ANNUAL REVIEW

2021 - 2022

SolarAid

OUR STORY SO FAR

WHY WE EXIST

Nearly 600 million people across sub-Saharan Africa lack electricity. When the sun goes down, the working day ends and the only option is to use battery powered torches or ignite kerosene lamps or paraffin candles, which emit toxic fumes into people's lungs and into the earth's atmosphere.

With the power of solar and the flick of a switch, we are changing this story.

Since 2006, SolarAid has distributed over 2.2 million solar lights across rural sub-Saharan Africa, reaching the places no one else goes to. And we won't stop there. We know that every time someone switches on a solar powered light, it's an instant win for both people and the planet, so we have made it our mission to light up every home, school, and clinic in Africa by the end of the decade with clean, safe, solar power.

With every light delivered to the hands of a farmer, a school child, or a midwife - we are making real sustainable change happen.

OUR SOCIAL ENTERPRISE

SolarAid is funded by donations from individuals who share our concern for climate change and are motivated to help people benefit from solar energy, along with corporate partners who share our values, and grants from an array of trusts and foundations to fund our innovations. Donations enable SolarAid to innovate and devise viable business models that allow our lights to reach the most rural people and places.

Donations also allow us to run our social enterprise, SunnyMoney. We have learnt the best way to ensure universal access to energy and to make lasting change happen faster, is to build local, sustainable businesses and involve communities. Income from sales of solar lights are reinvested into the organisation, allowing our lights to reach the people and places otherwise left behind.

This business based approach helps us bridge the market gap between emerging enterprises and people living below the poverty line. It means we can invest in bold ideas that carry risk. We can model the market and act as a building block that both businesses and governments can help scale. And finally, we can bridge the knowledge gap in how to set up sustainable solar solutions that local communities and other non governmental organisations need.

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MESSAGE FROM THE CHAIR

MIRJANA ŠKRBA

The year of this report saw SolarAid expand and strengthen its operations, all thanks to our supporters' generous donations and the significant funding received from our key corporate partner, Statkraft.

Our priority remains - providing sustainable energy access to the poorest homes, schools and health facilities in last mile rural communities in sub-Saharan Africa through seeding and supporting small solar businesses for the distribution and sale of lights.

Through investing in building our support base and in engaging with the wider movement to achieve universal access to sustainable energy, we have been able to continue testing ways of mobilising accessible, affordable financing for end-users and enterprises.

Our project Light a Village project is a good example of this. It seeks to unlock an effective way to deploy solar power to entire villages.

Local contexts require locally designed solutions. Working directly with the communities is central to our energy access efforts. Part of a sustainable solution includes providing the beneficiaries with the capacity and skills to maintain and repair the systems installed. To accelerate the progress needed to achieve SDG7 by 2030, we are keen to share our ways of working and lessons learnt, so that others may adapt the models to their own local initiatives, so we continue to build strong partnerships with the wider NGO and private sectors and government agencies.

However, humanity continues to face daunting challenges - the COVID-19 pandemic damaged health programmes, closed schools and squeezed economies across the continent. There are still infrastructure problems that hamper logistics, as well as high energy prices, tax and customs burdens and rising costs. There are mounting dangers from climate change as well as impacts from regional disturbances with global impact in our interconnected world – the war in Ukraine this year has sparked an energy crisis and raised food prices across the world.

Amongst all this uncertainty, we believe there is hope in granting access to solar light to all, improving people's quality of life and chances of success.

We can only do this with our donors' continuing support. We would like to thank staff and volunteers for their dedication and teamwork, and we are grateful to all who have contributed towards our mission.

Mirjana Škrba, Chair of Trustees

WELCOME FROM OUR CEO

At SolarAid, we do not just dream of creating a world where everyone has access to clean renewable energy - we take action.

It is incredible to think that, since we were set up in 2006, today 101 million people are lighting up their evenings with solar energy across the continent each and every day.

SolarAid has played a pioneering role in helping make this happen, but with 660 million people projected to be without power by 2030, and 3 in 4 health facilities across the continent without reliable access to electricity, we still have a long way to go. Our mission is to change this, so that every home, school and health facility across Africa has access to solar light and power by 2030.

But we do not intend to achieve this alone. Nor can we. As we focus on developing practical, innovative, ways to bring solar solutions to those who need them the most, we also seek to scale up by working in partnership with governments and NGOs and collaborating with the growing number of solar actors operating across the continent.

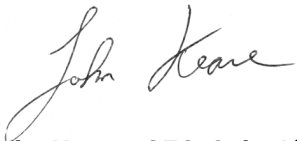
I am proud of our teams who work hand in hand with rural communities every day to bring solar lights and power to rural communities. They have been actively implementing ground breaking projects designed to overcome the barriers which prevent many from accessing solar power. When I visited one a projects of ours in one of the poorest, most remote communities in Ntchisi, Central Malawi this year, it was humbling to see so many families using solar panels for the first time to light up their homes at night. This was a glimpse of the future we want to see across the continent and it shows us that real, sustainable change can happen overnight.

As we continue to develop this work, the next step will be sharing what we learn and helping others to replicate successful projects in new areas. It's challenging, but it's also incredibly rewarding.

In this report, I'm excited to share with you how we, with your support, have launched a series of exciting new projects, all with the goal of bringing solar light and power to people who otherwise live without. Alongside continued support for solar entrepreneurs, with a particular focus on women, these projects include subsidy trials to help light homes and projects which use the latest solar technologies to light up low income homes together with rural schools and health facilities.

The report also details how we have continued building partnerships and sharing how we work and what we learn so that others can benefit and replicate what we do, to reach more people.

With the world facing the combined threat of the climate and energy crisis, never has it been more important to bring solar light and power to the world's poorest, most vulnerable communities. For this reason, we will not stop until we achieve our dream of a world where everyone has access to clean, renewable, energy.



John Keane, CEO, SolarAid

590M

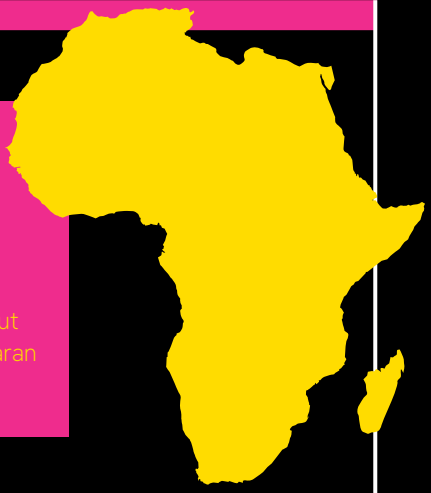
people in sub-Saharan Africa are without electricity at home.

1 IN 4

health clinics in sub-Saharan Africa have unstable electricity access.

65%

of schools are without electricity in sub-Saharan Africa.

