



# Little Sun

2022 | A Year in Pictures



In 2022, Little Sun provided a 5 kW solar system with nine panels to light the classrooms, science block, administrative offices, and outside areas of a boarding school in Tanzania. Photo: Gadgetronix

# Little Sun turns 10

Thank you for  
joining us on our  
solar journey



“By bringing the power of the sun to the hands of many, Little Sun connects us to the potential of co-shaping our world.”

**Olafur Eliasson,**  
Artist and Founder of Little Sun

## Dear friends of Little Sun,

This year, Little Sun celebrated our 10-year anniversary and there's a lot to reflect on.

For the last decade, we've been committed to creating a world powered by the sun and we have you—our generous and loyal community—to thank for our progress. Together with your support, we've brought a whopping 2,266,336,765 additional hours of light to households previously living without electricity.

Achievements like this would not be possible without your help, and we count ourselves lucky to have such an incredible community each step of the way. We'd be nowhere without such a wonderful group of partners, advisors, and friends.

While our team and scope of work has grown over the last ten years, our mission has remained the same. Delivering access to solar power is at the forefront of our efforts, and getting to know the local communities is at the heart. It's always been a priority for us to work together with the people in the regions we support. From the Monduli district of Tanzania to the Sine Saloum region of Senegal, our on-the-ground teams travel roadless stretches to reach last-mile communities so we can truly connect with the people who live there. Since Little Sun's origins, we've believed connection is a key factor in providing real opportunity and this inclusive vision will continue to carry us into the future.

We have learned a lot since beginning our work and one important takeaway is that opportunity grows as you ascend the energy ladder. To that end, we've expanded our impact work to include larger systems, more complex processes, and new communities. While we continue to distribute solar lamps to students, we've also electrified schools and health centers, installed our first community solar hub, partnered with climate-focused artists, and more. We've also expanded our footprint—we now have teams in Ethiopia, Senegal, and Zambia, and great partnerships for ongoing projects in Tanzania, Rwanda, and South Africa.

But, the best is yet to come! That's why we invite you to join us as we continue to bring clean power and light to communities living without electricity in sub-Saharan Africa. Enjoy this special 10-year edition of our 'Year in Pictures' and discover how you can be a part of our [next decade of impact](#). We look forward to continuing our solar journey together in 2023 and beyond.

**Little Sun Team**

# Little Sun

## GLOBAL IMPACT

2012-2022

1.540.717

LITTLE SUN PRODUCTS  
DISTRIBUTED WORLDWIDE

2.266.336.765

EXTRA LIGHT HOURS FOR HOUSEHOLDS  
LIVING WITHOUT ELECTRICITY\*

\$193.884.201

SAVINGS ON ENERGY EXPENDITURE,  
CUMULATIVELY, OVER LIFETIME OF PRODUCTS\*

4.649.870

PEOPLE WITH  
IMPROVED ACCESS  
TO ENERGY\*

1.212.872

METRIC TONS  
OF CO<sub>2</sub>EQ EMISSIONS  
AVOIDED, OVER  
LIFETIME  
OF PRODUCTS\*

938.030

KEROSENE  
LANTERNS  
REPLACED\*

968.262

LITTLE SUN PRODUCTS  
DISTRIBUTED IN  
REGIONS WITHOUT  
ELECTRICITY

63

ACTIVE SOLAR  
SALES AGENTS  
IN SENEGAL AND  
ZAMBIA

243

SOLAR SYSTEMS  
INSTALLED IN  
INSTITUTIONS\*\*

\*Based on GOGLA, the Standardized Impact Calculator for the Off-grid Energy Sector. The calculations are based on the product lifespan.

\*\*Health facilities and schools.

For more information, visit: [littlesun.org/impact](https://littlesun.org/impact)

# Little Sun

## PROGRAMS AT A GLANCE

### WE MEET URGENT NEEDS

Little Sun meets urgent energy needs with solar power for students, refugees, and community health workers. This helps students study after dark, equips teachers with the right tools, provides refugees with a sense of security, and ensures healthcare workers can treat patients.

### WE POWER PRODUCTIVITY

Little Sun powers productivity to improve agricultural efficiency, increase food security, broaden economic opportunities, and reduce poverty. To do this, Little Sun builds community solar hubs that power long-term agricultural needs, including milling, husking, and milk cooling.

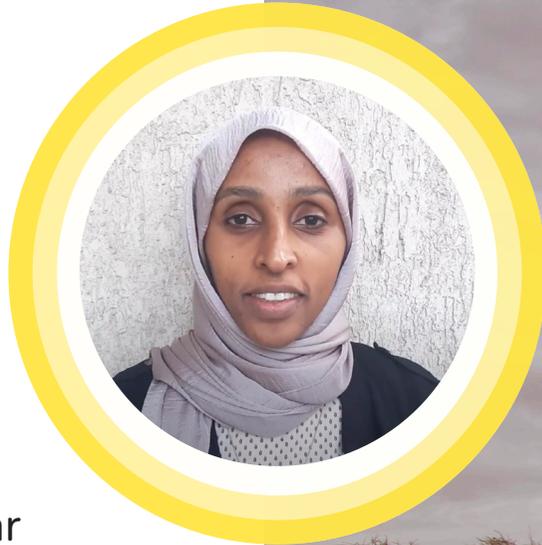
### WE EQUIP COMMUNITIES WITH SUSTAINABLE AND SCALABLE SYSTEMS

Little Sun equips communities with scalable systems that provide long-term solutions. We provide schools and homes with solar systems, create pay-as-you-go initiatives, electrify health centers, and support solar entrepreneurs.

### WE GALVANIZE CITIZENS AROUND THE BEAUTY AND POWER OF THE SUN

Little Sun galvanizes citizens around the beauty and power of the sun to inspire communities to take action around climate justice. This means investing in programs that create spaces for climate dialogue, partnering with artists who help imagine a climate-just future, and lending a voice to untold or underrepresented stories.

## URGENT NEEDS



Even though we've been delivering solar lights for so many years, the impact is still astounding. The positive change it brings to communities and individuals is really unbelievable. ”

**Huda Zuber,**  
Ethiopia Program Manager  
at Little Sun

Portrait of Huda Zuber, a Little Sun team member working in Addis Abeba, Ethiopia (left). Kaira wears her Little Sun lamp around her neck on a displacement site in Ethiopia's Somali Region. Photos: Little Sun (left), Rikka Tupaz/UN Migration Agency (IOM) (right).



