

Crowd Power

Crowdfunding & P2P Lending for Energy Access

State of the Market 2018



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This material has been funded by UK aid from the UK government; however the views expressed do not necessarily reflect the UK government's official policies.



This report has been peer reviewed by our programme partners at Cambridge Centre for Alternative Finance.

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Davinia joined Energy 4 Impact in 2013 to help launch their business advisory team in East Africa, and managed the rollout of a USAID funded programme bringing pay-as-you-go solar to Rwanda. Prior to joining Energy 4 Impact, Davinia was a Kiva fellow in Tajikistan, and a consultant at the Social Stock Exchange, London and School for Life, Uganda.

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He is a non-executive director of Thrive Renewables, one of the first crowdfunded investors in small-sized renewable projects in the UK, and a Board Member of Renewable World, an NGO which alleviates poverty in developing countries through micro renewable projects. Prior to Energy 4 Impact, Peter was global head of finance and investment for two power equipment suppliers: Siemens Wind Power and MAN.

He led the European energy lending team at GE Capital and was an executive director at Westdeutsche Landesbank. Peter has a BA in Economics and Politics from the University of Warwick.

Introduction

Crowdfunding & P2P Lending for Energy Access - State of the Market 2018 captures the growing importance of financial technology (fintech) based financing models for energy access companies. We examine data from two financing channels – crowdfunding and peer-to-peer (P2P) lending. Energy 4 Impact (E4I) has been tracking crowdfunding and P2P lending activity in the energy access sector since 2015, and began tracking energy access related initial coin offerings (ICOs) in 2018.

The report disaggregates data by fintech financing model and explores six models: P2P business lending, P2P microloans, donation crowdfunding, reward crowdfunding, equity crowdfunding, and ICOs. We share the key trends, by fintech financing model, as they relate to energy access companies, which include solar home system distributors, mini-grid developers and cookstove distributors.

The report aims to provide entrepreneurs, practitioners, governments and donors with knowledge on fintech financing models and how they can be used to raise debt, equity and donations for energy access companies. Dedicated research on this niche area of energy access company fundraising is scarce, however fintech-enabled fundraising is growing fast – the amount raised via these channels grew from \$3.4 million in 2015 to \$31.3 million in 2018. While this report focuses on the energy access sector, many of the learnings shared here may be relevant to other impact sectors.

Buffalo Grid



1

Crowd Power 2

Crowd Power 2 is a research-led programme designed to explore the role of innovative technology-driven financing solutions, such as P2P lending and crowdfunding, in the energy access sector. The programme seeks to understand the impact of innovative forms of capital raising on energy access companies, and the appetite of investors in high-income countries for investment opportunities with environmental and social returns. The Crowd Power 2 programme is managed by E4I a UK-based charity, which supports market-driven solutions to clean energy access in off-grid communities in sub-Saharan Africa.

Crowd Power 2 is funded through the UK Government's Transforming Energy Access (TEA) programme. TEA is a programme from the UK Government's Department for International Development (DFID), designed to support the progress of clean energy access in developing countries in sub-Saharan Africa and South Asia. TEA seeks to identify regional issues, and solutions, relating to energy access. TEA aims to lead the development of innovative technologies, business models, partnerships and skills designed to have a transformative impact on the progress of clean energy access. Up to £100 million will be invested until 2024.

Crowd Power 2 began in 2018, following the successful Crowd Power programme, a pioneering research programme

that examined the role of crowdfunding and P2P lending in the financing of energy access companies and projects. Crowd Power played an instrumental role in the growth of P2P lending and crowdfunding for energy access businesses, and supported over 250 energy access campaigns to raise £3.4 million (\$4.53 million) in funding.

Crowd Power 2 seeks to continue researching crowdfunding and P2P lending, while supporting energy access companies to raise pre-seed, seed and growth-phase capital via crowdfunding and P2P lending platforms. [Crowdfunding & P2P Lending for Energy Access - State of the Market 2018](#) is the first of three annual reports on the state of crowdfunding and P2P lending activities in the energy access sector. In addition to publishing three annual reports, E4I will conduct and publish a white paper on the feasibility of equity crowdfunding for the energy access sector, with publication planned for Q3 2019.

