# Transforming Energy Access

An Ecosystem Approach

November 2020



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### Introduction

### New crisis, old challenges

Coronavirus is the most urgent threat to Sustainable Development Goal 7 – global access to sustainable, affordable and reliable energy. The energy access sector is in severe crisis, but while the pandemic has gripped the world with horrifying speed, the issues it exposes and exacerbates in relation to energy access are longstanding.

In recent months, Ashden has surveyed dozens of energy access enterprises and organisations across our network about the impact of the pandemic on their operations, and supported wider knowledge gathering by sector organisations such as donor body EnDev. We have layered our insights on top of our existing knowledge of these innovators, built up over years and in some cases decades, to compile this report – made possible by the support of Wallace Global Fund. In it we delve into the short- and long-term challenges organisations currently face – using their experiences as a lense to explore the wider question of progress towards universal energy access.

We can report with confidence that the global pandemic is, on the whole, deepening barriers to energy access that have existed for decades – rather than creating new ones. As a result, coronavirus changes nothing and everything.

At this point in time, frontline enterprises and organisations face enormous challenges securing funding and investment, as well as difficulties reaching customers, retaining staff and buying stock. Despite impressive efforts to adapt to their situation, many are burning through their cash reserves. In a survey of over 600 companies across 44 countries by EnDev, over 50% of companies said they would have to close their business in two months.



Given the importance of a healthy ecosystem to progress on energy access, the impacts of the collapse or retreat of individual organisations will undoubtedly ripple out across the sector, disrupting partnerships and supply chains. These ripples could quickly combine to form a devastating wave, sweeping away years of universal energy access progress. Interventions that allow enterprises to survive and scale up are urgently needed. Grant funding is the top priority to complement the concessional loan relief funds that are already in the pipeline. In the face of the pandemic it is vital this funding flows fast, in small chunks, to the smaller, local enterprises that serve some of the most vulnerable and hardest to reach communities.

## This moment of extreme danger for energy access efforts can become an important wake-up call.

However, innovators confirm that the support they need now is largely the support they have been seeking for years. So positive interventions now will be a platform for longstanding and much-needed change. Optimistically, this moment of extreme danger for energy access efforts can become an important wake-up call, galvanising radical change through new approaches and thinking.



### **Ecoystem approaches**

Access to finance remains the most commonly reported need from organisations and enterprises, confirming the wisdom of Ashden's strategic focus on this issue.



Our report begins with a brief overview of common finance needs, but these immediate needs are widely understood within the energy access sector. The pandemic has exacerbated these essential requirements. More finance is urgently needed to protect the progress made towards achieving universal energy access and the enterprises, especially smaller 'grassroots' ones that are the very foundation of the sector. These enterprises tend to have a low turnover, but the deepest links with local communities and have played a critical role in delivering food, medicine, information and more during the coronavirus crisis. If the right financial and business support is not made available now, progress towards the Sustainable Development Goals (particularly SDG7) will be undone, and even more funding will be required in the future. So the overarching message of today – a need for finance of all types and at a range of sizes, offered on sympathetic terms – is not surprising.

But our analysis goes deeper, focusing on the ecosystem approaches that can help this finance flow where it is needed most and address other crucial issues such as social equity.



We have identified three key ecosystem challenges. Our exploration of each one in this report is supported by an in-depth view from a relevant organisation.

#### Understanding

Funders/investors and frontline organisations report a shortage of reliable, useful information about each other's intentions and impact. We propose a focus on building trusting relationships within the energy access sector.

#### Inclusion

Coronavirus has underscored the unique value of smaller organisations, rooted in local communities. However, these organisations face a range of disadvantages. We propose that boosting the role of smaller organisations, particularly those run by nationals of the countries where they operate, should be an ambition of every funder, investor and policymaker in this space. In the interest of a thriving ecosystem that benefits all, larger enterprises should seek mutually beneficial partnerships with smaller enterprises where they can.

