-2% electric cost savings based upon recent measured data of school districts audited by Energy Optimizers, USA. This program will use the more conservative numbers to forecast generated savings. Through strategic partnerships with organizations that have relevant experience in innovative projects and credible and verifiable success in their fields, this project is positioned for a high probability for success. The Ohio Energy Project and Energy Optimizers, USA are both highly regarded organizations that will be critical to the success of this program. The energy education program focuses on using the facility as a learning tool. Students participating in this program will continue to progress in their understanding of the efficient use of energy as it affects their everyday life. As the students develop greater skill and understanding they will be challenged to pass on what they have learned. Seniors will provide for peer to peer training of younger students. Annual repetition of the energy audit process will provide for early identification of potential facility operations problems allowing the facility manager to plan facility based corrective actions and refine their facility management efforts. The time savings for facilities staff -Advanced knowledge of current savings opportunities for facilities staff -Students provide valuable data for further analysis -Added bonus of support gained from students and staff with daily operations -Added by-in from students, staff, and parents. Government grants fund the development of effective educational projects that have many benefits related to the efficient use of energy. Including advanced energy saving students (HVAC) and advanced degrees (engineering) -Improved communication skills in students through development of reports and presentations of report findings and communication with younger students.

D) IMPLEMENTATION - Timeline, communication and contingency planning

18. To fill in the appropriate dates and an explanation of the timeline for the successful implementation of this project. In each explanation, be sure to briefly describe the largest barriers that could derail your concept or timeline and describe your plan to proactively mitigate such barriers. In addition, the narrative should list the stakeholders that will be engaged during that stage of the project and describe the communication that occurred as the application was developed.

Describe the ongoing communication plan with the stakeholders as the project is implemented. (Stakeholders can include parents, community leaders, foundation support and businesses, as well as educational personnel in the affected entities.)

* Proposal Timeline Dates

Plan (M/D/YYYY): 01/2014

Narrative explanation

Phase One: Program Launch Preparation: Districts identify 1) Facility Managers 2) Teachers -Energy Optimizers USA Project Manager confirm participating districts -Teacher letters prepare/teachers of scope, intentions and include timeline -Facility Manager letters specify the facility managers of scope, intentions and include title 1) Straight A Grant Fund Award Announcement:December -Districts and students notified of award 2) Training by PM and Ohio Energy Project staff -Mentor Coaches orientated to the mission and focus of the program. They receive training on tools and educational materials available through the project and are familiarized with the professional services available to them and teachers. Mentor Coaches are former teachers contracted by program organizers who will mentor district teachers and serve as resource for the program.

Implementation (M/D/YYYY): 01/2014

Narrative explanation

Phase Two: Integration of Energy Education into Curriculum: -January 1) Teleconference meeting with school facility managers to address program goals, intentions, timeline and review program implementation 2) In person energy audit training for coaches by Certified Energy Managers (CEM) and project energy auditors 3) Teacher telephone conference 4) Teacher/Mentor Coach in person meeting to review data collection, curriculum, Green Team project, review process, and share program contact info. 5) CEMs on call for questions 6) Weekly individual Coaches meeting lead by Mentor Coach and scheduled with teacher in person and by phone 7) Energy audit training for teachers led by CEMs and Mentor Coaches Phase Three: Student Service Learning -February 1) Student activities begin at all grade levels -Science of energy education initiated in the classroom -Students connect with energy professionals and audit concepts introduced 2) Green Teams established 3) LED Energy Project begins -Monthly meeting with students and CEMs Phase Four: LED Lighting Installation Project -February 1) LED lighting project initiated -Project team includes: facility manager, teacher, installation professional, and student leader 2) March: Lighting installation completed -Schedule set

