

## **REQUEST FOR PROPOSALS**

## **Summary Sheet**

(One page only) Note: If Philanthropy Network Common Grant Application is used, this Summary Sheet MUST accompany application. Please visit our website at <a href="https://www.chescocf.org">www.chescocf.org</a> to obtain an electronic version of this application.

Date: 9/13/2022

### **Contact Information:**

Organization Name: Solar CITIES, Inc.

Address: 973 Font Road, Glenmoore, PA 19343

Contact Name: Janice Kelsey
Contact Title: Co-Founder

Contact E-mail: Janice.SolarCITIES@gmail.com

Phone: 610-745-4403 Fa

Web Address: <a href="https://solarcities.solutions/">https://solarcities.solutions/</a> Year Incorporated: 2015 in PA

YouTube: www.YouTube.com/SolarCITIES

Have you pro	eviously received the Mil	ler Grant Award:	Yes _	No X	
If "Yes", please	indicate date and amount of	each grant, if any, rec	eived fi	om the Founda	tion
(1) Year:	Amt Rec'd: \$	(2) Year:		Amt. Rec'd \$_	
(3) Year:	Amt Rec'd: \$	(4) Year:		Amt. Rec'd \$_	

# **Organizational Information:**

Geographic Area Served (If not all of Chester County, specify primary Chester County municipalities served):

All of Chester County and surrounding counties. Our international outreach impacts communities in Australia, Cameroon, Canada, Ghana, Iraq, Israel, Kenya, Palestine, Panama, Peru, Sierra Leone, and Tanzania. Recent communications of need from South Africa, Tunisia and Ukraine. Because we produce many online open-source resources, our reach is actually exponentially greater than this. What we do locally impacts globally.

#### Annual # of Clients & Description of Population Served:

Number of people served <u>locally</u> is between 800 and 1,200 a year. This number does not include out of state, international projects, or our online support and passive impact through our online open-source educational resources. I would estimate that we have at least 6 intensive out of state and international projects per year with participation of an average of 10 people per project, for a total of 60 learners.

**Programs:** Locally, we take our mobile classroom to K-12 public and private schools, homeschool groups, Rotary Clubs, Community Gardens, Township Days, Sustainability Fairs and Energy Expos. For those groups who are close enough, we invite them for a tour at our sites at Solar CITIES and Adragone Aeroponics.

**Workshops:** We offer hands-on educational workshops here in Glenmoore or on site, at private residences for cooking fuel and fertilizer for gardens, house plants, and septic maintenance, homestead farms for manure management and fuel, community gardens for fertilizer production and fuel for grilling outdoors, sustainability education center to show it all, etc. In these venues we walk our beneficiaries through the process of

constructing and using their own biodigester, and we follow up with support through our global Facebook Page Solar CITIES Biogas Innoventors and Practitioners and other communication tools.

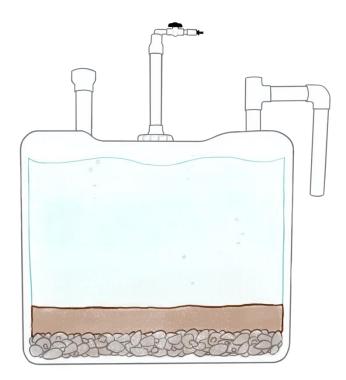
**Service:** Fuel and fertilizer prices have been rising around the world for years and have often been used to manipulate vulnerable populations. The effects of poverty are at its worst when cooking and heating fuel cannot be accessed due to conflict, floods, or cost. The lack of nutrient dense affordable fertilizer to farm and regenerate soil does not allow for growing one's own food. Deforestation is causing major problems with soil erosion, mudslides and climate issues. The burning carbon-based fuels for cooking and heating is a major cause of death and illness in places where indoor wood/coal fires are used for cooking. Approximately 3 billion people rely on carbon-based fuels. We facilitate a "train the trainer" model of sharing this simple technology that addresses each of the United Nations 17 Sustainable Development Goals to some degree.

#### **Mission Statement:**

The mission of Solar CITIES is to bring FREE, clean burning fuel and FREE nutrient dense fertilizer to people locally and globally through our biogas education programs.

#### **Organization Description:**

It is not easy to describe what we do, since it is something so unique. Solar CITIES is a 501c3 charitable educational organization. Very basically, we teach people how to turn poop and food waste into FREE clean burning fuel and FREE nutrient dense fertilizer with the resources they have at hand. This Tedx Talk, that we were asked to make early on, offers a better description: <a href="https://youtu.be/zNDPDBmBPzU">https://youtu.be/zNDPDBmBPzU</a>. Some of the information has changed, but still all valid.