#### Ambition

All the issues above point to the need for a radical new approach to delivering energy access in developing countries, including transformed ambition for governments and markets – and greater acceptance of energy subsidies, something commonplace in richer nations. We highlight exciting national-level innovation, and suggest how progress can be accelerated through system-level thinking.



Reasons for optimism are scarce, but they do exist. We see the enormous social impact of clean energy enterprises brought into the light by the pandemic, as they use their connections to local communities to respond to the emergency. We hear alignment in the interests of funders and enterprises over the need for improved communication and co-ordination. In recent months we have seen some donors step up at speed, creating new mechanisms and funds for energy access. And we see signs in the global response to coronavirus that societies and economies can be redesigned at lightning speed when needed. Universal energy access will undoubtedly require such a shift – one widely thought impossible just a few months ago.

This report draws on our ongoing conversations with, and assessments of, more than 50 enterprises and organisations in the Ashden network – as well as interactions with a wide variety of financiers and other sector players. Respecting commercial sensitivity and wishing to facilitate open and honest dialogue, we have only occasionally identified the views of individual organisations. However, the broad findings we present here were born out by the experiences of our wider network.

We first developed a close knowledge of these organisations through their participation in the Ashden Awards, and have continued to engage with them after their awards win through our events, one-to-one support, and programmes such as our <u>Fair Cooling Fund</u>. This summer we have mapped their needs through surveys and workshops specifically tracking the impact of the coronavirus pandemic. Discussions with financiers and donors have added further context and insight.



# Who is in our network and are they purely focused on energy access?

Energy access is the cornerstone of Ashden's work in developing countries. The vast majority of the organisations with whom we work are focused on bringing clean and affordable energy to homes, hospitals, workplaces and elsewhere. However, our network increasingly encompasses organisations working in other, overlapping areas – such as passive cooling and sustainable transport – related to low-carbon development. These organisations share the same customer base, challenges and opportunities as 'traditional' energy access outfits – and their alignment with the energy access sector offers significant opportunities. As a result, we have featured their views and experience within our analysis.



### The Need for Finance

Climate innovators face a range of challenges to their survival and growth, but lack of access to finance undoubtedly looms the largest.

Finance from more risk-tolerant investors that is quickly available, with limited conditions, and of the right type and scale is very hard to come by. One of the most common issues organisations face is the lack of debt for working capital. This problem is particularly acute in the energy access sector, and for mid-sized enterprises that tend to 'fall through the gaps' – one Africa-based solar company told us that raising equity at scale was challenging because they were too large for family, impact offices, but too small for multinationals and private equity firms. This lack of working capital affects stock levels, sales and operations, product development, and efforts to break into new markets. The issue is a long-standing problem in the energy access sector, and one that creates a vicious cycle – inhibiting the performance of companies, and so presenting investors with lower returns and higher investment risks, which in turn discourage investment and further harm enterprises.



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The need for finance has been heightened by the pandemic, which – through lockdowns, curfews and other government restrictions – has put tremendous financial strain on enterprises, reduced cash runways and put many jobs at risk. 30% of the enterprises surveyed by Endev have had to cease operations, going into hibernation or permanent closure, and over 65% of the respondents surveyed had been forced to either reduce staff hours and pay or make employees redundant. This reinforces Ashden's findings, particularly in countries like India and Uganda that have been severely affected. Businesses told us cash flow was severely affected by delayed projects, deferred investment raises and decreases in customers' ability and willingness to pay.

Enterprises in our network have had to introduce pay cuts for management and in some cases for all staff, of anywhere between 25 and 60%. Enterprises have had to stop work during lockdowns – either because they were ordered to close or because social distancing policies made operations unviable. Smaller enterprises have had to lay off more staff, while it has been easier for bigger companies to juggle resources and balance needs. The need for short-term grants and patient working capital to ensure core staff are retained, operations can continue, and lenders are repaid is most urgent. However, we saw individual examples of socially-minded businesses prioritising the needs of staff and customers even at this extremely difficult time. For example, one manufacturer and distributor supporting improved livelihoods in rural India told us they were striving to enforce no lay-offs or salary cuts – despite losing 25% of their business overnight.