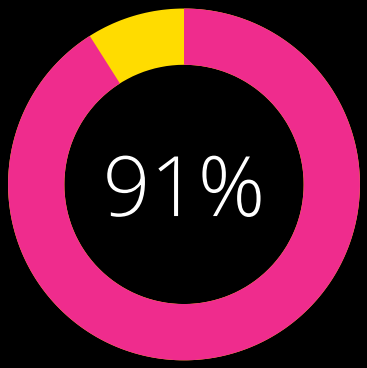


86%

of our customers say they experience improved safety since they got a solar light.

78%

of customers in Malawi were using an unsafe or poor lighting source, such as candles, kerosene or battery powered torches before accessing solar lights.



of customers in Zambia say quality of life "very much improved" since getting a solar light.

"My house has changed. When it is dark my children are able to use the solar lamp for cooking and studying. Food scarcity is no longer a big challenge, because we were using our money to have light."

Eness Naliwa,
Mayi Walas solar entreprenur, Malawi

2,203,112 SOLAR LIGHTS

DISTRIBUTED BY SOLARAID

Ricardo Cordeiro de Sousa running the Budapest Marathon

YOU ARE AMAZING

We are particularly grateful for the donations we receive from individuals throughout the year in response to our appeals and regular contributions. If this includes you - thank you - you truly are amazing.

We know that many of our supporters are concerned about the climate crisis and at the same time wish to do something that helps people. Our supporters are attracted by how provision of light powered by the Sun makes an instant impact on someone's life. Here are some of the reasons that have been shared with us on why people support us:

"Because I believe that saving the planet and saving its people go hand-in-hand, if you can empower more and more communities with solar-powered electricity, the rest of the world will follow suit".

"I appreciate the gains for both people and environment that solar energy brings."

In addition, we know many individuals show friends the solar lights bought via our shop, which are the same robust models we use in Africa, helping to spread the story of SolarAid's work.

It doesn't stop at donations - we are always taken aback by the creative ideas and the extraordinary lengths someone will go to raise additional funds for SolarAid.

Multiple marathon efforts - from the Arctic to the Sahara desert

Recovering from COVID-19, including a point when he could hardly run up the stairs, Ricardo Cordeiro de Sousa took on the challenge of running multiple marathons for SolarAid. He's already done four, including one in the Arctic, and has more lined up. Meanwhile, Jon Cross, having not run a marathon for 20 years, took on the ultra Marathon des Sables - 250km over sand dunes in 40 degree heat. Both these incredible fundraisers share SolarAid's spirit of setting an ambitious goal.

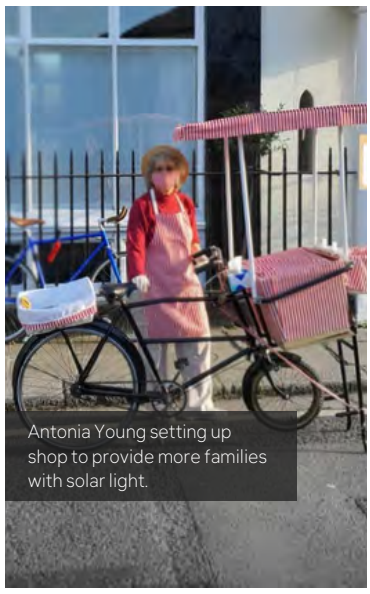

Jon Cross taking on the ultra Marathon des Sables.

Ice cream aid

Antonia Young got inspiration from the Sun in a different way - selling ice cream to her neighbourhood in support of SolarAid. During the lockdown she wrote a children's book - 'The Magic Suncatcher' - which you can now buy in our online store.

Living without electricity

A special shout out to the students and pupils of Brunel Primary school who once again did their fundraiser going without electricity. Inspired by the "Night Without light" fundraiser created by the Singapore American School we are now promoting this as a fundraising event each year that anyone can participate in.


Antonia Young setting up shop to provide more families with solar light.

OUR WORK IN

MALAWI

SolarAid first opened its office in Malawi, one of the poorest countries in the world, in 2006. With a growing population of 18.6 million people, over half of the population in Malawi live below the poverty line. In 2021, only 6.6% of the rural population had access to electricity.

In recent years, Malawi has suffered the consequences of climate change. As cyclones such as Cyclone Idai and Cyclone Ana swept through the country's Southern regions, infrastructure has failed in many areas. In many cases, rural communities have been cut off from the main roads connecting them to towns and cities as well as from the national electricity grid causing load shedding and a shortage of petrol.

Through SolarAid's social enterprise model and by working in partnerships with organisations, from governmental bodies to grassroot NGO's, SolarAid are able to deliver innovative solutions bridging these challenges and creating real, sustainable change. Since 2008, we have impacted an estimated 1.7 million in Malawi.

Across the country, we have continued establishing and supporting energy businesses, led by solar entrepreneurs known as 'Super Agents' who are able to provide sustained access to solar products within rural communities through a network of 766 entrepreneurs. In 2021 alone, this network brought solar light and power to 153,463 people. The aim is for these enterprises to continue to bring solar light and power to rural Malawians long after we have gone. Alongside this work, we have been developing new innovative projects which are designed to reach the poorest segments of society.

Our key strategic objective is to demonstrate that it is possible to achieve universal, sustainable, access to solar light and power within homes, schools and health facilities in 'focused, underserved, "last mile" areas. By demonstrating that this is possible and how this can be achieved, we will continue to actively influence wider change.

Alongside the impact of our direct interventions, we are using this work to:

1. Influence Government policy, action and change.
2. Provide blueprints and best practice for replication and adoption by partners, civil society, governments, the private sector, investors and donors .

Over the past 12 months we have been actively implementing a series of exciting projects, all aimed at increasing access to solar light and power.

Leading example of this work include:

- Supporting 20 Light Libraries within rural schools, enabling the poorest students to access solar light, together with library books supplied by our partners Book Aid International. We have now created a Light Library toolkit to help other schools and education NGOs replicate this model.

- Established 108 Mayi Wala groups – groups of women solar entrepreneurs - who now have access to solar lights, finance and training to help them distribute solar lights within remote rural communities.

- Launched our innovative 'energy as a service' light a village project in one of the poorest communities in the country, which is now lighting up over 500 low income homes and 10 rural schools, with plans to expand this model in the coming year as we continue to learn 'what it takes' to light up whole communities and how the private sector, civil society and governments can partner and scale this model across the country.

OUR WORK IN

ZAMBIA

SolarAid has operated in the vast land-locked country of Zambia since 2008. With 59% of households in Zambia earning less than the international poverty line of $1.90 per day, household income is modest. Education levels are low with 79% of girls finishing primary school in Zambia, and only 54% progressing to secondary school.

Together with its neighbours, Zambia is suffering from the brutal effects of climate change. In a country where the rural economy is dominated by small scale farmers, unpredictable rainfall patterns are putting vulnerable communities at risk of starvation and malnutrition. Rural economies are suffering, while prolonged dry spells in recent years is negatively impacting every aspect of society with power shortages across the country, with water levels in the main hydroelectric Kariba dam falling to record lows.