Earlier research papers can be found below.

[Powering the crowd into the future](#)

[Who is the crowd?](#)

[Success & failure: the key to a winning campaign](#)

[Can the crowd close the financing gap?](#)

[Mapping the market for energy access](#)

The programme will also support P2P business lending platforms, by assisting with the set-up costs of capital guarantees and local currency lending facilities. Crowd Power 2 will also encourage investor participation in the sector, through investor outreach activities.

Crowd Power 2 focuses on five key areas



1/ Donation & Reward Crowdfunding

The programme supports seed-stage companies to raise seed capital from their networks via donation and reward crowdfunding platforms through the provision of match funding. Match funding is typically 20 to 25% of the campaign target, but not more than \$10,000. Relevant donation and reward campaigns tend to raise \$5,000 to \$50,000.



2/ Equity Crowdfunding

The programme supports seed and growth-phase companies to raise equity on equity crowdfunding platforms by providing lump-sum investments to eligible campaigns. Lump-sum investments tend to be \$10,000 to \$25,000 and usually account for <10% of the campaign target. Relevant equity campaigns tend to have targets of \$100,000 to \$1 million. In addition, CP2 will conduct an equity crowdfunding feasibility study, which examines the opportunities, challenges and suitability of equity crowdfunding for energy access companies.



3/ P2P Lending

The programme will support P2P business lending platforms to establish foreign exchange hedging facilities to enable local currency lending. In addition, CP2 aims to support the creation of guarantee facilities, which protect investors on P2P lending platforms in the event of default. CP2 can assist platforms with the set-up costs of these facilities.



4/ Investor Outreach

The programme will fund outreach activities designed to attract millennial and diaspora investors (and donors) to energy access crowdfunding and P2P lending. Outreach activities include events, podcast interviews, influencer marketing and other channels. E4I seeks to understand the effectiveness of various channels in converting new investors, with a particular focus on millennials and diaspora.








5/ Research

The programme will continue to publish industry-leading research on the energy access crowdfunding and P2P lending market. Three annual reports will be published, based on fundraising activity in 2018, 2019 and 2020. In addition, CP2 will publish three white papers over the duration of the programme, which examine key issues impacting the market, such as the availability of local currency loans from P2P business lending platforms.

Crowd Power 2 Goals

Crowd Power 2 is a three-year programme, and will run through to **August 2021**. The programme aims to achieve the following outcomes:

Focus Area	Intervention	Anticipated Outcome
 Donation & Reward Crowdfunding	Provide match funding	Support 8 energy access companies raise early stage capital
 Equity Crowdfunding	<p>a Publish equity crowdfunding feasibility study</p> <p>b Make lump-sum investments</p>	<p>a Conduct study on market and policy requirements to increase participation of energy access companies</p> <p>b Support 5 energy access companies raise equity</p>
 P2P Lending	Pay set-up costs	Support creation of 1 local currency lending facility on platform/s; support creation of 2 guarantee facilities on platforms
 Investor Outreach	Encourage diaspora and millennial investor participation	Attract 500 new millennial and diaspora investors to energy access P2P lending and crowdfunding
 Research	Share market analysis	Publish three annual reports on energy access P2P lending and crowdfunding; publish three white papers on key issues impacting the sector

Crowd Power Achievements

2015 - 2018

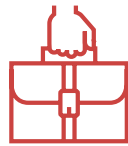
\$4.5M

 raised for energy access companies and projects

300,000+
individuals
with energy
access



Co-funding
leveraged
6X private
capital



120+
jobs
created



29
countries



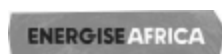
56,000+
tonnes
CO2 reduced



252
campaigns
supported

Platform Partners

CP2 continues a number of partnerships formed during Crowd Power and seeks to expand the partnership base by onboarding new platforms as relevant campaigns arise. The partners we currently work are highlighted below, although we are open to working with new platforms. If you are interested in becoming a partner please contact info@energy4impact.org



2

Understanding Crowdfunding and P2P Lending

Fintech-enabled financing models, such as P2P lending, are becoming a valuable component of the financing mix for energy access companies. The increased significance of alternative financing in the energy access sector reflects several trends.