Portable solar lamps are a simple and affordable solution to increase access to energy and shine a light on renewable energy initiatives. Distributing solar lights and chargers is also an efficient way to help those in **urgent need**—whether that's refugees, healthcare workers, or school children.

Over the last decade, Little Sun has worked with major relief organizations—including UNHCR, IOM, Oxfam, and Save the Children—to deliver solar lamps and phone chargers to those living without light.

We are determined to make a bigger impact in our next decade. That's why our goal is to equip a million more people who urgently need energy over the next ten years.

# A beacon of hope for Ukraine



The Little Sun team charges Little Sun solar lamps on our rooftop in Berlin (top). A first batch of lamps was delivered at the Polish border (left). Ukrainians waiting in a queue to pass the border in Poland (bottom). Photos: Little Sun

This year was marked by a devastating war in Ukraine. Little Sun stands with the people of Ukraine who continue to resist, flee, and stand for peace.

In this war, communities are cut off from electricity—depleting them of power and light. To help those disconnected from the electric grid, Little Sun distributed 1,868 solar lights and 122 chargers so those impacted could stay connected and maintain their activities after dark.

Little Sun partnered with Ukraine-Hilfe Berlin e.V., Berlin Odessa, Berlin Hands e.V., and Winds of Change to help distribute our lamps.

# Supporting youth in Senegal

“ The support of Little Sun has been magnificent. Many of these children do not have a light at home. This gift of a lamp is essential. The future of this country goes through young people, and giving them a source of light helps improve their learning conditions. ”

**Jean Goepf,**  
Director of the Nébédjay association

Little Sun's Ndeye Astou Sané explains how to use the Little Sun solar lamps in a classroom. A school child holds a solar-powered light during a workshop.

Photos: Little Sun (left), Nébédjay (right)



Access to personal solar devices has proven to substantially increase student performance, forming the educational foundations needed for young people to obtain higher-paying jobs in the future.

In the Sine Saloum region of Senegal, Little Sun partnered with Nébédjay to donate 700 solar lamps to students living off the electricity grid. 354 lamps were distributed during nature camps and 346 were donated to non-electrified schools. These lamps provided students with access to light in the evenings.

Additionally, Little Sun held a series of solar workshops to educate students on the benefits of solar-powered agriculture equipment. Because agriculture is such a high-growth career sector in Senegal, these trainings can provide important life-long skills for students.

## Power to READ, Ethiopia



“ Since I got my Little Sun lamp, I’m able to do all my homework and my grades have improved by a lot. I’m now top of the class and my parents are so proud of me! ”

Aida,  
Mosebo village, Ethiopia

Portrait of Aida (left). Two school children use their solar lamp to study after dusk (top). Three school children receive solar lights in Ethiopia’s Somali region (bottom).

Photos: Naod Lemma (left, top),  
Abshir Warmahaye (bottom)



340 million children in sub-Saharan Africa live without basic electricity. For school children, this means an inability to study or read once it gets dark. This leads to a lower graduation rate, which translates to a lower likelihood of landing a job that can help pull families out of poverty.

To help change that, Little Sun launched **‘Power to READ’**—a project that aims to increase access to solar energy in eight different regions of Ethiopia. We partnered with the Ministry of Education to distribute nearly 60,000 Little Sun solar lamps to students and over 1,000 solar chargers to teachers.

# Supporting education in Tanzania



Little Sun has continued to distribute solar lamps to students in the Maasai region in Tanzania, with help from our partners AAIDRO. This year, we distributed nearly 3,000 solar lamps to pre and primary schools in the Simanjiro, Longido, and Monduli districts to provide students and teachers access to light after dusk.

Workshops on renewable energy and climate change issues were also held to educate students and prepare them with practical mitigation and adaptation methods. Another solar distribution of close to 9,000 lamps and 400 chargers is kicking-off in January 2023.

School children in Tanzania watch a cartoon by Ubungo that focuses on the differences between renewable and non-renewable energy (left). School children receive donated Little Sun solar lamps (top right). A school teacher gives a workshop about solar energy (bottom right). Photos: AAIDRO (left, right), Little Sun (top right)

## Bringing solar power to students in Burkina Faso and Rwanda



Little Sun's long-time partner Boureima Kabré helps distribute lamps to school children in Burkina Faso (top). Students hold their new solar lights in Rwanda (bottom).

Photos: Little Sun (top), SaferRwanda (bottom)

In early 2022, the already compromised security and humanitarian situation in Burkina Faso worsened. By April 2022, the number of people displaced internally rose to 2 million and more than 4,000 schools were closed.

To help support students who fled their homes, Little Sun distributed 5,000 solar lamps in collaboration with BETA S.A.R.L., Plan International, Caritas Burkina Faso (OCADES), the Departments of Education of Kourittenga, the Department of Education of Bales, the non-governmental development organizations Compassion Internationale, Tin Tua, Teega Wendé Association, and TOMAD Développement.

In Rwanda, Little Sun collaborated with SaferRwanda to distribute almost 44,000 solar lamps to students in the Kamonyi district since the launch of the Solar Schools Program four years ago.

This year, we distributed more than 3,000 lamps to students in Kamonyi to ensure they have access to light for evening study and reading.

# Supporting students and mothers across South Africa



Little Suns make a huge difference for many families, particularly those with young babies and chronically ill family members.

**Emma Chademana,**  
One to One Africa

View from the maternity (top). The maternity is located in the Eastern Cape (bottom). A health worker tracks records for a child during a home visit (left).

Photos: One To One Africa: Enable project



In response to the ongoing energy crisis in South Africa, Little Sun has continued to extend our impact programs with the Enable Project and the National Association of Child Care Workers.

We have equipped nearly 700 at-risk children—mostly living in townships and informal settlements—with solar chargers through the NACCW. Close to 1,900 mothers with young children, as well as families with chronically ill family members, received solar lamps through the Enable Project in the Eastern Cape. Plus, over 100 people in the Enable Project, who provide support to mothers with young children, received solar chargers to further aid their care.

## Providing solar education in Nepal



Since 2007, MAP has focused their work in the remote region of Rigaon, which comprises 27 villages in the Himalayan Mountains. This year, three schools were built in the area—two primary and one high school—to support 500 students. While education has always been a priority in the remote region of Rigaon, environmental protection has become a growing concern in recent years as the area becomes increasingly vulnerable to climate change. As a result, programming has shifted to combine both educational and environmental components.