## Flexible support from investors and funders – taking a needs-based, tailored approach – is key.

In the face of the health crisis, flexible support from investors and funders – taking a needs-based, tailored approach – is key. Now more than ever, enterprises are seeking capital that is low cost or a blend of public and private finance, catalytic in nature, offered with flexible terms, quickly available and easy to apply for. 'Small ticket sizes contribution' will have a huge impact. Close to a third of the 600 companies surveyed by EnDev said they only need \$10,000 – that is \$2 million to save 200 companies. Half the companies surveyed need less than \$50,000 in grants or loans to survive the next six months. While some well-connected international companies have secured the finance they need, the majority of enterprises are struggling.



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Organisations need to develop new lockdown-appropriate digital capabilities, such as e-commerce services and better remote working and management practices. Grants for innovation funding are, therefore, in high demand. For example, one of the clean cooking innovators in our network is urgently looking for R&D funding to adapt its products and services to the new reality. Innovators are scrabbling to respond to changes in social behaviour – such as new patterns in electricity consumption as more people stay in their homes.

Enterprises are keen to take the initiative. Some have already managed to pivot their business models and adapt to social distancing policies, taking steps such as setting up call centres, accepting cashless payments, developing mobile apps, introducing safe distancing and PPE in factories to continue manufacturing, and moving certain parts of the supply chain (for example: assembly of products) to communities to protect the business and create jobs. One India-based distributor has digitised all marketing and sales activity; partnered with fintech companies to offer digital facilities for rural customers; and restaffed its head office to remotely manage customers and sales agents.



But more finance is still needed to create new products and business models, develop better practices and make sure these pivots can be sustained in the long run. One sustainable cooling innovator discussed the need to retain skilled staff in the coming months so growth can resume once conditions are better – and the need to attract patient capital to facilitate this growth. There are urgent needs beyond finance too – for example, one business in our network requested pro bono help from e-commerce experts.



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Three Ecosystem Challenges

### Understanding

Difficulties communicating with funders, investors and policymakers are a recurring problem for frontline climate enterprises. This issue has been heightened by the coronavirus crisis, with organisations eager to learn of the availability of relief funding and the intentions of funders but finding it hard to access such information.

#### Even before the crisis, organisations stressed their desire to build better understanding with new and potential funders and investors.

However, these needs for enhanced communication and networking precede the pandemic. Even before the crisis, organisations stressed their desire to build better understanding with new and potential funders and investors – to better communicate their own needs and get a firmer grasp of the investor and funder offer. Organisations felt their business models, ambitions and customers' needs were often misunderstood by, or unknown to, donors and investors – throwing up barriers to investment. Our network has also raised peer-to-peer communication as an area to tackle – suggestions included a regular CEO forum, as an informal space to share challenges and coping strategies.

Funders and investors also express a desire for more and better data. This includes essential business metrics such as sales figures and turnover, but also information about the human impact of energy access interventions. They are not alone in doing so – in a <u>recent report</u>, the International Renewable Energy Agency echoed this with a call for "quality data to inform policy at the national, regional, and international levels". Given the clamour for better data from multiple stakeholders, in order to serve both finance and policy needs, there is a clear argument for prioritising this issue across the sector.

The pandemic has underlined the scale and severity of this communications challenge. On the whole, smaller funders such as family trusts and foundations seem to have been in closer contact with enterprises, and investors have been in touch with their existing portfolio companies. The greatest unmet need in this area is a clearer picture from institutional funders, particularly around funds set up to facilitate coronavirus relief and community development.



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However, this problem of knowledge gaps related to the emergency has also been raised by funders. Enterprises in serious peril – and expecting revenue decreases of more than 20% this year – are understandably reluctant to communicate their challenges widely. As a result, some large funders feel they are not receiving a clear picture of the issues on the ground. Ashden witnessed this phenomenon at one of our recent events, where on the whole enterprises were reluctant to discuss publicly the impact of the pandemic in front of donors and investors – despite doing so enthusiastically in private and among trusted peers.