We teach people how to build and use home-scale biodigesters utilizing the resources they have in their own regions of the world. Here in the US, we use recycled International Bulk Containers (tote tanks) and 55 gallon plastic drums. We purchase plumbing parts from a contractor supply house, or we can get them at HomeDepot, Lowes, and online. We share in areas impacted by mass migration, conflict, and natural disasters. For example, we have recently been asked to advise in Ukraine. We will teach remotely from here. There at the other end the NGOs, volunteers, and residents will be scrapping, utilizing what they can find. Just as in our work in Haiti, they will literally trash pick containers and plumbing parts from damaged buildings and businesses. They've already begun looking for what they need. And we will see what we can do to enhance their efforts along the way.

Annual Budget (pre-covid) <\$20,000		<u> </u>	_ # of Full-Time Equivalent Paid Staff
<u>70</u>	% of budget for program expenses	<u>         8                           </u>	_ # of Board Volunteers
		9	_ # of Board/Tech Advisors
<u>20</u>	% of budget for administrative expenses	10	_ # of Active Non-Board Volunteers
		2	_ # of Student Interns (per year)
10	% of budget for fundraising expenses	A lot	_ # of Volunteer Hours
100	% total		

## Top 3-5 funding sources:

- 1) Self
- 2) Board Contributions
- 3) Workshops
- 4) Donations
- 5) Project Partnerships

# **Proposal Information:**

Grant Amount Requested:	\$2,500	Description of Grant Purpose:
-------------------------	---------	-------------------------------

This grant will be used to outfit our new larger "mobile classroom", an 8' x 12' enclosed trailer. Up until now, Solar CITIES has been borrowing a member's small personal trailer. One of our 2 large project trailers that stores and transports steel molds and large equipment came back to us recently. The steel mold for making 10m3 concrete biodigesters is now in donated storage facility, so we now have an opportunity to transfer our growing educational display and materials into a larger trailer. Since this is used as a work area and/or walk-through display we need to:

- hire a professional to spray coat the inside of the trailer with a commercial grade water-proof coating
- hang donated shelving
- purchase storage containers for educational materials and supplies
- Purchase tie-downs and hardware
- Purchase supplies to safely mount display boards to walls as part of the walk-through educational exhibit
- design/order/purchase/install new display posters from FastSigns
- order/purchase/apply Solar CITIES decals with contact information on the outside walls of mobile classroom
- Purchase a safe step-up or accessible ramp with rail for the side door of mobile classroom
- Purchase and replace the cracked ceiling vent



This is our borrowed trailer that we have used for 6 years now to take our educational programs and workshops on the road. As you can see, it's still quite full after taking out our larger display items. It was great to get us started, but we have seriously outgrown it, often needing another vehicle to bring everything and everyone that we need.

We know from our own experience that this trailer is much too short (small) for people to safely walk through without hitting their head or possibly falling. The larger trailer is tall and wide and has a drop-down ramp in the back that makes it easily accessible.

With a larger trailer and ramp, we can easily pull out our larger items, like our event tent, tables, and several interactive displays, and still have more room for storage and a walk-through photo exhibit and library resource display.

Organization is key to a smooth running and successful event!

# MARJORIE L. AND ARTHUR P. MILLER FUND REQUEST FOR PROPOSALS Grant Proposal Narrative

Please provide the following information clearly and concisely.

Proposals of 1 or 2 pages are strongly encouraged.

#### 1. Organization's history, goals, key achievements and distinctiveness

- Solar CITIES is based on the work of National Geographic Explorer & University Professor, <u>Thomas Henry Culhane</u>, PhD., who learned about home-scale biogas in India from another professor there who built one on the rooftop of his home.
- "T.H." began this work in 2009 in Cairo, Egypt in the Zabbaleen Community (translated "Garbage Collectors") where the people recycle 85% of the trash that is dumped in their community.
- SolarCITIES.Solutions is not the first iteration of a formal non-profit that T.H. started. It is actually the third. He first started a German Verein, similar to our non-profit, that unfortunately did not last. Distance and family issues made it difficult to maintain. It did however produce a great foundation of stories and articles that we have transferred to <a href="www.SolarCITIES.Solutions">www.SolarCITIES.Solutions</a>. The European website is still up and running for reference. The link is at the bottom of our own website. The second iteration was funded by InSinkErator Corporation, however, the Executive Director assigned to the non-profit took it in a very different direction that did not align with the

original mission. When it failed, I had already been working in cooperation with Solar CITIES to build a biodigester in Gap, PA. My "why" is a long one, but we did not want to see the mission of this small but mighty effort dissolve, so we sat down and started over in 2014. This is now the longest running and most successful iteration of a mission that must not be allowed to fail. We have developed a very cohesive team.