For example, a botanical trail that incorporates detailed signage about the surrounding flora was created in 2020. Plus, an inaugural environmental study was carried out to improve the current waste management system and the region's first recycling center was built earlier this year.

Since most students have to walk upwards of an hour to get to school, Little Sun solar lamps were another opportunity to provide a practical educational solution with an environmental twist. This year, 400 lamps were distributed to ensure students were able to get to and from school safely while also learning more about solar energy.

A school child holds a Little Sun solar lamp alongside her drawing in a classroom (left). A class of students pose outside with their new solar lamps (right).

Photos: Monaco Aide et Présence (MAP)

# PRODUCTIVITY

Productive use leveraging renewable energy represents the next frontier for off-grid solar. While traditional farming practices are getting harder and harder to sustain, booming solar energy holds a massive opportunity to improve the lives of local communities living without electricity.

**Frederik Ottesen,**  
Engineer and Founder of Little Sun

Portrait of Little Sun's Frederik Ottesen (left). Farmers are working on the field in Chibombo, Zambia (middle). A woman farmer wears her Little Sun solar lamp (right). Photos: Little Sun (left, right), Merklit Mersha (middle)



More than half of the population of sub-Saharan Africa are smallholder farmers, but agricultural **productivity** across the region remains exceedingly low. There are multifaceted reasons for the challenges these farmers face, but one thing is clear: With solar energy, communities can power tools that allow them to increase their yields, sales, and more.

Little Sun is committed to supporting farmers, particularly those who lack market and grid access. To accomplish this, we are leveraging solar technology for agricultural productivity and post-harvest processing. This ensures more crops are available, farmers can increase household incomes, and communities meet their nutritional needs.

Through tools, like post-harvest processing, Little Sun is deploying community solar hubs that will anchor milk collection for small-scale dairy farmers. This will not only generate sustainable household incomes, but also contribute to the national dairy sub-sector growth in Zambia. Additionally, we've installed solar dryers that reduce food loss after harvest, while maintaining food's nutritional value and increasing income for farmers.

We have met with countless women's groups and local organizations to make sure we co-create solutions that are local, efficient, and sustainable. Our goal for the next decade is to create 150 million dollars in local profits across Africa within the agricultural sector.

## Improving food preservation in Senegal

“ We are women passionate about transformation, but we are not sales professionals. We are challenged by access to markets and quality processing equipment. The Little Sun solar dryer gives us hope to solve one of the problems we face. We now have quality products and less workload. ”

**Adji Sène,**  
member of the women's organization  
Jappo Liggey Cooperative in  
Toubakouta, Senegal

A woman prepares food with milled banana (left). Solar systems and dryers during a prospecting visit in the Tambacounda region (top right). Little Sun team members visit Coumba Diop, a female entrepreneur based in Mbour (bottom right).

Photos: Little Sun



Drying is a key way to preserve food. Not only does it prevent unnecessary spoilage, but it enables farmers to increase their food storage in strategic anticipation of a better market price. Farmers traditionally dry produce in open fields, but this is prone to bacterial contamination, insect or animal infestation, and theft. Plus, this is only a seasonal solution as rains and humidity prevent food from completely drying.

Little Sun provided several women's groups in Senegal with solar dryers to help them increase their production of agro-forestry products—this includes items such as artemisia leaves, which are used locally to prevent malaria. Little Sun acquired 60 kg capacity solar dryers from local manufacturer Performance Afrique to dry diverse products including grains, vegetables, fruits, spices, and herbs.

The dryers use thermal solar energy to heat a closed cabinet where food is placed. Then, photovoltaic solar energy powers a fan that blows humid air out of the cabinet. Each solar dryer is manufactured locally.

The dryers fully dehydrate the food which maintains the food's nutritional qualities and helps farmers create and market new products. Little Sun also supports farmers with marketing, branding, and sales in local markets.

## Empowering female farmers in Senegal

Irrigated agriculture in the Sahel produces significantly better yields than rainfed agriculture. Plus, mechanization—which also requires access to energy—increases agricultural productivity.

Little Sun is piloting an irrigation project with women's groups active in market gardening and arboriculture in the Fatick Region of Senegal. This will provide solar-powered water pumps and tap systems to female farmers. This infrastructure enables these women to gain new livelihood opportunities, increase income from gardening or smallholder farmer businesses, and learn new skills.



Little Sun's Ndeye Astou Sané and Nébédáy's Abdoul Aziz Ndiaye use a well in the Tambacounda region (top). One of 30 wells in Nébédáy's agroforestry perimeter near Toubakouta is powered with a solar water pump (bottom). Photos: Little Sun

## Expanding agricultural opportunity in Senegal



Traditional post-harvest processing methods are frequently inefficient, expensive, or environmentally unfriendly. Staple crops, such as millet and rice, are either milled manually by hand or processed using diesel-powered machinery, which is both costly and polluting. Solar-powered equipment is a solution to both challenges. Our target is to expand opportunity through a solar toolkit which helps women save time, eliminates the arduous task of hand milling, and ensures food doesn't contain diesel particles.

In conjunction with Nadji.Bi, a local solar company, Little Sun implemented a community solar hub to expand access to machine-operated, low-cost milling services at the village level. These solar-powered crop mills help farmers save time and money through machine-based milling that's close to home. Users pay for the milling or energy through mobile banking services and the enterprise is monitored through a partner web platform. The milling hardware and software are both made in Senegal, creating a secondary economic benefit from the effort. To date, 22,036 kg have been milled and 7,255 kg have been hulled.

Millet is milled with a solar-powered machine (left). Two women talk at the counter of a community solar hub (middle). A woman carries milled millet home (right).  
Photos: Little Sun

## Supporting entrepreneurship in Senegal

Little Sun provides me with quality products that are greatly appreciated by the community. The sales of Little Sun lamps allow me to have raw materials for processing, year round. After harvest, I exchange a Little Sun lamp for a 50 kg bag of millet or corn. I am grateful for the guidance and support I receive from the Little Sun team, which provides the lamps and facilitates payment. ”

**Adjaratou Ba**  
female entrepreneur in  
Tambacounda, Senegal

Little Sun's Mbadj Samba Cissokho shows two entrepreneurs from the Tambacouda region examples of packaging and marketing materials for products. Photos: Little Sun

Little Sun has trained more than 500 budding **entrepreneurs** — primarily women and young adults— in solar energy and entrepreneurship. Little Sun's entrepreneurial skills training prepares participants in all aspects of business development and operations. The program is designed to give attendees the knowledge and tools they need to create a business of their own. We work with a network of local partners to build curriculums that reflect the local needs and are conducted in the local language.