Firstly, the growth of the energy access sector is occurring at the juncture of innovation in both product technology and financial technology. Given the sector's roots, innovative financing channels, such as P2P lending, are a natural fit for these forward thinking companies.

Secondly, access to finance is one of the most frequently cited barriers to growth by energy access companies, and fintech-enabled financing channels open up opportunities to obtain funding outside of traditional financiers (e.g. banks, impact investment funds).

Thirdly, demand for triple-bottom-line investments from investors in high-income countries is increasing as investors look to mitigate climate change and reduce energy poverty, while potentially earning a high rate of return on their investment.

The rate of growth, and the suitability of company profiles, varies across fintech financing models, thus it is important to understand the relevance of each model in the context of

energy access. Factors such as a company's financing needs (e.g. capital type, ticket size), stage in the business lifecycle and investor network capacity, will determine the suitability of certain fintech models to meet a company's financing objectives.

There are two broad financing models, which we focus on in this report:

1/ P2P Lending, which includes P2P microlending and P2P business lending. We use the term P2P lending to refer to debt-based fintech credit models, however it is important to note this is a simplification of a diverse range of models adopted by fintech credit platforms. P2P lending models have evolved from their traditional roots, as strictly peer-to-peer. Many platforms have retail and institutional investors, and offer various financing instruments (e.g. bonds, securitised loan-parts).

2/ Crowdfunding, which includes donation crowdfunding, reward crowdfunding and equity crowdfunding. It also includes ICOs, a new method of crowdfunding which entails the issuance of tokens (or crypto-assets) to investors, who typically invest with cryptocurrencies (e.g. Bitcoin). Crowdfunding is generally considered a much higher risk activity than P2P lending, although it is important to note that in the energy access context, a large number of donors and investors are motivated by more than financial return.

Fintech Financing Models Explained

The below classification represents the various fintech financing models used by energy access companies.



P2P Business Lending

Individual or institutional investors provide a loan to a business.

Campaign size
\$10K-\$1M




P2P Microloans

Individual or institutional investors provide a loan to a consumer.

Campaign size
\$50-\$1K



P2P Lending

Donation Crowdfunding

Individual donors provide funding to individuals, companies or projects based on philanthropic or civic motivations with no expectation of monetary reward.


Campaign size
\$5K-\$20K




Reward Crowdfunding


Backers provide funding to individuals, companies or projects in exchange for non-monetary rewards or products.

Campaign size
\$5K-\$50K



Crowdfunding



Equity Crowdfunding

Individual or institutional investors purchase equity issued by a company.

Campaign size
\$100K-\$3M



Initial Coin Offering (ICO)

Individual or institutional investors purchase tokens issued by a company. Investors may use cryptocurrencies or fiat¹ to invest.

Campaign size
\$100K-\$3M

Source: Cambridge Centre for Alternative Finance,²Energy 4 Impact

¹ Currencies that a government has declared to be legal tender.

² T. Ziegler, R. Shneor, K. Garvey, K. Wenzlaff, N. Yerolemou, B. Zhang, R. Hao, 'Expanding Horizons: The 3rd European Alternative Finance Industry Report', Cambridge Centre for Alternative Finance, February 2018, <https://www.jbs.cam.ac.uk/faculty-research/centres/alternative-finance/publications/expanding-horizons/#.XLZ0J-szZE6> (accessed 14 March 2019)