Over the past year, SolarAid has continued to bring solar light and power to the rural homes and health facilities most in need. Our social enterprise currently supports over 200 entrepreneurs and has distributed over 350,000 solar lights sold across the country, impacting an estimated 1.7 million people. There has also been progress in recent years with more solar actors entering the market. Yet with just 14% of the rural population enjoying access to grid electricity, and with the poorest people struggling to afford access to many solutions on offer, there is still much to do.

Alongside the distribution of solar lights, we have also brought light and power to 10 rural health facilities pairing the latest plug and play solar systems with energy efficient medical appliances in order to demonstrate to other NGOs and the Ministry of Health how quickly such systems can be deployed and to learn more about the impact these interventions have on improved health care provision. The results have been encouraging, demonstrating that, with the right supporting infrastructure in place, these solutions can be rapidly deployed at low cost and have an immediate impact.

As part of our strategy to leave no one behind and recognising that many low income households struggle to afford solar lights, we launched the first in a series of end-user subsidy trials, which lowered the cost of solar lights for low income households. The results showed a significant increase in uptake, helping people living below the poverty line to save money, while building the customer base for rural entrepreneurs.

As always, we openly share what we do and what we learn, so that others can replicate. SolarAid Zambia has also been leading the way in ensuring that customers can extend the life of their products, by training and supporting repair technicians. This work has included the creation of an open source repair mobile app which is not only being downloaded by technicians in Zambia, but also in countries across the continent such as Kenya, Tanzania and France. By giving solar lights a second life, and working in partnership with other actors to find new uses for products at the end of their life, we are reducing high levels of electronic waste.

In the coming year, we will continue innovating and delivering projects which not only bring solar light and power to more rural homes and communities being left behind, but crucially, we will be actively sharing what we learn and how we work, so as to encourage replication to accelerate change. We will also continue to support the Solar Industry Association of Zambia (SIAZ) in its aims to create an enabling environment which helps build a vibrant off-grid solar industry while working with like-minded partners with established networks across the country as we seek to accelerate access to solar light and power.

Solar entrepreneurs such as Rhoda Chibale can now make a living while bringing clean energy to her community, children such as Ashley Muchinga can read after dark, and healthcare workers such as Sister Grace Mkupa can now work throughout the night without having to worry about blackouts.

POWERING HOMES

As the sun sets across sub-Saharan Africa, millions of small paraffin candles and toxic kerosene lights are starting to flicker in homes across the continent. In many cases, they are being lit in an attempt to extend the day, so that children can do their homework and families can carry out household chores or work to earn extra income.

But the light levels are poor. The flames pollute the environment and people's lungs. The lights are dangerous, causing countless tragic accidents across the continent each year. Yet the only alternative is complete darkness. This reality, facing the world's poorest communities, limits opportunity. It harms quality of life and it traps families in poverty. Solar lights change this reality.

This is why SolarAid has launched new initiatives which have been designed to bring solar light and power to homes which have never been reached before. By working hand in hand with rural communities, schools and entrepreneurs, we identify barriers which prevent people from accessing solar lights and then explore solutions. Examples of this work include:

Helping customers overcome price barriers: We do this by enabling people to pay for solar lights in small, affordable, instalments either through the use of smart Pay-As-You-Go (PAYG) technology or through the local schools where we establish Solar Light Libraries . These libraries enable students to access solar lights, with the option of owning them over time. In the past year, we have also launched our exciting new Light a Village project. This project is bringing solar home systems to some of the poorest communities in Malawi through an 'energy-as-a-service' model which removes the barriers and risks which come with ownership.

Helping solar entrepreneurs scale up: We train and support local entrepreneurs so they can bring the lights to their communities, and through partnerships such as with Lendwithcare, we provide microfinancing models to give aspiring businesses support in accessing stock.

Reaching the last mile: As part of our commitment to ensuring that last mile communities have access to solar lights, and in recognition that women have a critical role to play to bring energy access to rural communities, we are proud to be training and supporting women solar entrepreneurs in Malawi as part of our Mayi Walas initiative.

All of this work focuses on the same outcome: Access to solar light and power to transform lives.

As part of our programme 'Light a Village' in Malawi, Patrisha Jenufalam's family now have a light switch on their wall.
Photo: SolarAid/Chris Gagnon

"I like the solar lights because they are very bright. We are able to eat well at home because of the solar lights. My children are also able to study without problems."

ENESS NAWILA, MALAWI

POWERING SCHOOLS

230 million children across the globe attend primary schools without electricity. Across sub-Saharan Africa, 65% of schools are unelectrified, with students living in rural areas where the majority of homes lack access to electricity. This means that, when it gets dark, students have less opportunity to study or do homework, while teachers have less time to prepare for the school day. This results in less opportunity for children, hindering long term development.

Access to light can lead to improved school attendance and performance levels, providing children the opportunity to study safely and schools the opportunity to open after dark.

Schools are also often at the heart of rural communities across Africa. SolarAid has successfully demonstrated over the past 15 years, that collaborating with education networks not only fast tracks access to solar light and power for students and teachers, but also the wider community. This is why we collaborate with education authorities, head teachers, community members and solar entrepreneurs to light up schools and bring solar lights to rural families. 2021 saw us launch new projects in collaboration with rural schools:

Light Libraries: In partnership with local education authorities and with Book Aid International, SolarAid brought Solar Light Libraries to schools in Malawi. These libraries are designed specifically to reach the poorest students and their families, enabling students to use a solar light in the evening. Each Light Library school is also equipped with a solar system which lights up classrooms. We have now developed a toolkit to enable organisations working with schools to replicate this model within schools across the continent.

Light a Village - Schools: 2021 also saw us launch our Light a Village model which has been designed with the goal of providing every home in a rural village with access to solar home systems through an 'energy as a service model.' Half way through the pilot, the local community requested to include schools within the programme. 10 schools are now accessing solar light and power through this model, with plans to reach more in the coming year.