Anyone involved in the training is then able to earn an income by selling Little Sun lamps through Village Savings and Loans Associations (VSLAs). To date, more than 40,000 solar lamps have been sold, enabling Senegalese children to study an extra 36 million hours. Additionally, households have saved 8 million dollars on lighting expenditures which can instead be spent on food or education.





Little Sun's Joan Le Fur walks back from a prospecting visit at a school in the Tambacounda region, Senegal. Photo: Little Sun

## Increasing farmers' income in Chibombo, Zambia



Little Sun is building our first community solar hubs in Chibombo, Zambia, which are set to open in February 2023. Our community solar hubs service the long-overdue needs of rural farmers to make post-harvest processing more efficient and affordable. The concept for the hubs was developed in close partnership with the local farmer's cooperative, the district department of livestock, the chiefs of the adjoining villages, and the Dairy Association of Zambia (DAZ). The first activity that will be enabled by the hubs is a solar-powered milk cooling system.

According to the DAZ, around 550 million liters of produced milk is lost annually in Zambia due to lack of milk collection infrastructure, refrigeration facilities, and market access.

In order to help formally harvest this lost milk, Little Sun is pioneering a solution that relies on renewable energy, instead of costly fuel-based approaches. By implementing solar milk cooling systems that rapidly reduce temperatures of raw milk, unnecessary spoilage is reduced or eliminated.

Construction workers take measurements at a community solar hub (left). Children ride with cows in Chibombo, Zambia (right).  
Photos: Chona Mwemba



A boy leads cows to a field in Chibombo, Zambia. Photo: Chona Mwemba

# SCALABLE SYSTEMS

Access to clean, reliable energy can have a significant impact on someone's life. For children living without electricity in Africa, solar energy can provide a path to a brighter education and future. The same is true for community health workers who need light and power to bring patients the treatment they require.

Little Sun has worked with local partners to provide households and institutions with solar systems. This means everything from installing solar home systems for light, refrigeration, and television to implementing solar systems at schools to help students and teachers succeed. Little Sun has also electrified health centers so doctors can provide better care to their patients. Over the next decade, we aim to reach 20,000 households and institutions with bigger **solar systems**.



“We’ve been delighted to know the community we work in and with. That’s why our next step is to bring bigger impact with bigger systems to power schools and health centers.”

**Fatoumata Ndiaye,**  
Senegal Business Developer  
at Little Sun

Portrait of Little Sun's Fatoumata, based in Thiès, Senegal (left). Solar installers equip a household with a solar home system near Mumbwa, Zambia (top, bottom).  
Photos: Little Sun (left), Chona Mwemba