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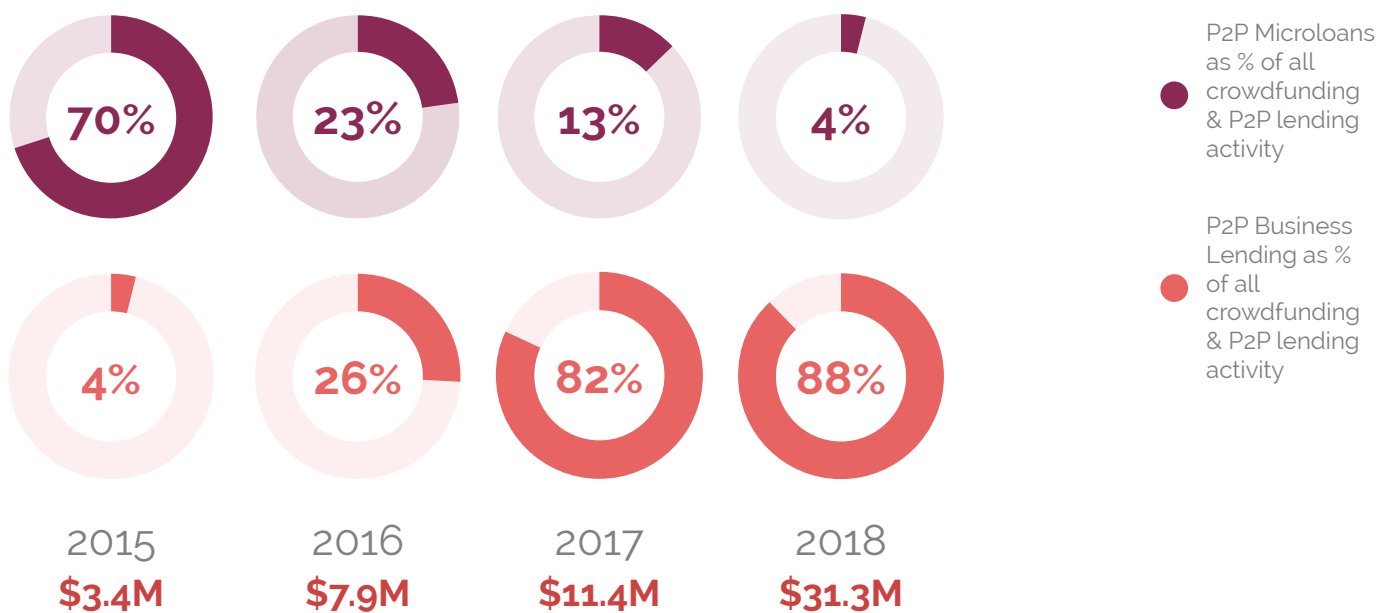
Top 5 Trends 2018

P2P Lending and Crowdfunding

1/ P2P Lending landscape shifts dramatically

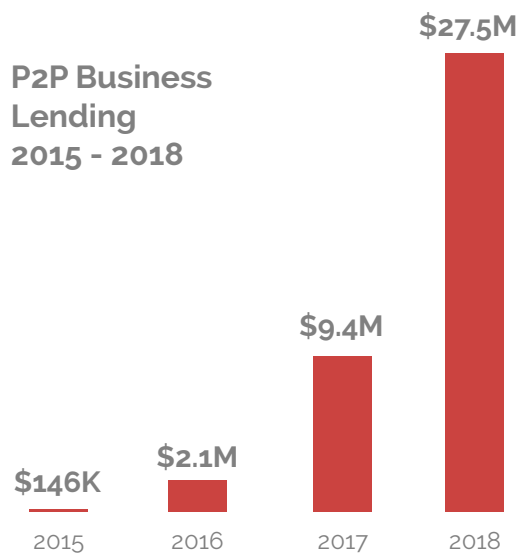
When we began data collection in 2015, P2P microlending dominated energy access P2P lending and crowdfunding activity, making up 70% of all funds raised. P2P business lending made up just 4% of fundraising activity. Over the past three years, P2P business lending activity has ballooned – it now accounts for 88% of all funds raised. Growth is driven by demand for impact investment opportunities from retail investors in high-income countries, and the significant unmet debt needs of energy access companies.

Shifting P2P Lending Landscape



2/ Energy Access P2P Business Lending Doubles

P2P business lending is growing at an explosive rate as energy access companies are drawn to the flexible nature of P2P business lending, while investors are drawn to the relatively high return offered – at the same time as making an impact on climate change and energy access. Returns on GBP and EUR denominated investments range from 4% - 10% p.a..