Summative evaluation (M/D/YYYY): 05/01/2014

Narrative explanation

Phase Five: Reporting (All Phases) -March April 1) Reporting by teachers to Mentor Coaches 2) Mentor Coaches compile individual reports into single report 3) Mentor Coaches reports presented to Springfield-Clark CTC project lead as the project fiscal agent -includes update on teacher training on audit procedures and energy curriculum -includes update of integration into material of teacher curriculum March: Mid Term Update -Districts report via phone or email of students using the program and program material to Project Manager -Mentor Coaches report status of energy audits on bi-weekly basis -Project Manager -Mentor Coaches report on LED Project to Project Manager to include: teacher observations; energy savings; facility managers’ observations May: Final Project Report -Evaluations of student progress; completion of energy audits; student presentation of energy audits to the school board; teacher program evaluation -Mentor Coaches Report June: Final Reporting Compiled by Project Manager -Yearly energy management's observations: CEMs report; audit results and summations -LED Project Report (teacher observations; energy savings) -Treasure's report (financial impact)

Activities/achievements of the students communicated through local media, families, service clubs, business owners in the community and local elected officials -Press releases issued by the district (drafted provided by Mentor Coach), frequent updates posted on district's website and social media, and in district newsletters -Students write articles for the school newspaper and make presentations to the school board, local businesses, and service groups -Energy audit project teams have been created and students and teachers begin to meet as a group. Results are now starting to show up at home and at school -Seniors will provide for peer to peer training of younger students. -Students provide valuable data for further analysis -Added bonus of support gained from students and staff with daily operations -Added by-in from students, staff, and parents.

19. Describe the expected changes to the instructional and/or organizational practices in your institution.

Students: Students participating in this innovative project will gain a stronger foundation for the science of energy. They will also gain significant hands-on learning by using the district facilities as a learning laboratory. The energy education curriculum will focus on teaching the critical skills in analyzing data, measuring, investigating and problem solving. They also gain skills in the area of creating presentations, creative writing, topic creation and presentation delivery as they prepare to present their findings and report to the district school board. They will be empowered to communicate their findings which will have a significant impact on them by positioning them as a respected source of data and direction. Additionally, the impact of their findings will be the starting point of their next project. The results from the energy audit project should provide the opportunity for students to continue their studies in energy related careers. The students will also be able to contribute to the local community by participating in the local community service projects such as energy efficiency projects. Members of the community have also seen a positive impact as students have gotten engaged in energy related projects in their communities as a whole. Teachers: Teachers of all grade levels participating in this project will have the opportunity to provide with new materials to supplement their teaching of the science of energy. They will have the unique opportunity to implement the use of their facility as a learning lab for their students giving them the real world application of what they have learned in their class. Schools: School districts will benefit from the student engaged professional energy audit by learning what behavioral changes and equipment/controls changes can be made to have a positive impact on their energy use. This data is proven to have quantifiable results that have substantial value and impact. Communities: Communities will see great impact by this innovative approach to education as students become more engaged with energy efficiency projects in their local communities. They are excited for opportunities to use their education to benefit others in their community. Additionally, this helps establish relationships with local community colleges and higher education institutions to...
20. Describe the rationale, research or past success that supports the innovative project and its impact on student achievement, spending reduction in the five E:

- **E) SUBSTANTIAL IMPACT AND LASTING VALUE**

The rationale behind this project stems from work being performed by Ohio Energy Project (OEP), a non-profit organization that works with Ohio teachers on energy education. Their experience is relevant and impactful. A project-based learning approach to teaching science, technology, engineering, and mathematics (STEM) to students can create, acquire, analyze, synthesize, evaluate, understand and communicate knowledge and information in a global context. The goal is to make curriculum relevant and engaging through practical, problem solving processes and tools of education and technology. The curriculum is structured to help young people from broad and diverse backgrounds and is flexible so that teachers can incorporate it in ways that fit the individual needs of students. It begins directly with Ohio Common Core standards and Revised Science Content Standards making this project an innovative tool for teachers with hands-on last impact for students. This project will make curriculum relevant and engaging through the practical, problem solving processes and tools of education and technology. There is complete alignment between high school STEM instructional program and higher education and workforce standards. The project applies evidence-based approaches to a transdisciplinary curriculum using project-based learning, differentiated instruction, and project-based learning in the 21st century's new educational landscape. The project focuses on the gap between the new 21st century educational landscape and the current educational environment by working with public sector, academic and business leaders to engage employees in innovative, collaborative, and effective professional learning opportunities. The project seeks to engage students and teachers by partnering with the project's professional energy engineers to conduct professional energy audits. The districts benefit financially by the cost savings realized through the energy efficiency audit recommendations. Energy audits are like a physical examination for your facility. Knowing the energy health of your facility allows you to make data driven decisions in planning and performing. Operating. Performing Energy Auditengagement with OEP's program is being used right now in more than 610 school buildings in Ohio. This project will engage students in real world hands on educational learning. Students will engage in energy conservation through their performance of an educational energy audit of their school facility. It is a well-conceived and thoroughly developed proven educational program in which teachers will integrate energy, audit, energy learning, energy educational approaches and aligning to the Common Core and Revised Science Standards into their daily activities. Student educational outcomes will be increased, particularly in science and math. Students will gain knowledge of careers in science, math, and engineering professions very early in their educational development. This program of LED lighting is likely to be successful in providing teachers with the skills to enable students to excite and motivate students through the assistance of Mentor Coaches who will assist the teacher in assimilating and integrating the program materials into their lesson plans. Student educational outcomes will be increased, particularly in science and math. Teachers will be provided with new curriculum and training technologies to integrate into their educational approach through the use of project based learning professionals. Teachers will tailor the project to meet individual student learning objectives in a way to excite and motivate students through the assistance of Mentor Coaches who will assist the teacher in assimilating and integrating the program materials into their lesson plans. The total is $104,070 energy savings for the program.

- **ESRAEE level facility energy audits produce a median savings of 16%. The energy saving that is achieved will be sustained throughout the period from year to year. The cost to continue the program is $0.014 per year per facility to cover additional energy audit materials and facts. It is a simple comparison of the utility bills before and after the energy audit process. The cost savings realized by the energy efficiency audit program will be free up funding that can be redirected back into the classroom. The outcome of the LED lighting project will produce the total projected facility energy savings. LED lighting is 78% more efficient than standard fluorescent lighting. The rationale behind this project is supported by substantial evidence and hard numbers.

21. Is this project able to be replicated in other districts in Ohio?

- **YES**

22. If so, how?

This Energy Project's teacher-centric educational approach starts with year-long training opportunities at regional meetings throughout the State. OEP will connect new and returning teachers directly to energy industry experts who understand and translate complex energy information into compelling educational instruction. From visits to nuclear reactor labs to classroom activity kits, OEP brings teachers the latest in the science of energy field. Teachers will discover new technologies, alternative sources, renewables and more through the professional development created by teachers for teachers. CEU hours are available with many of the sessions. There are current benchmarks, new, other educational programs and energy professionals programs meet multiple Ohio Academic Core and Common Standards for elementary through high school courses. Student Benefits - Become energy leaders - Apply skills to teach peers skills and family about energy efficiency - Learn to save money and energy - Understand how to use energy-saving devices - Strategize to make energy efficient choices - Get Home Energy Efficiency Kits with - Lighting - LED Night - Door Air Sealers - Showerheads - REFAZ - Weather stripping - Replace old showerheads - Door sweeps - Replace old showerheads - Door seals - Reduce air leaks. The program will utilize a greater share of resources in the classroom by providing professional experts and coaches to teachers, as well as materials and lesson plans. Teachers are provided with a new set of curricula and training techniques to integrate into their educational approach through the use of project based learning professionals. Teachers will tailor the project to meet individual student learning objectives in a way to excite and motivate students through the assistance of Mentor Coaches who will assist the teacher in assimilating and integrating the program materials into their lesson plans.

24. What are the specific benchmarks related to the fund goals identified in question 9? Include any other anticipated outcomes of the project that you hope to achieve that may not be easily benchmarked.