Enterprises must be willing to discuss the impact of the pandemic on the customers with funders. Data from research organisation 60 decibels shows that out of more than 18,750 customers interviewed since April 2020 in Asia, Africa and Latin America, 9 out of 10 customers reported their families' financial situations are worse since the pandemic, and one third of the customers have had to reduce their intake of food in order to remain connected to their energy source.

This is likely to impact future demand for energy products and services. Those most at risk are those 100% reliant on commercial sales to customers – such as a clean cooking innovator in our network that reported their hard-earned reserves were depleting fast.



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Organisations like EnDev and 60 Decibels are trying to fill gaps and provide donors and investors quick, aggregated sector-level information to make funding/investment decisions, as providing more and better quality data is not a priority for enterprises in the pandemic, as they struggle to survive, but a necessity if they want to receive more funding.

#### Industry associations have come together with leading investors and support providers to form the Energy Access Action Network.

Meanwhile, industry associations have come together with leading investors and support providers to form the Energy Access Action Network, a coalition to coordinate the relief efforts. This involves working closely with donors and funders and supporting the creation of relief and recovery instruments. These include funds, grant programmes and technical assistance mechanisms – all of which are needed immediately and urgently. Industry associations are also providing support to their communities – in the form of webinars and connections to finance.

To put this blizzard of activity into context – and to draw out the long-term aims driving such work – we have examined the strategic perspective of one industry association.



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#### An industry association view: Global Off-Grid Lighting Association

The Global Off-Grid Lighting Association (GOGLA),established in 2012, now represents over 180 enterprises and NGOs as a neutral, independent, notfor-profit industry association. GOGLA helps its members secure finance, influence policymakers and respect the rights of consumers. In recent months it has tracked the impact of coronavirus on the off-grid energy sector and supported organisations in seeking advice, resources and emergency funding.

GOGLA uses a range of strategies to aid dialogue between governments, the private sector, and development partners, and build understanding between key players in the energy access sector. This summer, they have played a key role in collecting market insights and data from frontline energy access enterprises and supported the Energy Access Covid-19 Relief Summit.



GOGLA Access to Finance Project Manager Roan Borst confirms Ashden's view that while investors are wary of new investments, they are supporting their current portfolios with bridging loans and other interventions. Commitments into solidarity funds have generally been high, she reports.



She says: "One of the main barriers to growing investment is transparency. We like to see that investors have accurate information – such as how is the sector really doing? For some investors, the perceived risk is higher than the actual risk due to lack of knowledge of the sector or lack of information on sector status.

"We are hearing conflicting messages about the impact of coronavirus. Anecdotal evidence from individual companies, investors, and software providers indicates that, perhaps surprisingly, PAYGo repayment rates have remained relatively strong. Though there is a notable variation between countries, regions, and customer segments. The responses to the <u>EnDev</u> <u>survey</u> tell a different story and depicts the energy access sector as one in stress with a significant drop in sales and collection rates."

Roan says knowledge gaps for many investors include understanding how these businesses operate day-to-day, and how one might carry out due diligence on them. She reports strong recent investor interest in 'productive use' enterprises – but adds that investors are lacking information about sales and market size in this area.





She sets out some of the ways funders and investors can find themselves misaligned. "It's important for companies to set the right expectation and understand an investor's expectations and interests. It is also important for entrepreneurs to know which investor to talk to. Talking to the wrong investor creates problems. Sometimes these conversations go nowhere, so the cost is wasted time and effort. And sometimes organisations get capital that is not the right kind for their business. You have seen this during the pandemic, where companies are taking on debt that makes it harder for them to get equity down the road."

"Investors should be aware that if you're investing into energy access it will need to be patient funding – you will probably be invested for seven years before you can exit. It's a complicated business model, and a nascent industry – so enterprises might need nurturing."