Morgana Wingard, Power Africa

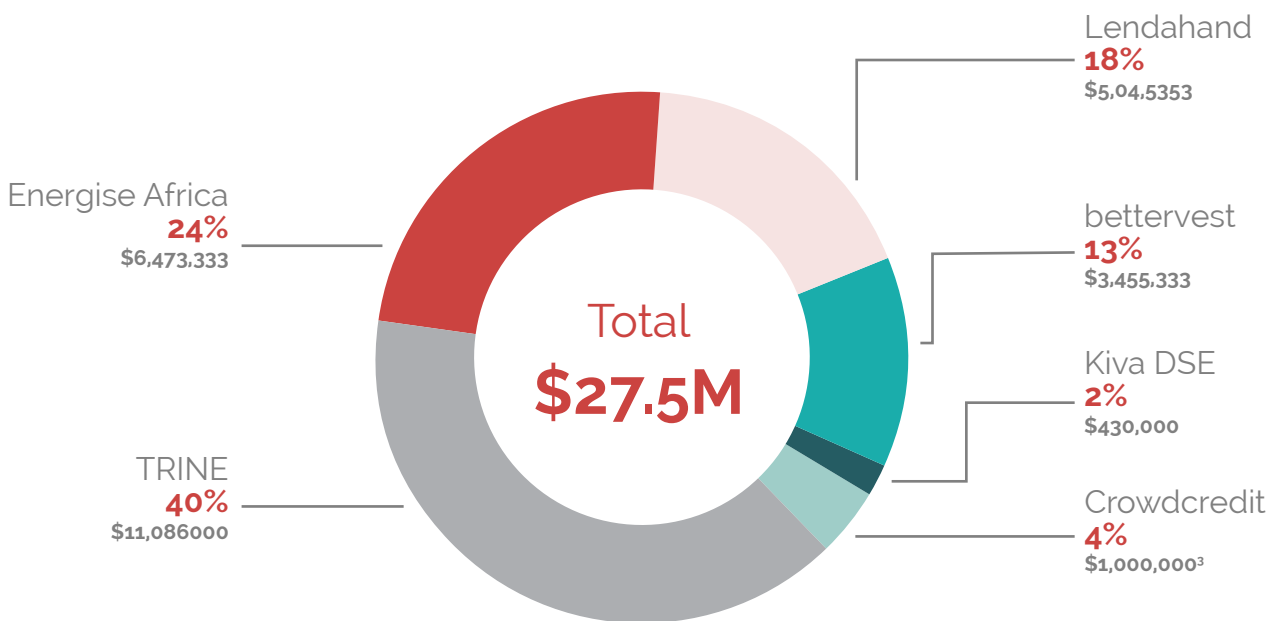
3/ Six Active P2P Business Lending Platforms

The number of active P2P business lending platforms grew in 2018 as Solar Home, Myanmar announced they had raised a syndicated debt facility, which included Japan-based P2P business lender Crowdfunder. Five out of six lending platforms are focused on growth phase companies. The Kiva Direct to Social Enterprise (DSE) programme is the only P2P business lender focused on earlier stage companies.