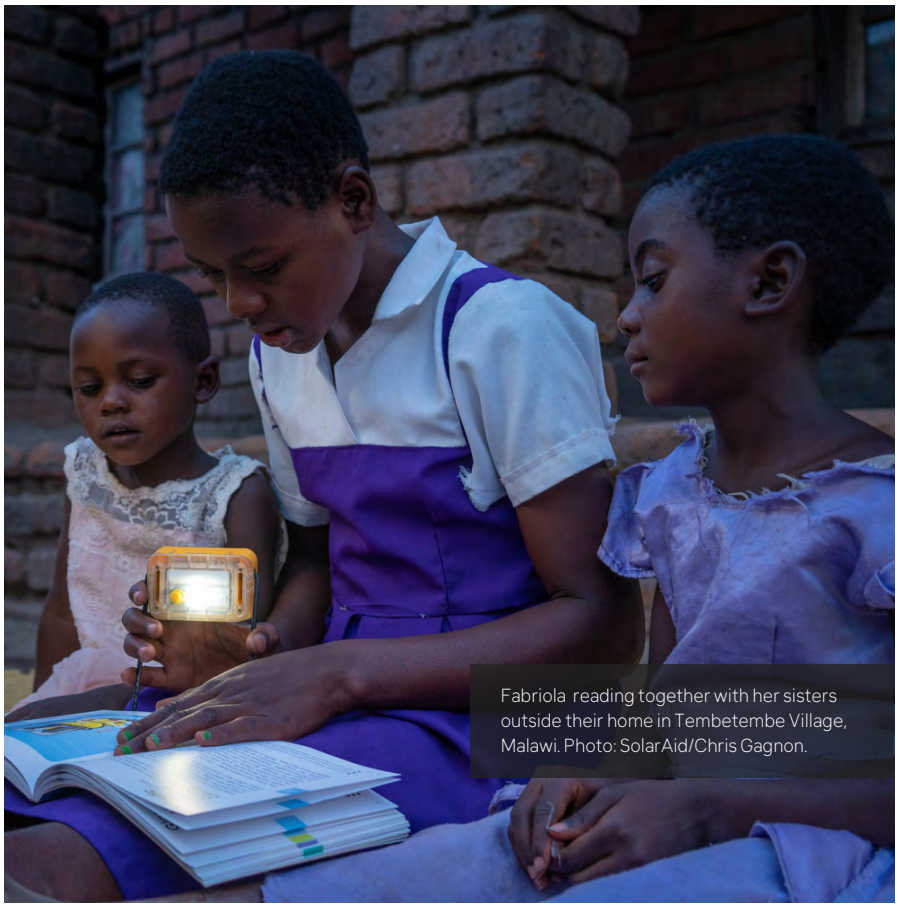
"I want to be a teacher so that I can help my parents and relatives. I want this job because I admire the way teachers do their job here at school."
- Dalitso Halario, 13, Malawi.
Photo: SolarAid/Chris Gagnon

FABRIOLA'S STORY

LIGHT ON THE PATH TO BECOMING A NURSE

The pitch black surrounds Fabriola Davidson, 15, as she sits outside her house in Tembetembe Village in Malawi, reading a book about engineering. But with a solar light firmly in her hand, the darkness is not affecting her.

"I was looking at things like computers and how pressure works. If I had a computer, first and foremost, I want to learn. So to avoid struggles when I go to nursing school."



Fabriola reading together with her sisters outside their home in Tembetembe Village, Malawi. Photo: SolarAid/Chris Gagnon.

Becoming a nurse is top of mind as Fabriola is studying for her exams, "I want to help the sick. I can work as a nurse and I will be earning money to help my poor relatives," she says.

Fabriola was struggling with her studies in the past. The family had to rely on torch light and to buy batteries every day to get light after the sun set and it was a strain on the family's budget. "If we do not have money to buy batteries, the children won't have time to study because we live in the dark," Fabriola's father, Davidson said.

Fabiola adds, "In the end I was not performing well in class because sometimes, I just read a little bit and the torch light went off. So I failed because I was not able to study enough."

But a light of hope has now arrived, and things are changing for the family.

At Fabriola's school a Light Library with solar lights provided by SolarAid and books provided by Book Aid International has arrived. For as little as 1p, this allows Fabriola to rent a solar light and a book to bring home with her. She is now able to study long after the sun has set. "I was happy because I knew that I would improve my performance in the classroom (...) When I borrow a book and a torch, I go home and I study in a quiet place so that nobody disturbs me."

Having access to solar light in the night time has not only improved Fabiola's study results, it has also benefited the whole family, "We use the solar light during eating, studying and when performing other different tasks," Fabriola says while also explaining that there is no Light Library at her siblings school, so they share. "I give it to them once I have finished studying so that they can also perform well in school."

The joy of the books and lights has also extended to Fabriola's parents, "When she comes home from school, she reads to me things that I cannot read. Her reading brings joy in my heart and I am encouraged that she has a future," says Fabriola's mum. Her dad in particular liked a book called 'Tambourine'. He says, "I like the story inside the book. It reminds me of my time back in school. The story shows how life moves from poverty to times of glory. Based on the story plot from poverty to glory. I thought a school child can also move from poverty to glory."

In an instant, access to a solar light can transform the future for a family.

POWERING HEALTHCARE

A staggering 3 out 4 health facilities in sub-Saharan Africa lack access to reliable electricity.

Healthcare professionals are often forced to tend to patients in the dark, by candle light. Patients are left at greater risks of serious complications and healthcare workers face an increased risk of contracting diseases. In sub-Saharan Africa, where 200,000 women die of complications during childbirth each year, a particularly vulnerable group are women giving birth at night.

Plug-and-play solar systems, which can be rapidly deployed at low cost, can change this reality, literally overnight. This is why SolarAid has reintroduced Powering Healthcare programmes to both Malawi and Zambia.

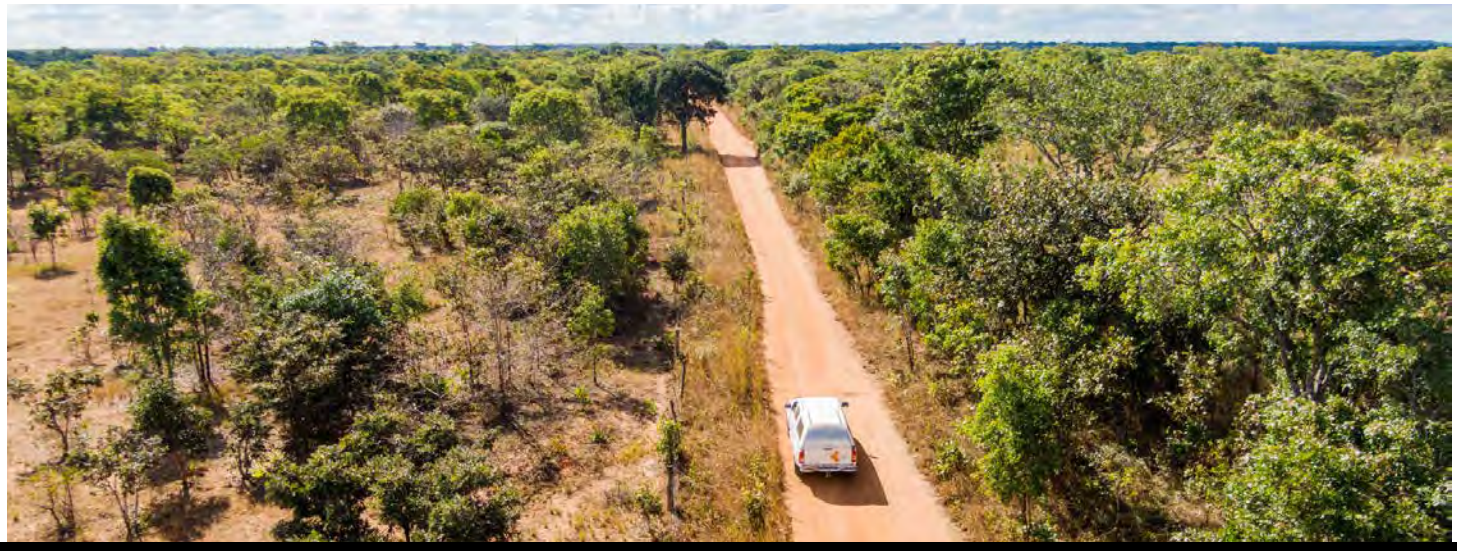
In 2021, with the support of the UK Foreign, Commonwealth and Development Offices (FCDO) Frontier Technology Livestreaming programme, we partnered with Churches Health Association (CHAZ) to bring solar powered medical equipment and lighting to 10 rural health clinics.