#### Ashden's recommendation on understanding

Bodies that are intermediaries between funders, investors and frontline enterprises should not act simply as conduits of information but become enablers of trusting relationships. This can be achieved by supporting deeper and more meaningful connections. They should seek to address common misconceptions, and proactively tackle areas where parties are reluctant to share key information, helping increase the availability of data.



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### Inclusion

For smaller and/or indigenous climate enterprises – those founded in (and by people from) developing countries – the challenges are particularly acute. The biggest climate enterprises are overwhelmingly founded and run by individuals from Europe and North America, who are able to leverage a host of advantages – from sharing a common language and culture with international funders and investors, to possessing social connections and power that unlock opportunities. Local organisations struggle to compete.

Funders can boost energy access by nurturing a more inclusive and diverse ecosystem of climate enterprises, one that features a prominent role for organisations owned and operated by local people, including people from marginalised communities. These are better placed to truly serve local needs, and allow the numerous economic and social benefits of energy access and climate action to accrue where they are needed most. It is clear that universal energy access requires a plethora of solutions to meet different needs between and within communities – a greater wealth of national organisations can deliver this diversity.

# The world's top 10 solar home system providers have collectively raised \$1.13 billion of investment since 2010.

Investment and funding is key. Currently, the vast majority of investment in clean energy enterprises flows to a small handful of companies. For example, the world's top 10 solar home system providers have collectively raised <u>\$1.13 billion of investment</u> since 2010. This is two-thirds of total investment into the energy access sector. And despite efforts to rally the energy access sector around coronavirus relief initiatives, donor funding through the existing initiatives currently only seeks to address 20% of the need that has been identified. This funding is not accessible to small enterprises working with the most marginalised communities and playing a relief and liaison role.



A recent sectoral trend towards specificity – rather than vertically-integrated enterprises – may create opportunities for smaller, indigenous companies. For example, instead of developing their own pay-as-you-go (PAYG) platforms, more and more solar companies are now using Angaza's PAYG technology and sales platform to make products accessible and affordable to end-users. But these smaller companies will succeed only if they are given fair opportunities.

In Ashden's own awards, over the last 20 years we have seen an increasing prevalence of winners with senior management based in Europe or North America. This was not an outcome sought by Ashden judges but one that reflects the tendency for well-connected organisations to attract growing investment and support over time. In response therefore, we have introduced new award criteria, with greater emphasis and weighting to democratisation of solutions and energy access for the most marginalised, as means to redress the balance. We have considered applications from smaller and more fragile enterprises, not always focusing on scale or on proven success, and increased the diversity of our judges.



International funders and policymakers would also benefit from reassessing their criteria for dispensing support and striving for more inclusive investment. Working more closely with intermediaries is another way of reaching smaller organisations that play a unique role and bring unique value to the sector. A 'level playing field' is not one where every organisation is judged against the same metrics, but one that makes space for diverse contributions meeting a range of goals.



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#### Connections matter: A view from SMV Green Solutions.

India's SMV Green Solutions enables people in four cities win dignity and decent pay as electric rickshaw drivers. This includes helping women break through the significant barriers that stop them taking on the job.

SMV's interventions include providing affordable finance that allows drivers to eventually own their vehicle outright, rather than being locked into a cycle of punishing hire fees. The company was founded in Varanasi in 2015 by entrepreneur Naveen Krishna, after a period living with the marginalised communities he now serves.



The enterprise's challenges to secure funding and investment have been made more difficult by coronavirus, with sources of finance becoming very hesitant, Naveen reports. The company has taken on cost-cutting measures and secured support for staff salaries from a not-for-profit partner. In this environment, Naveen is particularly keen to protect his credibility with local banks. He says that when it comes to attracting finance smaller and indigenous organisations face particular disadvantages.



And he adds: "For debt financiers, particularly private investors, some kind of reference or connection really makes things moves fast. For us, it takes time. If I start the process today the final funding won't come before nine months. But if you're well connected it can come within 30 days."