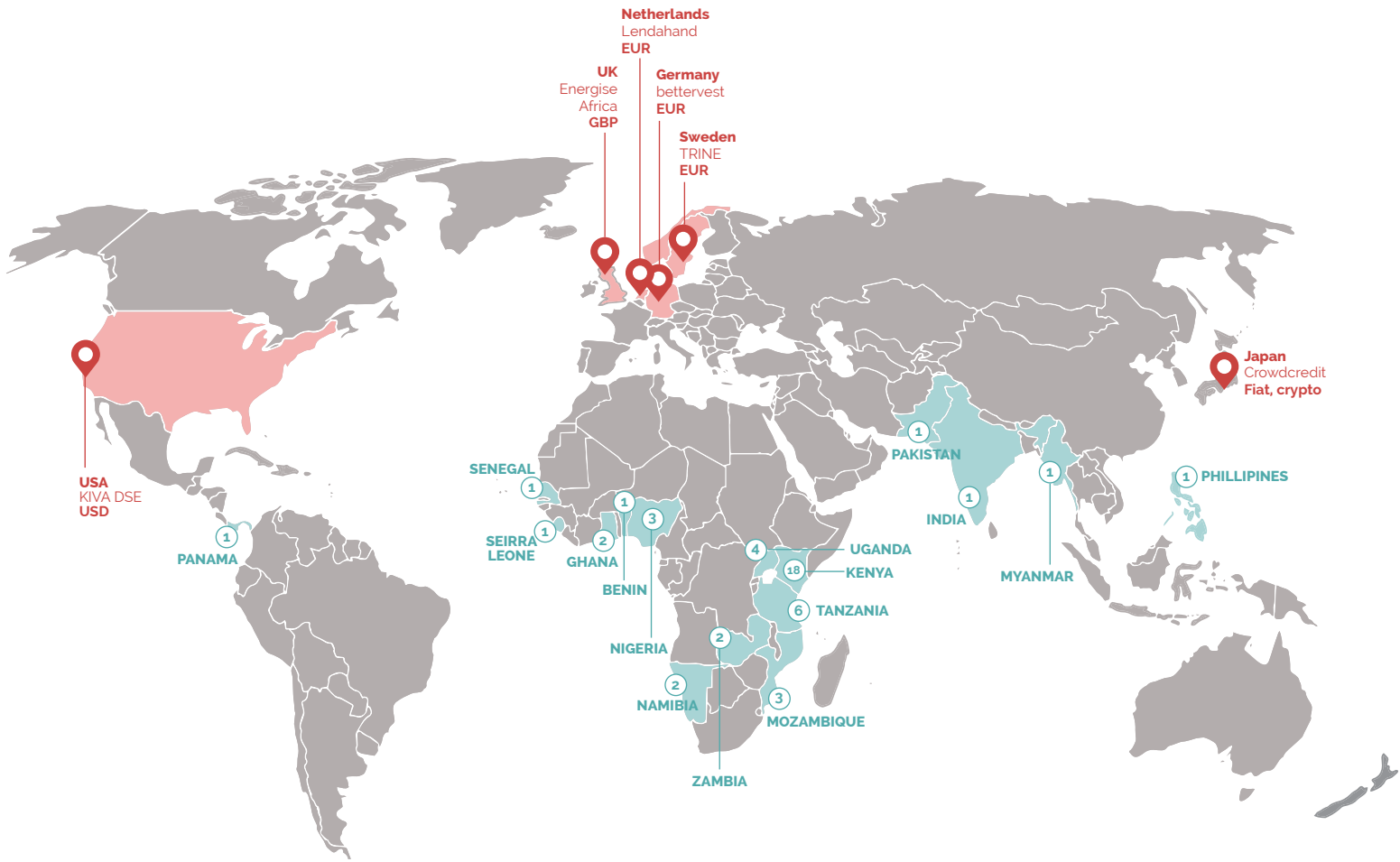
Rachel Couch, Power Africa

P2P Business Lending by Platform 2018



³ E4I was unable to obtain accurate data pertaining to Crowdfunder campaigns due to financial regulations, which prevent disclosure. This is our best estimate, based on market intelligence.