# Supporting businesses and households in Mumbwa, Zambia

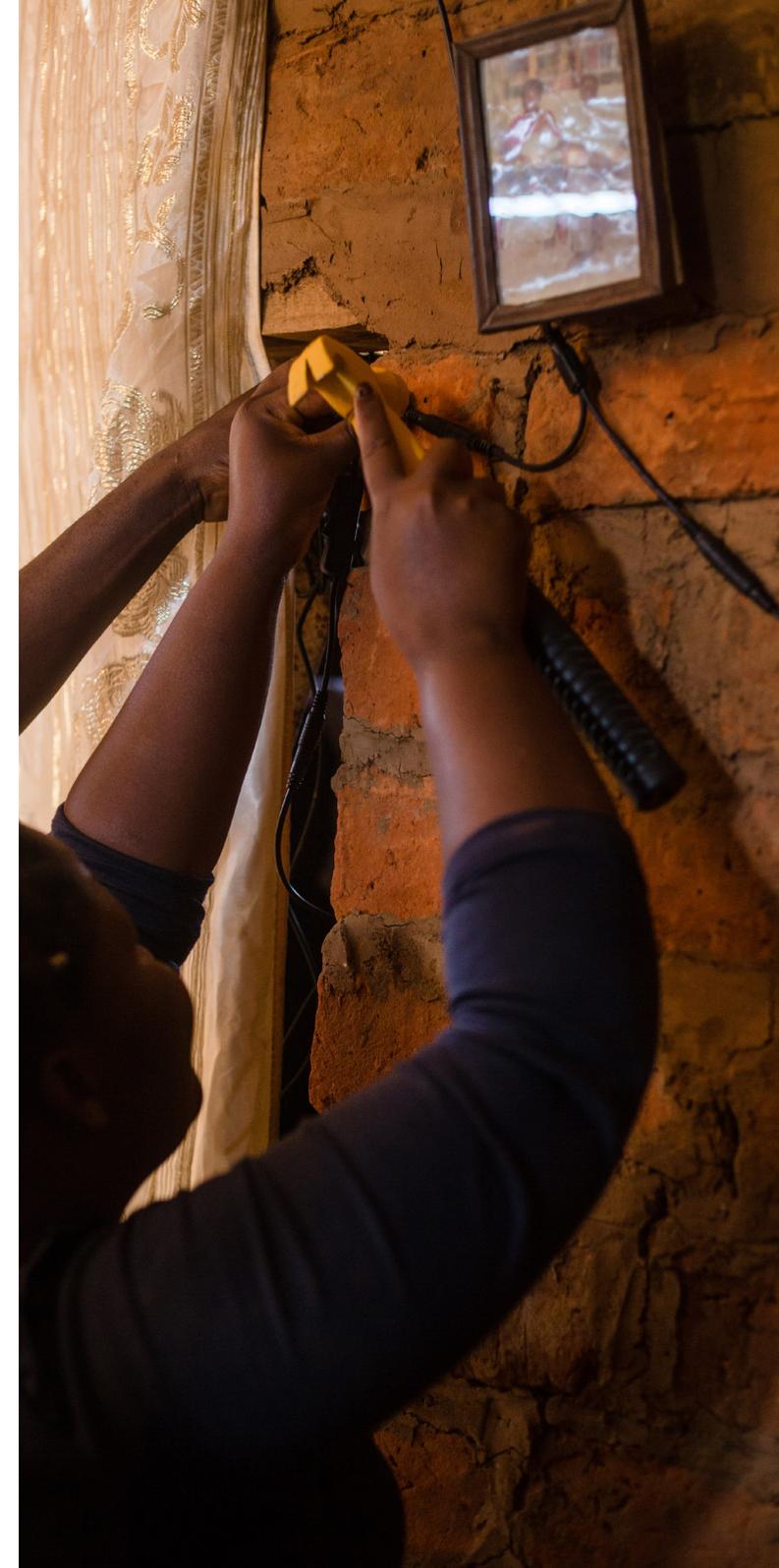
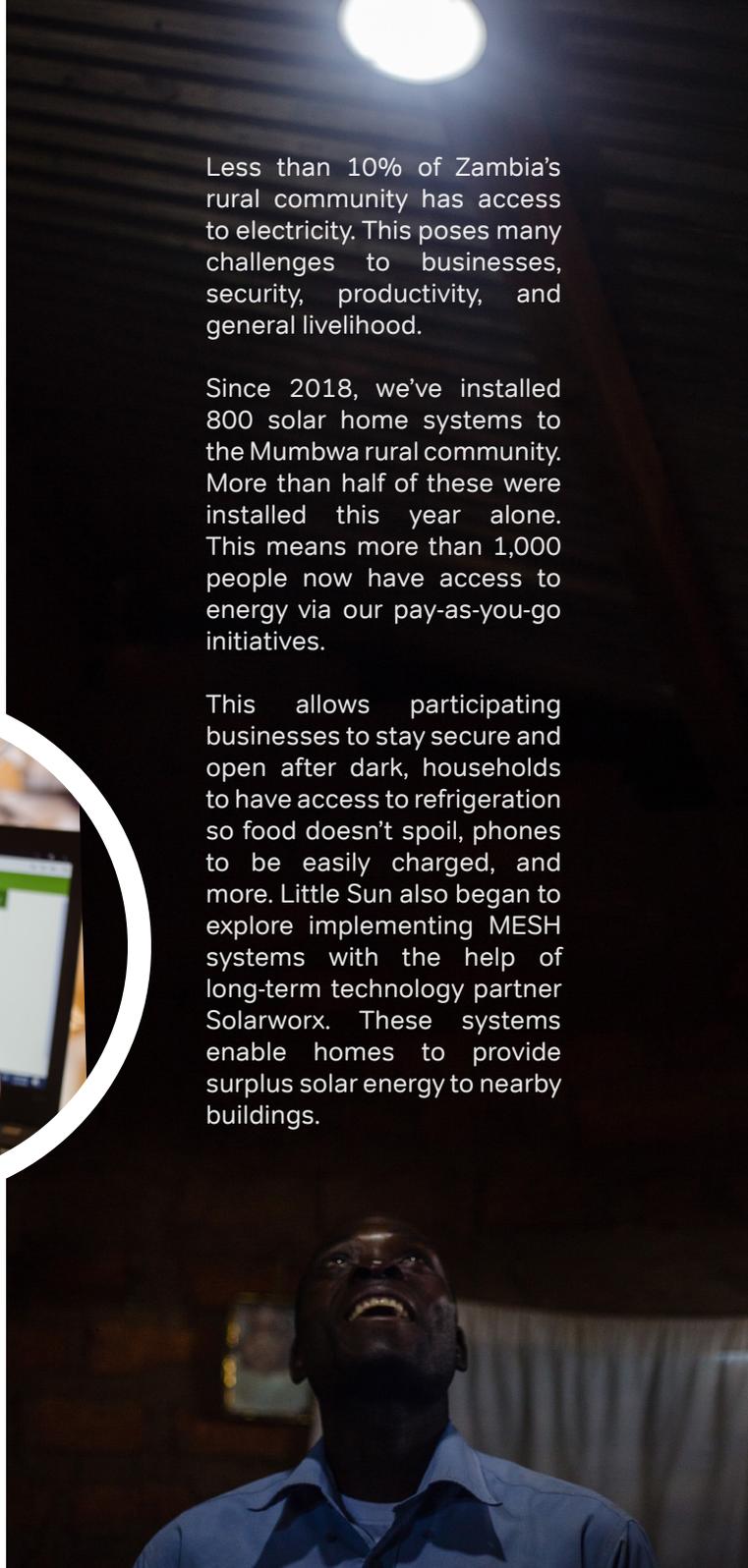


Less than 10% of Zambia's rural community has access to electricity. This poses many challenges to businesses, security, productivity, and general livelihood.

Since 2018, we've installed 800 solar home systems to the Mumbwa rural community. More than half of these were installed this year alone. This means more than 1,000 people now have access to energy via our pay-as-you-go initiatives.

This allows participating businesses to stay secure and open after dark, households to have access to refrigeration so food doesn't spoil, phones to be easily charged, and more. Little Sun also began to explore implementing MESH systems with the help of long-term technology partner Solarworx. These systems enable homes to provide surplus solar energy to nearby buildings.

A solar agent learns how to use the PAYGO technology during a workshop. A man stands in his house (middle) with a newly-installed solar home system (right).  
Photos: Chona Mwemba



# Bringing light to schools in Mumbwa, Zambia



“ This solar power has encouraged studying in the evenings. It was especially helpful that it came during examination time. The school has also appreciated that it has provided security for classes. ”

**Spencer Namiindi,**  
Head Teacher of Nalusanga

Children run around in the school playground (left) and learn during the day (bottom right). A solar agent installs a solar panel to power a school (top right) to power the school (top right) so that children can have light after dusk.  
Photos: Chona Mwemba



Together with the District Education Board Secretariat and Ministry of Education, Little Sun installed solar systems at 13 rural schools in Mumbwa, Zambia. These electrification initiatives have brought light to nearly 8,700 students and 130 teachers. By electrifying these schools, Little Sun has helped facilitate additional study hours for students while creating a more secure learning environment.



A school in Mumbwa is entirely powered by solar energy at night. Photo: Chona Mwemba

# Electrifying a boarding school in Tanzania

“The solar system at the school is a paradigm shift.”

**Daniel Senyieri Kaaya,**  
Chemistry and Physics teacher

The Gadgetronix team finishes installing the solar panels at the school (top). Children now have light at night to gather at the school after dusk (bottom).

Photos: Gadgetronix (top), Little Sun (bottom)

There is a secondary boys school situated in a remote area of Tanzania, just a short distance from the Kenyan border. Evenings were typically a time of hurry at the school—over 500 students and teachers rushed to finish their evening tasks before the sun set and darkness enveloped the school.