Theoretically, modern digital communications should make it easy to connect with potential backers around the world. But Naveen says that while SMV have the data and documents needed to satisfy potential investors, it is also vital they experience the work 'on the ground'. He says: "Everyone who has invested in us has done so after making some kind of field visit. Two things really matter – meeting the end-users and meeting your team. The human touch counts."

Bigger funders such as OPIC (now DFC) and the World Bank want to support the enterprise, but the amounts offered are larger than those needed by SMV. And such funding is often conditional on a strong partnership between the enterprise and a local bank. A blend of debt funding, and grant funding to service the debt or pay the interest would be particularly helpful in light of coronavirus.

What changes would benefit smaller organisations? Naveen suggests a fairer, more transparent and uniform approach to due diligence from funders and investors would save crucial time and resources. "A standard template and process, with an agreed timeline."

He also says that when it comes to attracting investment and funding, organisations would benefit hugely from greater marketing capacity. This is rarely a priority for such enterprises, particularly in their early years. "There is so much to do, that marketing sits at the bottom of the list."

Naveen has now made branding and communications a priority for SMV. But SMV's current expertise in this area involves reaching local people through pamphlets and community meetings, rather than producing slick videos and Powerpoint presentations. Naveen contrasts this with organisations founded by Europeans and Americans, which have often set up a website before reaching a single end-user.



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Challenges for SMV beyond finance include recruiting high-quality staff in senior positions at the right salaries, with skills and experience but also the values that inspired Naveen to launch the organisation. While SMV and other SMEs face significant issues, Naveen suggests that they possess unique strengths. In his case, these include a deep knowledge of and connection to local people's lives. These insights have a fundamental impact on his business. For example, Naveen's business model builds on drivers' familiarity with making regular payments for their vehicles – a process he has remodelled to be supportive rather than exploitative.





His experience also shapes a values-based approach to his work. He says: "I've dedicated my whole life to this idea and this community. I'm firm in my belief that these people work hard for their livelihood – they should be respected and supported. I have seen their struggle, I have spent time with them. My motivation is to create a platform where they get respect and dignity."

Naveen is clear that investors and funders, like potential employees, must share his ethos – and be realistic. This can be challenging: "alignment of mission, vision and expectation is difficult," as he puts it.

#### Ashden's Recommendation on Inclusion

Funders and policymakers should set an explicit strategic goal to prioritise support for national and for smaller organisations as a route to a more inclusive energy system that better meets local needs. Investors should tap into the potential of such enterprises by offering realistic terms and timescales, being ready to adapt their normal operating models.





### Ambition

Progress towards SDG7 demands radical action. Our work with frontline organisations tells us that many are achieving significant steps towards universal energy access and a low-carbon future for marginalised people. However, it is also clear that the pace of change falls short of that required to achieve SDG7 by 2030. Coronavirus threatens the growth, and even the existence, of many frontline enterprises. But ensuring the survival – or even a gentle scaling up – of today's organisations is simply not enough.

Ashden believes the solution is a more ambitious effort to shape the ecosystems that can drive greater energy access and create holistic solutions. This need not come at the cost of support for individual frontline organisations – in fact, these organisations have consistently told us that a flourishing ecosystem is crucial to their success. Specific needs raised by organisations include regional partners to disseminate products, and local manufacturers that would ease the need to import materials from abroad. Innovations such as PAYG services demand reliable telecommunications and banking providers. Support for partnerships or networks needs to run alongside support for individual organisations. Funders, investors and policymakers may also need to forge out-of-sector relationships in order to support progress on energy access.

# An element of subsidy is an inevitable requirement for universal energy access.

The single most important mechanism for rapid progress to SDG7 is national-level action that supports and co-ordinates public and private sector efforts. Within our network, we have seen how programmes delivered by governments – in close collaboration with a full range of partners – can bring progress at the pace required. These programmes reflect the reality that an element of subsidy is an inevitable requirement for universal energy access (something accepted by every wealthy country in the world, at least in respect of its own population's energy needs).