P2P Business Lending Platform and Campaign Map



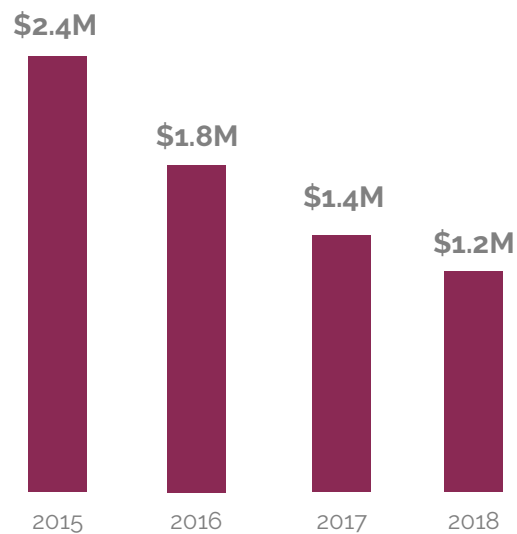
Key

- ① Number of campaigns
- 📍 Platforms

4/ Energy access P2P Microlending trends downward

P2P microlending activity in the energy access space has decreased by 20% year-on-year over the past three years, in absolute terms. P2P microlending has also become a much smaller component of the overall energy access P2P lending and crowdfunding space. Between 2015 and 2017, an average of \$1.8 million was raised each year for energy access microloans; in 2018, \$1.2 million was raised. The dip in activity appears to be a result of a handful of previously active Kiva field partners (which originate loans) reducing loan activity on the platform.

P2P Microlending 2015 - 2018



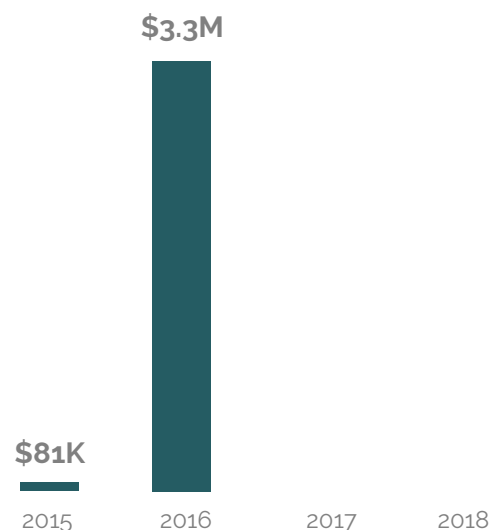
5/ Equity crowdfunding remains stagnant

The current state of equity crowdfunding is not an ideal fit for the typical energy access company profile. Most equity platforms, which operate at scale, are based in the UK and Europe. The regulatory frameworks that govern equity crowdfunding tend to restrict investment to companies domiciled in the platform's country or region of incorporation.

Further, the profile of companies that successfully raise funds tends to be early-stage companies that are 'disruptive' and have a strong innovation focus. While this description aligns with several energy access companies, articulating the business model in a way that appeals to investors can prove a real challenge. There was one energy access campaign on Crowdcube during 2018, by ECOPOW3R, Rwanda, however the campaign failed to reach its target.

Encouragingly, we see increased interest in equity crowdfunding from policy makers in sub-Saharan Africa. We anticipate future interventions to support local companies to raise funds via equity crowdfunding.