In Malawi, with the support of our corporate partnership with ICG and in partnership with the Ministry of Health, we brought power and energy efficient medical appliances to 20 health facilities.

Together with Mzuzu University in Malawi, we also carried out research which identified why past efforts to electrify health facilities often failed. Two of the main challenges to effective widespread adoption of solar in healthcare settings are 1) Coordination and 2) Operation and maintenance support. This results in some faculties receiving multiple solar systems and in many cases, systems fall into disrepair due to lack of maintenance plans.

In order to bridge these issues, we are testing a new approach to direct implementation working with the Ministry of Health in Malawi. In addition, in consultation with UN Sustainable Energy for All, we are exploring how we can provide organisation of healthcare interventions on a national scale.

"We have a backup now, you can do anything at any time. When there is no electricity, you are able to come and work. I'm a night nurse and when there is no light at least we are able to work."
- Sister Grace Mkupa, Zambia.
Photo: SolarAid/Jason J Mulikita



STATE OF THE SECTOR

AFRICA MISSION

SolarAid was founded to fight poverty and tackle the climate crisis, with a vision of helping create a world where everyone has access to clean, renewable energy. The main focus has always been on changing the day-to-day reality within communities across sub-Saharan Africa, where currently nearly 600 million people are without electricity at home.

Our mission is for each and every one of these people to have access to solar light and power by 2030. How we aim to achieve this has changed since we were established in 2006. In 2006, our job was to work with entrepreneurs across Africa to assemble small solar panels and lights as a viable alternative to candles and kerosene lights.

By 2010, new solar companies were making solar products specifically for use across rural Africa, but there was no awareness of these products and no solar market.

So - we focused on 'market catalysation' - increasing awareness, trust, demand for solar lights and building last mile distribution networks to serve these communities. Today, SolarAid's social enterprise alone has sold over 2.2 million solar lights.

But more importantly, our work has helped build a wider solar sector, with social enterprises now distributing solar lights and systems across the continent. We are proud of the role we have played in helping build this ecosystem.

There is still more to do, however. Millions of low income households are unable to afford the solar lights and systems now available on the market. Recent research estimates that, along with significant investment in the private sector, $4.5 billion in grant funding is needed to address the affordability gap to ensure that everyone on the planet can access solar power at home.

It is also widely recognised that subsidies and game changing interventions are needed if we are to achieve universal access to energy by 2030.

It's a similar story when it comes to schools and health facilities. One billion people worldwide are served by healthcare facilities without reliable electricity. One in four health facilities in sub-Saharan Africa have no access. 62% of health facilities and 66% of schools report unreliable access to electricity, significantly impacting health and education. It is clear, therefore, that billions of dollars will be needed to close the electricity gap for public institutions in sub-Saharan Africa.

With access to electricity rates of just a few percent in rural parts of countries such as Malawi and Madagascar, whole communities are starved of the energy they need to develop rural economies and build resilience within the communities being hardest hit by the effects of climate change.

The good news is that solar lights and solar homes systems are the most cost-effective solution to electrify millions of off-grid homes, school, health facilities and businesses. Urgent action is needed, however, to ensure that no one is left behind. That's where SolarAid comes in.

We are able to develop new innovative models which prioritise bringing access to solar light and power in the poorest homes and most neglected communities. As always, our job is not to do this in isolation. We work hand in hand with rural communities, governments and also the private sector to test projects and demonstrate models which bring solar lights to those currently being left behind. This work can then, together with partners and the army of solar enterprises now operating across Africa, be scaled across the continent. Our goal is now simple: To close the gap, so everyone has access to solar light and power and no one is left behind.