Things changed when Little Sun, together with partners AAIDRO, Gadgetronix, and ESTEC, installed a school-wide solar system, solar-powered TVs, and efficient cook stoves.

After dark, students now gather in the brightly lit classrooms for additional study time or community activities, something that was not possible before. Teachers incorporate the solar TVs into their lesson planning, either broadcasting educational videos or recording class instruction for students to review during study time. The new stoves enable a warm, well-cooked breakfast to be served before classes start. The stoves also reduce expenses for firewood by almost 90%—freeing up a substantial budget that the school can now allocate to nutritious ingredients, while also curbing deforestation in the Maasai region.

The program has helped turn the school into a center of innovative energy solutions. Through the daily use of the solar system and energy-efficient cook stoves, the school has demonstrated how energy poverty can be overcome.



## Powering health facilities in Ethiopia



A solar agent with a health facility's solar system control panel (left). Doctors use a powering device (middle). Solar agents install solar panels on a rooftop (right).

Photos: Samson Tsegaye

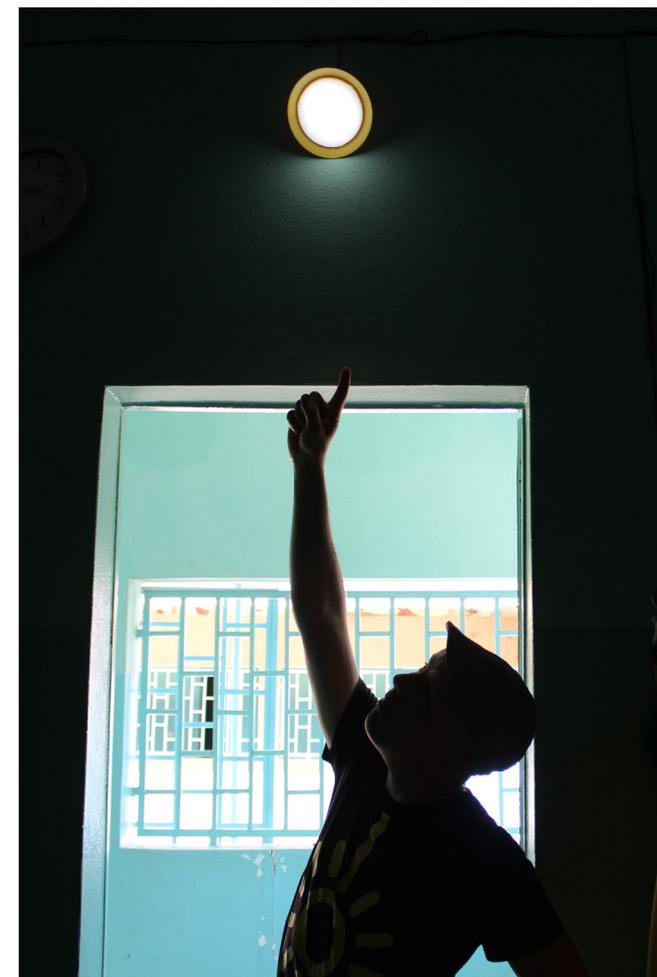
According to the Ethiopian NEP 2.0 report, 72% of all healthcare facilities in Ethiopia lack access to electricity and 95% of health hubs serving rural populations have no power.

The absence of reliable lighting and electricity in off-grid areas places a tremendous burden on community health workers. Access to energy is vital for communications, digital health tools, maternity wards, emergency care, vaccine refrigeration, administrative tools, testing, and more.

Little Sun is committed to rethinking how energy services are delivered to healthcare facilities. Rather than establishing a centralized power system, Little Sun distributes energy needs through small-scale solar systems that allow local health providers to have better access to energy. Applying a modular system is efficient and can be tailored easily to every health center. Additional services can also be added as funds become available.

In partnership with Solar Development, We Care Solar, and Doctors with Africa CUAMM, Little Sun implemented a pilot project that powered six off-grid health facilities in Southern Ethiopia with solar electricity to power lighting, mobile communication, small medical devices, and vaccine refrigeration. The aim of the project is to provide a proof of concept for affordable, reliable, independent, and distributed plug-n-play solar systems to power off-grid health facilities.

## Powering health clinics in Senegal



Inspired by the positive feedback we received from the maternity ward solar systems installed in Ethiopia and our work with partner We Care Solar—a maternity health care energy solution—we began to consider how to expand our health work in Senegal in 2020. As a first step, Little Sun began to work with partners in the health sector (including the Senegalese Red Cross, Intra Health, CARITAS, Plan International Eclosio, and The Ministry of Health) to identify rural health centers without access to energy. From there, we implemented the first basic solar systems that provide lighting and device charging to enhance healthcare services.

These solar home systems are both simple to use and inexpensive. They provide light and outlets to power mobile phones and basic medical equipment, allow midwives to better manage deliveries at night, and provide community health workers with a place to charge phones so they can communicate with patients, partners, and other medical professionals. To date, Little Sun has installed nearly 220 solar home systems in Thiès, Tambacounda, and Ziguinchor.

The Little Sun team installs solar panels on a health facility rooftop. Former Little Sun's Samuel Dansette visits a health center in the Tambacounda region, Senegal.  
Photos: Little Sun

## Solarizing health clinics in Zambia

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A health facility powered by solar energy at night in Mumbwa, Zambia.  
Photo: Chona Mwemba



Today, solar-powered medical facilities play a small but vital role in improving health outcomes around the world. To help, Little Sun has delivered solar home systems to power light and vaccine refrigeration in rural health centers in Zambia's Mumbwa district.

These solar systems improve night-time health treatments, particularly for deliveries and maternity care. They also enable electricity for various devices, including the cell phones of clinic personnel. With the addition of a solar fridge, health centers have access to critical refrigeration for vaccine and medicinal storage.

In total, Little Sun equipped five health centers in Zambia with solar fridges and solar systems that power lighting and key devices. The impact of these solarized clinics will benefit a population of up to nearly 67,000 residents who rely on these clinics for their care.