Innovators in this area include the Beyond the Grid Fund for Zambia (profiled below), and the <u>Togolese Electrification and Renewable Energy Agency (AT2ER)</u>, winner of a 2020 Ashden Award. AT2ER is a government body tasked with ensuring that all of Togo has access to electricity, through a combination of electricity grid expansion, rural mini-grids and solar home systems.



After struggling to bring energy to rural communities, in March 2019 the body launched the Cizo Project, which offers a subsidy to households, therefore giving them the much needed helping hand to access clean energy through their own solar home system. Payments are made through mobile banking, with the subsidy being applied directly to the payment amount. In partnership with five distributed energy service companies, they are now rolling out the Cizo Project across the country.

Such plans give frontline innovators a platform for greater impact, particularly with harder-to-reach communities – those unlikely to be served by a purely market-based approach. They can also unlock co-benefits such as improved incomes, serving a range of development goals. In the case of Togo, this includes training 6,000 people to be engineers or mobile banking agents, with a strong push for women to be included.



As companies establish themselves in poorer communities – developing local sales teams, building customers' credit histories, and better understanding of local needs – the size of subsidy needed diminishes. However, the fact remains that providing energy to the world's most marginalised people – for example, those living in extreme poverty in isolated areas – is rarely a commercially attractive proposition. If the world is to achieve genuinely universal energy access, subsidies of some kind will be necessary.



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#### A national programme view: Beyond the Grid Fund for Zambia

Since launching in 2018, the innovative Beyond the Grid Fund for Zambia (BGFZ), funded by the Swedish government and developed and implemented by the Renewable Energy and Energy Efficiency Partnership (REEEP), has brought clean energy to 119,000 households, businesses and institutions. It has done this by making it less risky and less expensive for businesses to enter the country's off-grid energy market. The success of the fund has led the Swedish government, the Nordic Environment Finance Corporation (NEFCO) and REEEP to create the Beyond the Grid Fund for Africa (BGFA). This aims to build markets and bring access to clean, affordable off-grid energy to at least 5 million people in Burkina Faso, Liberia, Mozambique and Zambia by 2025.



The BGFZ programme has provided incentives for energy companies reaching last-mile communities unserved by the public and private sectors – as long as enterprises offer quality services and products, accessible to as many people as possible. The programme has also built a live data platform tracking progress on energy access and convened the country's politicians and other key stakeholders in an influential off-grid energy task force. The context for providing energy in rural Zambia is particularly challenging.



Villages are often comprised of homesteads 2-3km apart, which makes service delivery very difficult, whether from public or private schemes. A holistic approach combining incentives, data gathering, and policy mechanisms has been crucial to the success of the fund and allowed it to support a developing energy ecosystem, not just a limited number of companies.



The fund's Senior Expert and Liaison Manager Sabera Khan, an Ashden Trustee, says: "Our beginning was simple and humble – there was a vision, that if the telecommunications industry could connect people in villages without the need for heavy state infrastructure, why can't those lessons be applied to energy?"

The ethos of the fund is in keeping with the ideals that created universal energy access in richer nations – that without public finance supporting private finance, the world will not reach its SDG targets. In many 'developed' nations, governments invested in infrastructure even when there were no immediate returns. Another challenge is bringing on board the private capital markets, which need to be blended with public finance.



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Sabera reports that the programme has left enterprises eager to reach further into last-mile communities – which would require a different level of subsidy. Companies that have sold systems need to keep increasing their portfolio, whether through connecting people to a higher tier of service, or upping the volume of units sold.

Even with a successful national plan in place, Coronovirus remains a huge threat to energy access efforts. Angel investors, state funders and others are only funding their own portfolios, not markets, Sabera confirms. She adds: "We need to do something differently. Domestic financial institutions must be supported to be more involved in achieving country level targets. When companies get shut down, it's not just about the companies. What happens to those consumers? If enterprises pull out, other businesses that rely on that energy no longer have it."

"Development is not just stopping – it's going in reverse. Globally, governments need to talk and say 'what are we going to do in terms of staying on track for the SDGs?' Even if that means revising targets, we need to have forward movement. Covid-19 is our new reality. This is happening now."