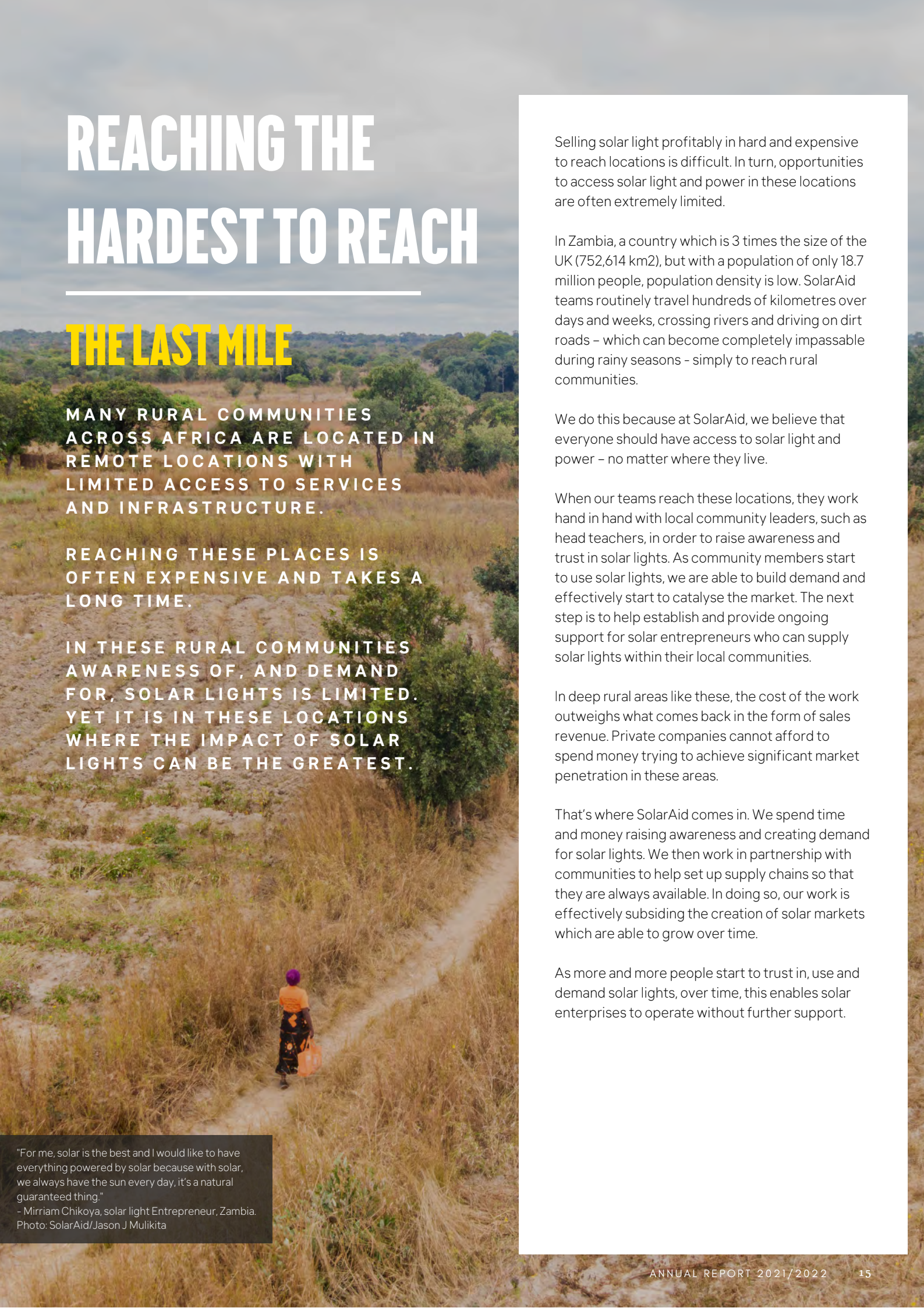
REACHING THE HARDEST TO REACH

THE LAST MILE

MANY RURAL COMMUNITIES ACROSS AFRICA ARE LOCATED IN REMOTE LOCATIONS WITH LIMITED ACCESS TO SERVICES AND INFRASTRUCTURE.

REACHING THESE PLACES IS OFTEN EXPENSIVE AND TAKES A LONG TIME.

IN THESE RURAL COMMUNITIES AWARENESS OF, AND DEMAND FOR, SOLAR LIGHTS IS LIMITED. YET IT IS IN THESE LOCATIONS WHERE THE IMPACT OF SOLAR LIGHTS CAN BE THE GREATEST.



"For me, solar is the best and I would like to have everything powered by solar because with solar, we always have the sun every day, it's a natural guaranteed thing."
- Mirriam Chikoya, solar light Entrepreneur, Zambia.
Photo: SolarAid/Jason J Mulikita

Selling solar light profitably in hard and expensive to reach locations is difficult. In turn, opportunities to access solar light and power in these locations are often extremely limited.

In Zambia, a country which is 3 times the size of the UK (752,614 km2), but with a population of only 18.7 million people, population density is low. SolarAid teams routinely travel hundreds of kilometres over days and weeks, crossing rivers and driving on dirt roads – which can become completely impassable during rainy seasons - simply to reach rural communities.

We do this because at SolarAid, we believe that everyone should have access to solar light and power – no matter where they live.

When our teams reach these locations, they work hand in hand with local community leaders, such as head teachers, in order to raise awareness and trust in solar lights. As community members start to use solar lights, we are able to build demand and effectively start to catalyse the market. The next step is to help establish and provide ongoing support for solar entrepreneurs who can supply solar lights within their local communities.

In deep rural areas like these, the cost of the work outweighs what comes back in the form of sales revenue. Private companies cannot afford to spend money trying to achieve significant market penetration in these areas.

That's where SolarAid comes in. We spend time and money raising awareness and creating demand for solar lights. We then work in partnership with communities to help set up supply chains so that they are always available. In doing so, our work is effectively subsiding the creation of solar markets which are able to grow over time.

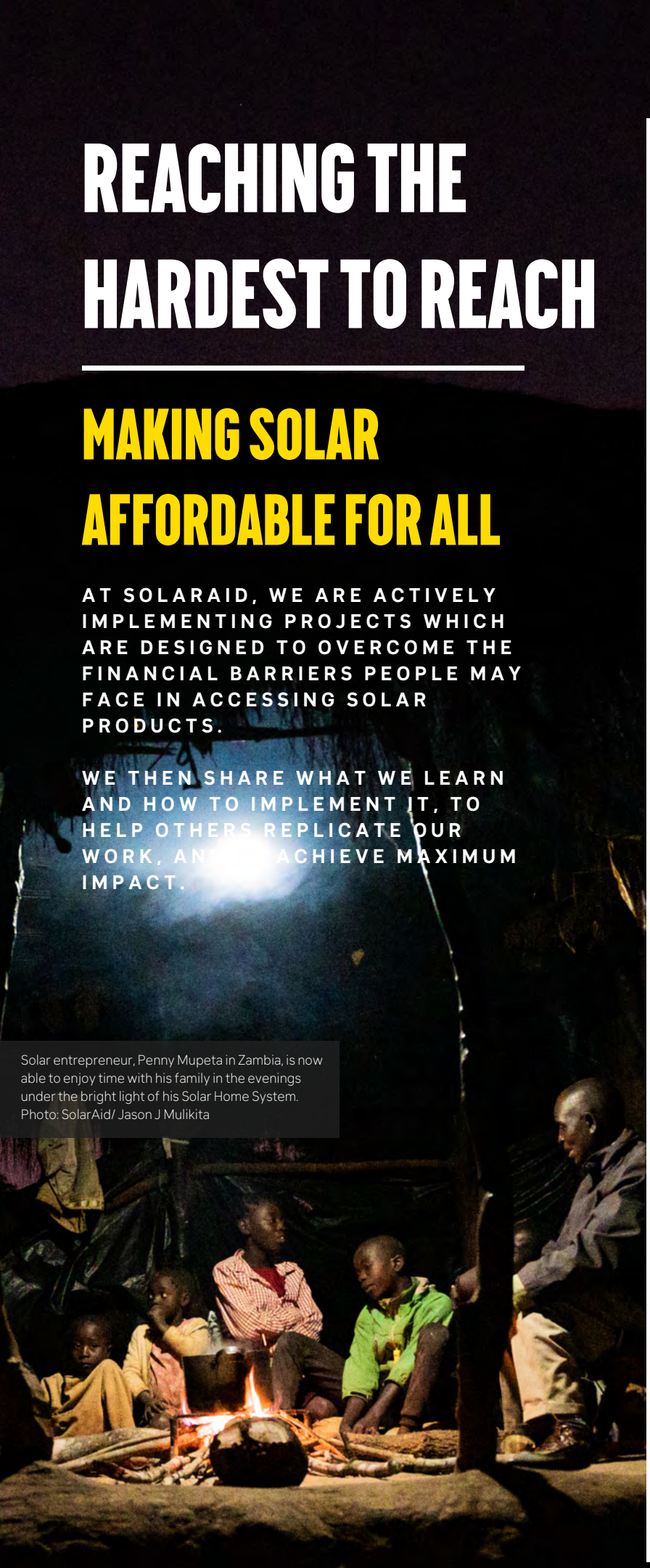
As more and more people start to trust in, use and demand solar lights, over time, this enables solar enterprises to operate without further support.