- Solar CITIES is the only educational non-profit organization teaching environmental skills in clean
  energy and sustainability. We focus on biodigestion as the center of a virtual hub, but also branch
  out into subjects like using the fertilizer from biodigestion in hydroponics and aeroponics, DIY solar
  panels, evacuated tube solar water heaters, make your own solar water heaters, plastic shredding,
  separating of plastics, creating with reclaimed plastics, water protection, learning from and
  meeting the needs of indigenous communities, and more.
- Biogas is the hub to our wheel, as biodigestion addresses every one of the United Nations 17
   Sustainable Development Goals. It IS solar energy, and everyone has the resources to do this.
- In 2014 Solar CITIES led the training of owners of a Chester County Homestead Farm, near Ludwig's Corner, in the construction of the very first 10m3 concrete biodigester in North America. There have been a dozen more in the US since then.
- The first indoor IBC tank biodigesters were built in 2014 in the basement of Hudson Valley Vertical Farms
- The first IBC tank biodigesters in Pennsylvania were built in 2014 at the Kelsey Family Homestead in Glenmoore, PA. There are now over 100 IBC tank biodigesters in the US and a dozen universities adopting our design in their engineering, sustainability, and public health programs.
- Based in Chester County, we are a very diverse (in many ways) collective of members (people) in Chester County and beyond, who have come together for a worldwide urgent initiative focused on waste to energy innovations from small-scale to larger scale. Our primary tool is education through application. You have to see it to believe it and you have to build it in order to practice it.

#### 2. Funding request:

#### A. Specific Chester County needs and issues addressed

- Support local farmers with improved Manure Management system for small to mid-size farms
- Protection of streams and rivers from run-off
- Protection of wells from run-off
- Spread sustainability education to a new generation
- Educational programs in biomass/biogas/alternative energy for schools
- Waste to energy awareness and initiatives
- Reduction in landfill waste

## B. Organizational impact (for general operating proposals) or project impact (for project proposals)

- Larger mobile classroom will fit all our educational displays and resources thus offering a more comprehensive education of our methods
- Reduce our carbon footprint with fewer vehicles, as everything and every team member will fit in 1 trailer and 1 vehicle

- The project will get done with professional guidance and assistance to look professional and attract more interest
- Safer set-up for our Solar CITIES educators and those interacting with us
- Upgraded mobile classroom will offer physical accessibility
- Professional looking/accessible interactive display will increase credibility and engagement
- A better organized mobile classroom will increase our preparedness
- A more professional looking display will increase the frequency of visits to schools, community organizations, farms, etc.

#### C. Overall strategies to implement the organization's mission (or project)

- Hire someone to spray coat the walls and floor of trailer
- Hire someone to install the shelving, racks, and tie downs
- Order updated display posters from FastSigns
- Order Solar CITIES logo decals to be applied to trailer
- Order step-up or ramp with railing
- Complete the new mobile classroom and take out to the first program

#### D. Why it is important to fund this now

- We currently have many requests for educational programs by community members such as Church Farm School in Malvern, Seniors & Sprouts in Pottstown, The Edge Farm in Chester Springs, a private farm in Media, indigenous tribes in the Dakotas, a private farm in West Virginia, and Rosebud Continuum Sustainability Education Center in Land O' Lakes, FL.
- If funded now we can have everything completed in time to fulfill several requests over the school year

## E. How do you intend to meet the challenge component of this grant?

- In-Kind Donation: Coating will be donated by Andek Corporation and/or their local distributor
- In-Kind Donation: Reclaimed shelving will be donated by Bob Spangler, Lyons & Hohl
- Solar CITIES student interns/volunteers will design the indoor layout and displays taking into consideration accessibility, storage, and flow of walk-through displays when set up at venues
- Solar CITIES and Seniors & Sprouts volunteers will work together to move all educational displays and resources into the new mobile classroom

#### 3. Timetable, with anticipated outcomes and their relevance to the nonprofit's mission

- Mobile Classroom could be completed in 2-3 months depending on schedules
- Program requests can be fulfilled by June of 2023
- We will have impacted over 100 learners

#### 4. How impact and results will be demonstrated

 Photos of the progress of outfitting the new mobile classroom will be shared, and also displayed on Facebook

- We photo document all our programs and events. Projects and programs utilizing our new mobile classroom will be shared and documented on our website <a href="www.SolarCITIES.Solutions">www.SolarCITIES.Solutions</a> and on our Facebook Page.
- We will keep a sign-up sheet, when appropriate, at each event to capture impact data
- Take of a count of people visiting and/or passing through the mobile classroom