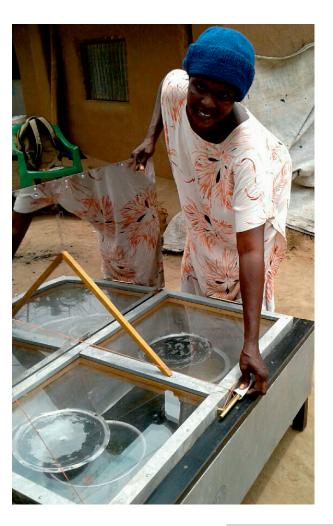




### SOLAR COOKERS INTERNATIONAL

Global Solutions to Global Challenges

Your Impact With SCI -Fiscal Year 2020-



## Letter From the Executive Director and Board President



Photo credit: Sacramento Region Community Foundation

What a year! A global health crisis, inequities abound, and a burning environment. These global challenges require global solutions.

With approximately <u>3 billion</u> people still cooking over open fires and about 1 million people dying <u>every year</u> from pneumonia from cooking-fire smoke, the time to act is now. Solar cooking reduces risks such as air pollution, deforestation, and respiratory disease. It increases energy independence, food stability, health, and safety.

### Our mission is to improve human and environmental health by supporting the expansion of effective carbon-free solar cooking in world regions of greatest need.

This is especially important during times of crisis and to reduce future health and environmental risks. With your support, solar cooking eliminates indoor pollution, reducing overall outdoor pollution. This improves the air that we all breathe and for this, we truly thank our supporters.

Best,

Caitlyn Hughes

Caitlyn Hughes, Executive Director

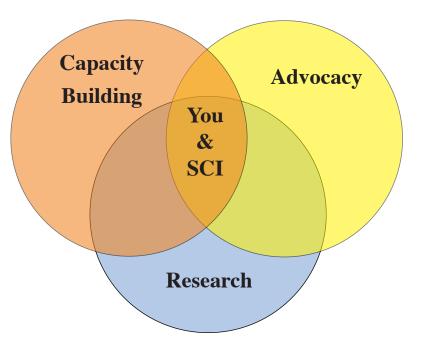
pave

Dr. Shishpal Rawat, Board President

### How It Works

A solar cooker is a thermal cooking device that collects and absorbs direct sunlight and retains heat to cook food and pasteurize water. Hundreds of designs (or models) exist, from reflective-panel cookers to institutional rooftop steam systems that can cook for thousands of people at a time.

SCI leads the solar cooking sector through advocacy, research, and capacity building, for instance, by connecting our hundreds of collaborators in over 135 countries.



Global challenges require everyone working together, especially those who influence policies and resources. That's why you and SCI are informing tens of thousands of top government and civil society leaders about solar cooking at international events such as the United Nations (UN) Climate Conference (COP) and the High-Level Political Forum (HLPF). Leaders are looking for solutions; you and SCI are making sure they know about solar cooking.

"I have a lot of faith in the UN and the UNFCCC (United Nations Framework Convention on Climate Change) when it comes to addressing climate change and I am extremely proud of the representation SCI has taken at the COP meetings and other important international opportunities to show the world the tremendous potential of solar and integrated cooking."

> -SCI Global Advisor Jack Anderson



SCI holds a press conference at COP25 with speakers (left to right) Pranav Mehta of the Global Solar Council, SCI Science Director Alan Bigelow, Ph.D., SCI Board Treasurer Mike Paparian, SCI Executive Director Caitlyn Hughes, and Golo Pilz of Brahma Kumaris. *Photo credit: Rob Tyrrell* 

Thanks to you, SCI shared the solution of solar cooking on a global scale by amplifying your voice through the press. SCI informed millions of people about solar cooking with features in The New Yorker, the Washington Post, Physics World, Business Insider, Voices of Leaders, Spanish news, Taiwanese news, two French magazines, and more.



SCI Executive Director Caitlyn Hughes (left) and SCI Science Director Alan Bigelow, Ph.D. (right) broadcasting solar cooking information worldwide from the United Nations Climate Conference (COP25). *Photo credit: Rob Tyrrell* 



SCI Executive Director Caitlyn Hughes (left) meeting with Sustainable Energy for All CEO Damilola Ogunbiyi (right) at the United Nations Climate Conference (COP25).