REACHING THE HARDEST TO REACH

MAKING SOLAR AFFORDABLE FOR ALL

AT SOLARAID, WE ARE ACTIVELY IMPLEMENTING PROJECTS WHICH ARE DESIGNED TO OVERCOME THE FINANCIAL BARRIERS PEOPLE MAY FACE IN ACCESSING SOLAR PRODUCTS.

WE THEN SHARE WHAT WE LEARN AND HOW TO IMPLEMENT IT, TO HELP OTHERS REPLICATE OUR WORK, AND ACHIEVE MAXIMUM IMPACT.



Solar entrepreneur, Penny Mupeta in Zambia, is now able to enjoy time with his family in the evenings under the bright light of his Solar Home System. Photo: SolarAid/ Jason J Mulikita

In Zambia, we have successfully piloted an end-user subsidy model through our Schools Campaigns. By reducing the price of the most affordable solar light, in 2021 we have seen demand increase by up to 600% as we develop long term relationships with customers who can save money and potentially afford to go up the 'energy ladder' to access greater levels of life changing power.

Together with the Malawi Ministry of Education we are also making solar lights available to students who can either borrow them, or purchase them in affordable instalments on a 'rent-to-own basis' from their local school. A Light Library toolkit was published so others can replicate this approach across the continent.

In Malawi, together with the local community, we are also trialling an energy-as-a- service model which avoids the need to actually purchase a solar system. By providing households in the poorest communities in Malawi access to solar home systems for free, they only have to pay a small daily fee to access the energy. Alongside being affordable, the Light a Village model also removes the risk of purchasing and maintaining a solar home system.

We are further recognising that access to finance is critical to help businesses scale up, which is why we created the 'Financing Energy Businesses Cooperative' (FEBCO). FEBCO is the first of its kind - a cooperative that creates a credit facility by pooling entrepreneurs' own funds to leverage additional funds from external sources. This allows entrepreneurs to access working capital finance at affordable prices. We have now developed a 'how to guide', which will help other actors facing similar challenges to establish their own FEBCOs.

Through our partners Lendwithcare we have been providing accessible loans to solar entrepreneurs since 2019. 'Lenders' pool together to fund interest-free loans to entrepreneurs. These loans have supported the launch of new Mayi Wala businesses, enabled entrepreneurs to purchase solar light stock and supported them to continue their solar businesses during periods of financial challenges.

By continuing to form partnerships with a range of actors across the continent and as we showcase these models, share our learnings and design further subsidy trials, we are aiming to bridge the issue of affordability, allowing everyone across the continent to be able to afford access to solar light and electricity.

"My household has changed. When the solar business started, we saved the money in village bank. We bought a goat. It has a kid now."
- Liness Friday, Mayi Wala businesswoman in Malawi.
Photo: SolarAid/Chris Gagnon

INNOVATION, OPEN SOURCING AND PARTNERSHIPS

SolarAid is proud of the pioneering role it has played since 2006, increasing access to life changing solar light and power across sub-Saharan Africa. As a charity, we have always focused on the development of sustainable products and solutions.

There is, however, a limit to the number of people we can reach alone. That is why we are increasing our focus on working in partnership with the growing number of solar market actors operating across sub-Saharan Africa. To ensure energy access in homes, clinics and schools, we are forming partnerships with governmental institutions, NGO's and sector partners.

Over the past year, we have launched a series of projects, all of which have been designed to prioritise access to solar light and power for the poorest off-grid communities and infrastructure. All of these models, with the potential to scale, are being open sourced, for potential partners to adopt and replicate across new geographies.

An example of our partnership work is the support we have been giving to ElleSolaire as it seeks to help women solar entrepreneurs and Village Savings and Loan Associations (VSLA) increase access to solar light and power in Senegal, West Africa.

This year, 50+ women have been certified as solar entrepreneurs through the ElleSolaire Academy, generating incremental income for 1,750 women, and bringing clean energy to an additional 7,800+ people in their homes and/or health and maternity clinics . In partnership with SolarAid, a shared learning agenda on mainstreaming gender in energy is in progress. Women, who are the primary users of household energy, are trusted members of the community and unlocking their untapped entrepreneurial potential is key to addressing energy poverty in Senegal, where 65% of the rural population live off-grid.

"Firstly, the good I have seen is an improvement in lighting at my house. Secondly, it is the impact I am making in my area; many people that buy lights from me have also seen an improvement in their lives."
- Penny Mupeta, solar light Entrepreneur, Zambia.
Photo: SolarAid/Jason J Mulikita

DELIVERING A SHARED PURPOSE

STATKRAFT AND SOLARAID SHARE A COMMON VISION OF A WORLD THAT RUNS ENTIRELY ON RENEWABLE ENERGY.

Since the foundation of SolarAid, we have been supported by Solarcentury which generously donated a percentage of their profits to SolarAid each year. Solarcentury is now part of Statkraft, Europe's largest renewable energy company. Statkraft and SolarAid share a common vision of a world that runs entirely on renewable energy.

In July 2021 Statkraft agreed to continue this support and committed to provide £2 million to SolarAid over the next 3 years starting with a £1 million donation in 2021.

This commitment has enabled SolarAid to develop its long term strategic thinking to deliver on its new mission, develop the thinking behind new innovative projects, as well as invest in fundraising to help attract even more funds to achieve the ambitious mission set out by SolarAid of lighting every home, clinic and school without electricity in Africa by 2030.

The financial stability Statkraft provides means any funds raised from other sources, such as grants from foundations or donations by individuals, can be applied to reaching people in remote rural areas that would otherwise be left behind.

THE YEAR AHEAD

EXPANSION, SUBSIDIES, LEARNINGS AND PARTNERSHIPS

The coming year will see SolarAid continue our strategic focus on developing sharable and replicable models which prioritise bringing solar light and power to those who need it most.

SolarAid is operating in a unique space as the only organisation wholly focused on testing models which will reach those currently left behind. Over the coming year we will continue to develop and test innovative models which have the potential to be replicated and scaled across the continent. Built into each model is an endgame, where we map out how scale will best be achieved, such as through government adoption, commercial adoption or open sourcing our work to potential replication partners.

Examples of what we will discover next year are:

Light a Village: This model has already demonstrated that we are able to bring solar solutions to one the poorest communities in Malawi and successfully light up the homes of people living in extreme poverty. In the coming year we will be expanding the model to reach more homes and schools as we carry out operational stress tests that will help us understand how this model can be scaled up to reach communities across the country and expanded into new geographies beyond Malawi.

End-user subsidies: We have proven that reducing the sales price of solar lights makes them more affordable and accessible to low income families. Together with like minded partners, we now want to learn more about which part of the population we are able and not able to reach and whether people who benefit from access to a solar light can, in time, afford to improve their life further by accessing greater levels of solar power and electricity.