- **Energy analysis and benchmark report - Analyze and Benchmark the Past 2-Years of Utility Bills of All Existing Facilities 2. Monthly utility bill analysis reports and tracking - Utility bills entered into the US EPA Energy Star Portfolio Manager Program - Cost Savings Analysis - Energy Savings for each year. Calculate equipment life cycle costs - Determine target energy efficiency savings - Calculate energy efficiency savings - Annual utility bill analysis and budgeting assistance. Work closely with the financial and business administrator(s) to assist with energy usage and cost forecasting for the next years’ budgets - Quarterly facility walk through and analysis of all existing buildings - A Certified Energy Manager will walk through your facility(s), with the school Green Team to identify potential energy conservation opportunities. - Lighting project installation - The lighting project manager will work with the facility manager and classroom teacher to schedule the installation of the LED lighting. - The classroom teacher reports their observations and opinions. - Energy audit report - Students prepare and deliver the School Facilities Energy Audit Report to board - Detailed written report will be reviewed and provided for the approved facility administrator(s) and/or school board - Annual facility improvement planning and budgeting - Assist the facility administrator(s) with establishing and updating the districts’ 5-year permanent improvement list - Both short-term and long-term (expected life of the equipment) - Submit Energy Audit Report to board and incorporate into the district’s "Energy and Environmental Efficiency Program" - Assist and lead the district to create a district Green Team to develop, implement and sustain this program. The program will utilize a greater share of resources in the classroom by providing professional experts and coaches to teachers, as well as materials and lesson plans. Teachers are provided with a new set of curricula and training technologies to integrate into their educational approach through the use of project based learning professionals. Teachers will tailor the project to meet individual student learning objectives in a way to excite and motivate students through the assistance of Mentor Coaches who will assist the teacher in assimilating and integrating the program materials into their lesson plans.

25. Describe the plan to evaluate the impact of the concept, strategy or approaches used.

- **Include the method by which progress toward short- and long-term objectives will be measured. This method should include the types of data to be collected, the formative outputs and the systems in place to track the program’s progress.**

In general, the project will be evaluated in a multi-year cycle. The project will be evaluated and reported on annually. The evaluation will include both formative and summative assessments.

- **Include the method, process and/or procedure by which the program will modify or change the program plan if measured progress is insufficient to meet program objectives.**

Educational Assessment of Science of Energy - Teachers will report increase of knowledge in classroom reflected in test results. It is anticipated proficient knowledge will be obtained when students achieve an 80% or better. Pre and post test will be encouraged for this purpose. - Educational materials will be receive will be retained for every year and districts will not need to purchase new curriculum. Energy Savings Assessment - Audit report for each facility will be generated and data collected. It is considered proficient if 10% energy savings is realized according to the baseline of the past five years of use. - Facility manager will implement recommended savings measures to save energy in the facility which will be reflected on the energy bill. - Facility managers and students will be encouraged to use this tool and compare facility to other comparable facilities. - Facility managers will free up funding that can be redirected back into the classroom. The data will be uploaded into the US EPA’s energy star Portfolio Manager Program. The data will provide building specific performance data. LED lighting will be installed - Teachers will report behavior changes with new lighting - Teachers will add weekly comments on the performance of the LED lighting project with student. District’s teams will remain active through the year, energy will be top of mind for students, teachers and school personnel - Green Team members will support the project and make regular recommendations for improvement and adjust activity based upon project outcomes and evaluations. - Green Team members will use the audits and resulting recommendations to be facilitate incorporate with Facility Managers. - Students will create a Power Point Presentation with audit findings and recommendations - Students will present to the classroom. School Board and other community partners-Students will present press releases to districts and local media.

By virtue of applying for the Straight A Fund, all applicants agree to participate in the overall evaluation of the Straight A Fund for the duration of the evaluation timeframe. The Governing Board of the Straight A Fund reserves the right to conduct evaluation of the plan and request additional information in the form of data, surveys, interviews, focus groups, and any other related data to the legislature, governor, and other interested parties for an overall evaluation of the Straight A Fund.
I Accept

Rick Smith
Springfield Clark CTC
10/25/2013