SCI makes sure your voice about solar cooking global solutions goes further by collaborating with impactful organizations, to make sure they know about solar cooking and include it in their work to help further the global solar cooking movement.

These organizations include: the World Food Program, Climate Technology Centre and Network, Sustainable Energy for All, the Global Solar Council, Renewable Energy Policy Network for the 21<sup>st</sup> Century, the International Solar Energy Society, and the American Solar Energy Society. For example, now solar cooking is included in World Health Organization training manuals and the United Nations Global Marketplace (UNGM).



SCI and World Food Program representatives meet at the United Nations Climate Conference (COP25) to discuss including solar cooking in school lunch programs. *Photo credit: Rob Tyrrell* 

SCI amplified your voice by educating the public at community outreach presentations at libraries, cultural festivals, science fairs, vocational training centers, service clubs, community events, conferences (virtual and in-person), and schools, such as this guest lecture at the University of Madrid in December 2019. Together, we are inspiring the next generation.



Professor Antonio Lecuona-Neumann, SCI Associate, hosts a guest lecture for his students from SCI Executive Director Caitlyn Hughes, SCI Science Director Alan Bigelow, Ph.D., and SCI Representative to the United Nations Rob Tyrrell. *Photo credit: Alan Bigelow, Ph.D.* 

Thanks to your support, we have empowered approximately 700 mothers, children, and fathers in Kakuma Refugee Camp, Kenya with access to the cleanest cooking technologies and training since 2018. The camp is not able to supply enough fuel to meet each family's cooking needs, so solutions like solar cookers are critical to keeping families healthy and fed.



Solar cooking training (left) and a newly empowered solar cook (right) at Kakuma Refugee Camp, thanks to you. *Photo credit: Alan Bigelow, Ph.D. (left) and Ecomandate (right)* 

Thanks to your support, SCI manages the Solar Cooking Wiki, the world's largest solar cooking database, easily accessible in 40+ languages, at solarcooking.org.



"The SCI Wiki has all the information we needed to prepare the curriculum for the course, Sustainable Development: Solar Cooking at the Universite Notre Dame d'Haiti (UNDH). I am a better solar cook today because of the Wiki." -SCI Global Advisor Rose Bazile

The John Collentine Solar Cooking Toolkit is an online collection of materials helping multiple audiences and serving multiple purposes, from the novice solar cook learning to solar cook to energy ministers promoting large-scale adoption of solar cookers. It provides a wealth of information in modules, making it a user-friendly tool for all. <u>www.solarcookers.org/sci-toolkit</u>

INTRODUCTORY TOOLS	TECHNICAL TOOLS	NETWORKING TOOLS	PROJECT TOOLS
Learn about the benefits of	Learn about solar cooker	Learn about the Solar	Learn about data, impacts, and
solar cookers, how they work,	designs, materials, solar	Cooking Wiki, consulting SCI,	significant projects; add your
and how to obtain a cooker.	tracking, and solar radiation.	Global Advisors, and more.	data to the global map.
TESTING TOOLS Learn about SCI's Performance Evaluation Process - why, how, what, and where.	ADVOCACY TOOLS ADVOCACY TOOLS Learn about the United Nations work, other clean cooking advocacy groups, and promoting solar cooking.	BUSINESS TOOLS Learn about financing projects and carbon credits.	TEACHING TOOLS Learn about classroom resources and building solar cookers.

Cooking with solid fuels comes with a high price tag. SCI's Solar Cooking Impact Summaries (an example shown right) depict the savings made possible by solar cooking. Many environmental and health costs associated with cooking with solid fuels are avoided by switching to solar cooking.

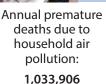
The estimated savings for each country are dramatic; some countries could save billions of dollars annually. SCI created these to encourage countries to invest more in solar cooking as a solution. See more at <u>www.solarcookers.org/resources/</u> <u>download</u>.