Vaccines are stored safely in a solar-powered refrigerator (left). A room inside the facility that will soon be lit by solar energy (top right) while a healthcare worker carries out a consultation in a nearby room (bottom right). Photos: Chona Mwemba



# CITIZEN ENGAGEMENT



“ [It’s about] using the power of art and culture and communication to talk about solar energy—to feel connected to this Little Sun, and the big sun up there. ”

Felix Hallwachs,  
Managing Director at Little Sun

A portrait of Little Sun’s Felix Hallwachs (left). Little Sun’s Founder Olafur Eliasson performs a Little Sunrise during a Pathway to Paris event in the Masonic Auditorium in San Francisco, California (right).

Photos: Claus Morgenstern (left), Steven Sebring (right)



Art and culture are instrumental in inspiring and educating communities about energy access and climate justice. Both play an important role in challenging old belief systems and lending a voice to untold or underrepresented stories. Without creative storytelling, we may not always be able to understand what is possible.

Art can also help turn conversations around fear into hope—galvanizing people to engage and take action. That’s why it’s important to us to enable artists to craft new narratives around renewable energy and climate action. Through creative activities, we believe we can drive engagement and inspire real change.

The design of the Little Sun solar lamp is in itself a symbol that’s been a vital part of our **citizen engagement**. The lamp allows people to place the power of the sun in their hands—making solar energy something physically experienced. Building on this idea, Little Sun joins forces with creatives in various fields and geographies to inspire communities about the power of solar.

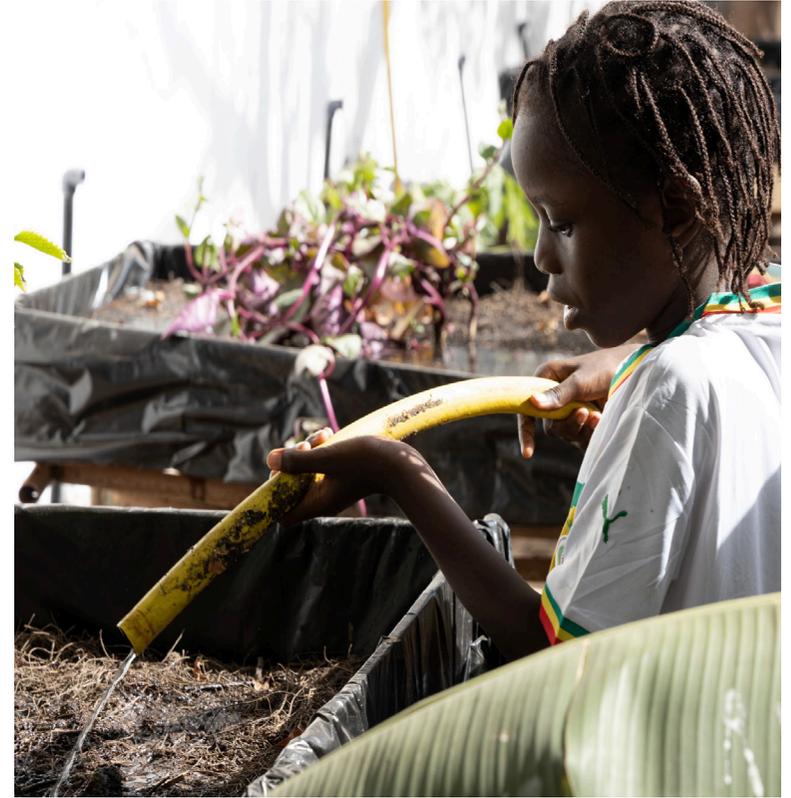
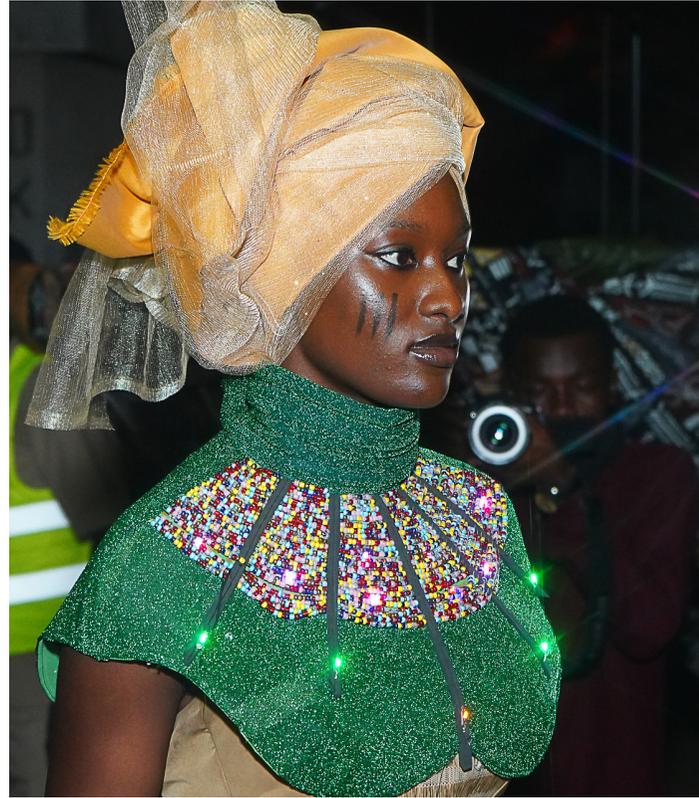
## Suñu Jant (Our Sun)

Little Sun collaborated with long-time partner RAW Material Company to present **Suñu Jant (Our Sun)**, a constellation of public artworks in Dakar. The project featured work by three established art spaces in Dakar that work at the intersection of art, sustainability, and social impact. Together, their installations imagined a climate-just future for the city that honored Senegalese traditions, invested in community leaders and institutions, and centered joy and celebration.

Each artist collective considered how solar might serve as a foundation of this future. While the resulting artworks varied in form—from a mobile amphitheater to a revitalized community garden—they each offered a vision for a world powered by the sun.

Suñu Jant featured work by KENU LAB'Oratoire des Imaginaires, Yataal Art, and Ker Thioissane and ran as part of Partcours 11, Dakar's annual city-wide art festival.

A woman wears a solar-powered dress as part of Kër Thioissane's solarpunk fashion show (left). A child waters a community garden created by Yataal Art at an elementary school in the Medina neighborhood in Dakar (right). The exhibit program from the opening at RAW Material Company (bottom). Photos: Djibril Drame





KENU's large-scale, solar-powered installation that acted as a community hub for artistic programs exploring sustainability and Senegalese tradition. Photo: Djibril Drame

## Inspiring climate action in Paris

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Little Sun partnered with Paris-based art collective 3537 to design a **solar-powered installation** that was illuminated at Brûlures—the organization’s climate-focused event series in January 2022. The cone-shaped installation featured 500 Little Sun solar lamps, symbolizing the need for global climate action through an exhibit that could be felt and experienced by many.