#### Ashden's Recommendation on Ambition

National energy plans should blend public and private finance, market and non-market based finance, and support specialised and vertically-integrated local companies, in a bid to create a stable national energy ecosystem of on- and off-grid solutions. This should include a mix of technologies to meet different needs, and would offer the best platform for supporting a nation's future energy requirements.



### Conclusion: A Changing Role for Ashden

Ashden is committed to going further in supporting frontline climate enterprises – in particular, helping them secure finance, and tackling the crucial sectoral issues of understanding, inclusion and ambition. With progress towards the SDGs stuttering, it is clear that 'business as usual' from sector organisations (including Ashden) will not deliver the transformation needed. In this report we have scoped out key challenges in the energy access ecosystem – now we must help that ecosystem thrive.

Our backing for individual frontline organisations delivering energy access is unwavering. But as well as giving one-to-one support, we are deepening our programmatic work and nurturing the environment in which these organisations can flourish.



This includes steps to facilitate emergency pandemic relief. This summer saw Ashden, Sustainable Energy for All and the World Bank's ESMAP programme co-host a <u>virtual</u> <u>summit</u> for government and philanthropic donors. Key moments included the Swiss Agency for Development and Cooperation (SDC) announcing a new commitment to support the electrification of health clinics and a catalytic first-loss contribution to the Energy Access Relief Fund.

We are delivering a growing calendar of <u>events</u>, webinars, masterclasses and pitching opportunities, many run with influential partners such as Sustainable Energy for All and <u>Bloomberg New Energy Finance</u>. More than ever, these events will be geared towards sparking or accelerating system change, rather than incremental progress. Meanwhile, the global surge in virtual events and gatherings offers an opportunity to draw new voices into our network. We are working to build on the success of July's <u>2020 Ashden Awards</u> Ceremony, our most diverse ever.



We are also going further to share the insights from our work with innovators, releasing incisive reports – such as recent publications on <u>energy and livelihoods</u> and <u>sustainable</u> <u>cooling</u>. We have seen how knowledge sharing is a persistent problem right across the sector. Our response is to dig deeper but also to channel our insights more precisely towards key changemakers such as funders and investors.

# We have seen how knowledge sharing is a persistent problem right across the sector.

Crucial to our new approach is a focus on solutions that are participatory, inclusive, targeted at the most marginalised and able to drive radical change. Properly supported, they are the agents for truly radical change. We invite our partners to join us on our journey.





### How was this report prepared?

In preparing this report, Ashden gathered insights from 53 organisations in our network; 25 from Asia; 21 from Sub-Saharan Africa; three from the Americas and four from the Middle East and North Africa. These organisations offer a wide range of energy access products and services, including household and off-grid solar, productive use solutions and micro-hydro technology.

The list also includes organisations active in the areas of clean drinking water and clean cooking, as well as natural climate solutions and sustainable buildings, cooling and transport.

Financiers interviewed included social impact investors, impact funds, philanthropic organisations and family offices.

Ashden thanks everyone who has offered their opinions and knowledge to assist in the preparation of this report. With sincere thanks to Wallace Global Fund for their generous support.

Chhavi Sharma, International Programme Manager, Ashden Craig Burnett, Editor, Ashden

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#### About Ashden

Ashden is a climate solutions charity. Its mission is to accelerate transformative climate innovations and build a more just world. Through awards and programmes, Ashden promotes and supports climate and energy pioneers – including businesses, non-profits and public sector organisations around the world.

Since 2001, Ashden has awarded more than 236 ground-breaking organisations.

www.ashden.org Twitter: @Ashden\_org



#### **About Wallace Global Fund**

Wallace Global Fund (WGF) is a private foundation founded by Henry A. Wallace, Vice President of the United States. The mission of the Wallace Global Fund is to promote an informed and engaged citizenry, to fight injustice, and to protect the diversity of nature and the natural systems upon which all life depends.

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