Mayi Walas: In the coming year, we will continue our support for female entrepreneurs in Malawi, through our Mayi Walas programme and in Senegal, in partnership with ElleSolaire. This work will help us understand the challenges and opportunities for women entrepreneurs and assess the impact these networks can have on bringing solar light and power to traditionally underserved rural areas.

New partnerships: Alongside our ongoing support for ElleSolaire in Senegal, we are actively engaging with new partners to help support increased and accelerated energy access across the continent. In Madagascar, for example, one of the poorest countries in the world at the forefront of the climate crisis, we are actively supporting and advising a new consortium of actors who are dedicated to bringing solar light and power to some of the poorest homes, schools and health facilities in the country. Partnerships such as these will be crucial if we are to continue to accelerate access across the continent and achieve our mission.

THANK YOU

WE WISH TO THANK ALL OF OUR SUPPORTERS IN 2021/2022, INCLUDING OUR INDIVIDUAL SUPPORTERS, AS WELL AS THE FOLLOWING:

Statkraft

german cooperation
DEUTSCHE ZUSAMMENARBEIT

Implemented by
giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

signify foundation

ICG

lend with care .org

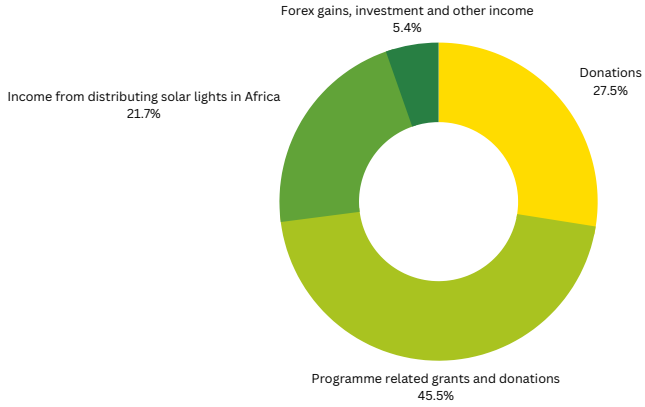
CHAZ
CHURCHES HEALTH ASSOCIATION OF ZAMBIA

EQ FOUNDATION
MEAVO LIMITED
ERM FOUNDATION
MALAWI MINISTRY OF ENERGY
TAMESIS PARTNERS
THE SOUTER CHARITABLE TRUST
FOREIGN, COMMONWEALTH AND DEVELOPMENT OFFICE (FCDO)
MALAWI UNION FOR SAVING AND CREDIT COOPERATION
THE LIZANDY CHARITABLE TRUST
HELEN + MICHAEL BROWN CHARITABLE TRUST
HEART OF ENGLAND COMMUNITY ENERGY LIMITED
DEDZA AND NTCHISI DISTRICT EDUCATION OFFICES MALAWI
ZAMBIA MINISTRY OF EDUCATION
YONDR
ELENEO
CLIMATE GIVING
LOTTOLOVE
GREEN MOUNTAIN TRUST
USAID
GOGLA

FINANCIAL SUMMARY

INCOME

Our total income in the financial year 2021-22 was £2.8m. The chart below shows a full breakdown. Total income increased by 62% compared to the previous year. One of the key reasons for the increase was due to the first year of a three year funding commitment by Statkraft, continuing the support by SolarCentury who became part of Statkraft in 2019. You can read more about the Statkraft partnership on page 18 of this report. Our supporters continued to be generous and individual donations continue to provide a bedrock of income.



In addition to the increase in fundraising, our income from sales of solar lights to remote communities increased by 49% to £607k. As restrictions relating to COVID-19 eased in the year and we were able to get programme teams back safely into communities. We are grateful to the hard work our teams have put in to achieve this.

90% of our income in the financial year is unrestricted compared to 57% in the previous year. This allows us to focus on developing innovative models to reach communities. As we are able to demonstrate more evidence from their success we expect to attract more restricted income from grant funders.

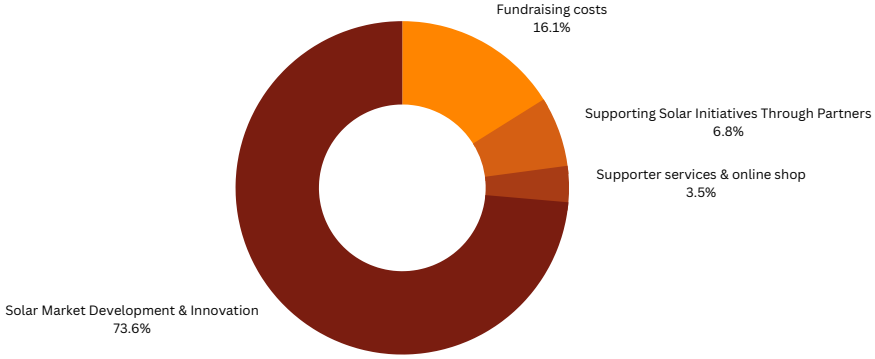
EXPENSES

Our total expenditure in the financial year 2021-22 was £2.4m. The chart below shows a breakdown of our expenses. Our total expenditure increased by 40%. The increase in expenditure is in line with investment in both fundraising and programme as part of our new strategic plan to achieve our ambitious mission, and linked to the Statkraft (and previously SolarCentury) transformational donations.

We breakdown our expenditure between Raising Funds and Charitable Activities.

Within the cost of Raising Funds: Fundraising costs increased by 57%, whilst Supporter services & online shop increased by 71%. The investment in fundraising will allow us to grow our income to levels that support long-term financial stability and funds our part of the mission to light every home, clinic and school without electricity in Africa by 2030.

Within the cost of Charitable Activities: Solar market development & innovation costs increased by 28% and Supporting solar initiatives through partners was an area we were able to develop this year and therefore costs increased by 362%. This report covers the progress of our programmes and our work with partners.



RESERVES

Reserves are held by the charity for working capital purposes, to allow us to invest in our long-term mission and to help us protect against volatile currencies and inflation risk.

The Trustees set a reserves target after considering the resources needed and risks faced by the organisation. Our minimum reserve levels are currently calculated at £0.9m. The charity has free reserves of £1.5m. The Trustees consider our reserves level to be appropriate and reflect the fact that SolarAid are at the outset of a new strategy – with a significant ambition to light up every home, school and clinic in sub-Saharan Africa by 2030. This has implications on the cost base of our current programmes and support functions. We have successfully secured a 3 year commitment of £2 million from Statkraft - £1 million was received in the latter half of 2022 financial year. The current level of reserves over and above our business as usual levels means we have been able to start adapting our structure and approach to deliver on our mission, including starting a programme of investment in fundraising to secure sustainable sources of income to further our mission.

More information about our financial performance for the year and how we calculate our target minimum reserves can be found in our Annual Report.

www.solar-aid.org
info@solar-aid.org
+44 (0) 20 7278 0400

Registered Charity Number: 1115960

SolarAid