45% of the population relies on solid fuels (i.e.: dung, firewood, charcoal) = 623,877,750 people

2017 Gross Domestic Product: \$12,237,700,479,375





Potential annual savings if 100% of people using solid fuels solar cook <sup>1</sup>/<sub>4</sub> of the time:

Photo credits (left to right, top to bottom): Macedonia Ministry, Julie Greene, FoST, Macedonia Ministry, and Charley Cross

#### Potential Impacts of Solar Cooking in China

Number of known solar cookers: 2,449,387



CO<sub>2</sub> emissions annually prevented from using existing solar cookers: **3,649,587 metric tons** 

CO<sub>2</sub> emissions potentially annually prevented by switching from solid fuels to solar cooking: 274,664,843 metric tons



\$491,546,898,936

## Your Impact With SCI: Research

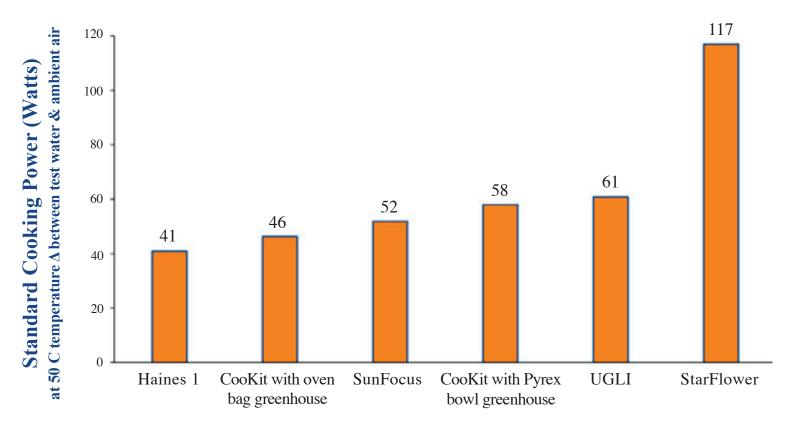
Solar Cookers International developed the Performance Evaluation Process (PEP) to measure the standard cooking power of various types of solar cookers. It empowers consumers, investors, and end-users like you and women in Kakuma Refugee Camp (see pg. 8) with accurate, unbiased, scientific information. It increases credibility and standardization of the solar cooking sector. Learn more about the cookers whose PEP results are shown on the following page, and see more results expected soon (such as from the Fornelia Mini, Haines 2, and ULOG) at

www.solarcookers.org/work/research.



Performance Evaluation Process (PEP) testing of the CooKit at the University of Nairobi, one of four global solar cooking PEP test centers, thanks to you. *Photo credit: Alan Bigelow, Ph.D.* 

### Your Impact With SCI: Research



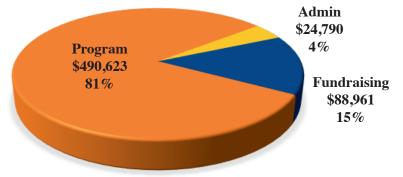
### **Solar Cooker Tested**

# Your Impact With SCI

### **Board of Directors**

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Mike Paparian, Treasurer Marty Greenia Chris Mundhenk



#### Highest Rating 4 Years in a Row

Solar Cookers International consistently receives the highest rating from charity rating organizations including Charity Navigator, GuideStar, and the Better Business Bureau.

"This exceptional designation from Charity Navigator sets Solar Cookers International apart from its peers and demonstrates to the public its trustworthiness."

> Michael Thatcher President and CEO of Charity Navigator

Total income for FY 19/20: \$683,824 Fiscal Year (FY) 19/20 = July 1, 2019 - June 30, 2020 Ending net assets: \$1,095,075



# Thank You to Our Supporters

The work at SCI is not possible without supporters like **YOU**. Together, we are making a difference in the lives of millions of people around the world. Thank you.

# A special thanks to our generous funders:

- Agua Fund, Inc.
- The Morris and Alma Schapiro Fund
- Community Foundation of Greater Memphis
- Distracted Globe Foundation / W Trust
- Unitarian Universalist Church
- AG Foundation
- Sacramento Region Community Foundation

### And

SCI Associates SCI Global Advisors SCI Legacy Circle Members SCI President's Circle Members SCI volunteers SCI collaborators

All of SCI's supporters including YOU!



"Solar cooking is a way to change myself and a way to change the world. I just love solar cooking because it makes me feel more connected with Mother earth. I *really think it is important for* everybody to take small steps ourselves to take care of her. This will be the best gift we can leave for future generations. Also, I love solar cooking because I want my daughter to learn about it and to feel the power of the sun." -SCI Global Advisor Rocio Maldonado

Photo credit: Raúl Pérez Albrecht

SOLAR COOKERS INTERNATIONAL

www.solarcookers.org

# Thank you!





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Photo credits: Front page -Ecomandate, Back page -Alan Bigelow, Ph.D. (left) and Shannon Watkins (top)