Alongside the installation, 3537 screened Fast Forward, Little Sun’s series of short films that focus on reframing the prevailing political rhetoric on climate change. These films explore five artists’ dreams for a regenerative world and feature over 300 global voices, from artists in Ethiopia, Senegal, the United States, and more.

A man stands in front of the installation that aims to raise awareness for energy access in Paris, France.  
Photo: Lucien Héritier



# Eye on the Future

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'Eye on the Future' is an interdisciplinary film that draws attention to the devastation caused by extreme weather patterns fueled by climate change. It was created in partnership with Florida State University.

As hurricanes have intensified, 'Eye on the Future' brings together a community performance that expresses the emotional impact these weather events have in Florida. Little Sun solar lamps are used to highlight how solar-powered items can be used during and after a hurricane strikes and devastates a region. The film is part of a larger project by Florida State University and the RIDER Center that examines global warming—specifically how at-risk communities access clean energy and water as climate disasters unfold.



Dancers perform a choreographed dance for the production of the film 'Eye on the Future' in Florida, USA.  
Photo: Becki Rutta



Dancers and movers stand with Little Sun solar lamps for 'Eye on the Future' film in Florida, USA. Photo: Becki Rutta

# GLOSSARY

## Village Savings and Loan Association (VSLA)

The purpose of a Village Savings and Loan Association (VSLA) is to provide straightforward savings and loan facilities in a community that does not have easy access to formal financial services. This is accomplished when a group of people agree to save together and take loans directly from those savings.

## Solar Home Systems (SHS)

Solar home systems (SHS) are stand-alone photovoltaic systems that offer a cost-effective mode of supplying amenity power for lighting and appliances to remote off-grid households. In rural areas, that are not connected to the grid, SHS can be used to meet a household's energy demand fulfilling basic electric needs.

## Off-grid or off-the-grid

Off-grid or off-the-grid traditionally refers to being disconnected to the electrical grid, but can also include other utilities like water, gas, and sewer systems. This can refer to both residential homes or entire communities.

## Community solar hub

A solar-powered space that can power various types of productivity work within a community including milling, husking, or milk cooling. These productivity services can be added or changed, based on community needs.

## Solar water pump

A solar water pump or solar water pump system is an electrical pump system in which the electricity is provided by one or several PhotoVoltaic(PV) panels. A typical solar-powered pumping system consists of a solar panel array that powers an electric motor.

## Renewable energy

Renewable energy is any type of energy that is collected from a naturally replenished source. It includes sources such as sunlight, wind, the movement of water, and geothermal heat.

## Solar dryers

Solar dryers are devices that use solar energy to dry or dehydrate substances, especially food. Solar dryers use the heat from the sun to remove the moisture content of food substances.

## MESH system

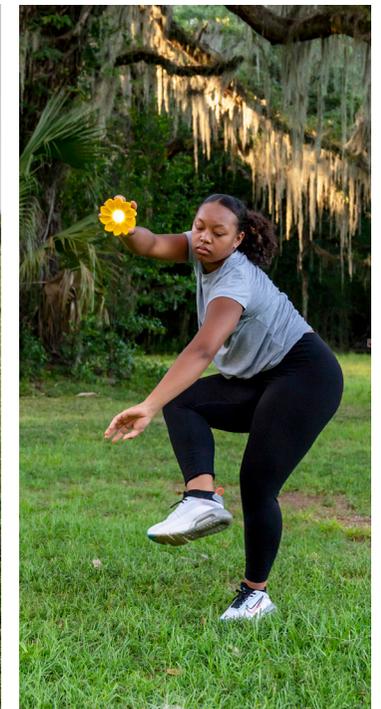
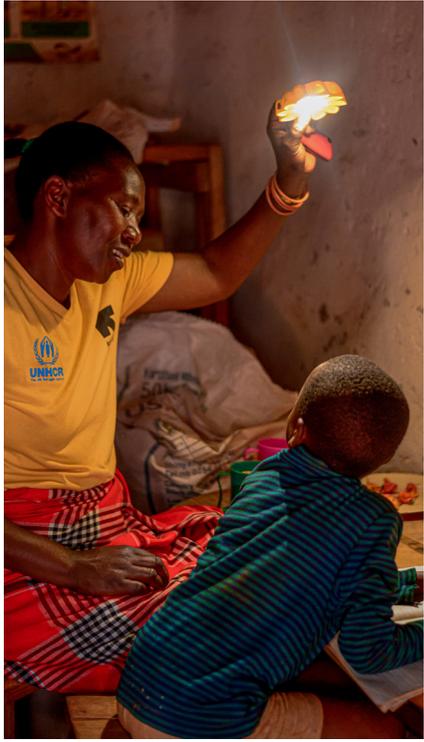
A decentralized solar system that allows neighboring homes and businesses to connect and form a power-sharing community.

## Mechanization

Mechanization is the process of changing from working primarily or exclusively by hand or with animals to working with machinery.

## Clean energy

Clean energy refers to energy that's generated from renewable sources without emitting greenhouse gases.



**THANK YOU TO EVERYONE,**

**NEAR AND FAR, WHO HAS HELPED FURTHER LITTLE SUN'S SOLAR MISSION TO BRING ENERGY ACCESS TO ALL IN THE LAST DECADE.  
YOUR SUPPORT IS THE REASON LITTLE SUN IS POSSIBLE, AND WE COUNT OURSELVES  
LUCKY TO HAVE SUCH AN INCREDIBLE COMMUNITY EACH STEP OF THE WAY.**



# WE'RE LITTLE SUN

Established in 2012 by artist Olafur Eliasson and engineer Frederik Ottesen, Little Sun is an organization working to deliver affordable clean energy and inspire people to take climate action. Little Sun distributes energy tools, implements renewable energy programs, and leads citizen engagement campaigns globally; partnering with solar experts, artists, companies, governments, communities, and nonprofit organizations.

Little Sun works primarily in Ethiopia, Senegal, and Zambia, drawing on the expertise of in-country staff. Through close partnerships with local organizations, Little Sun also operates in Rwanda, Tanzania, and South Africa. Little Sun has offices in Addis Ababa, Berlin, Dakar, Lusaka, and New York.

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