Equity Crowdfunding 2015 - 2018



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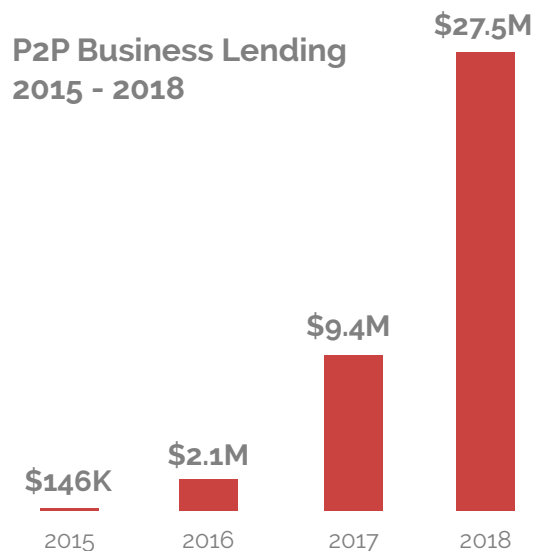
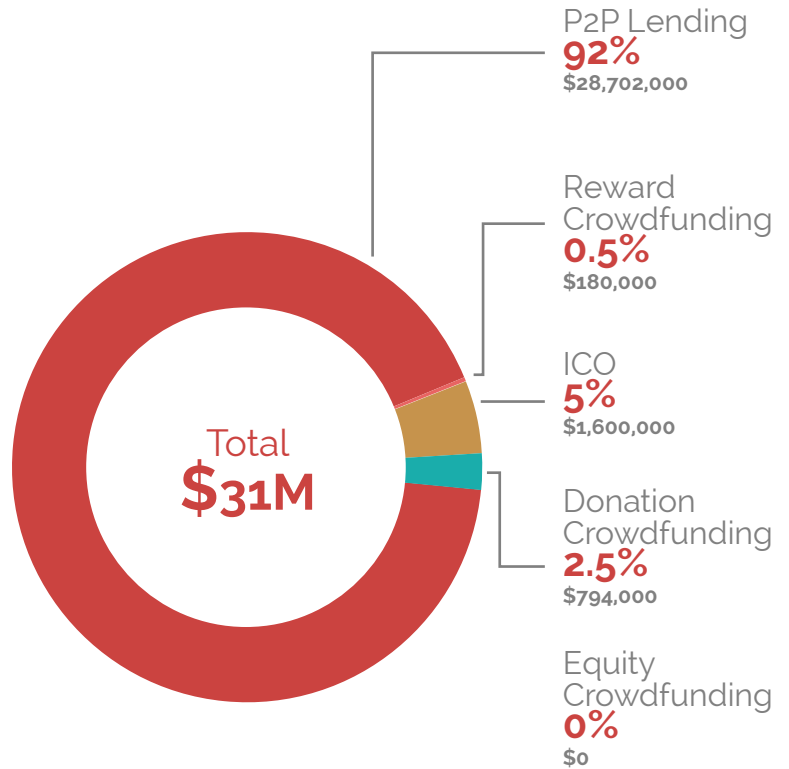
State of the Market 2018

Fintech financing models are now commonly used by energy access companies to raise capital, from early stage companies raising seed capital from family and friends via donation and reward crowdfunding, to growth phase companies raising multi-million-dollar debt facilities via P2P business lending platforms. The landscape is dynamic and P2P business lending, in particular, is evolving rapidly.

Back in 2015 the energy access crowdfunding and P2P lending market was dominated by microloans, which accounted for 70% of the \$3.4 million raised that year. Fast forward to 2018, and we see microloans accounted for 4% of the \$30 million raised for energy access campaigns on P2P lending and crowdfunding platforms. P2P business lending, on the other hand, grew from 4% of all fundraising activity in 2015 to 88% of all fundraising activity in 2018. The growth of P2P business lending is the result of a confluence of factors, including demand from investors in high-income countries for impact investment opportunities, demand from energy access companies for working capital facilities to support their growth, and the rise of P2P business lending platforms to serve the market.

P2P business lending is the primary source of growth in energy access related crowdfunding and P2P lending.

Crowdfunding and P2P Lending for Energy Access 2018



P2P business lending is where individual (or institutional) investors provide a loan to a business, facilitated by an online platform. In the context of energy access related P2P lending, the borrower is typically a solar home system distributor selling units to off-grid populations in sub-Saharan Africa or South Asia. The investors are often individuals based in Europe, or the UK, who earn a return on their investment of 4% to 8% per annum. Active P2P business lending platforms include TRINE (Sweden), Energise Africa (UK), Lendahand (Netherlands), bettervest (Germany) and Crowd Credit (Japan). Kiva (USA), one of the largest P2P microloan platforms globally, has also started lending directly to businesses through the Kiva Direct to Social Enterprise (DSE) pilot; although these loans tend to be smaller than on other platforms (<\$50,000) and attract no interest.

So why, exactly, has P2P business lending grown so rapidly?

P2P business lending emerged partly, in the energy access sector, as a response to a critical gap in financing faced by energy access companies. Industry data consistently shows that investment is highly concentrated, with four companies accounting for 67% of all investment in pay-as-you-go (PAYGO) solar companies from 2012 to 2017.⁴ Access to finance is frequently cited as a barrier to growth for energy access companies, and even companies that can access capital may not be able to obtain the right type of capital, on suitable terms.

The financing needs of the PAYGO solar business – the dominant model in the energy access space – are unique and require tailored

solutions that are flexible and that closely match the cash flow cycles of the business. While P2P microlending is where individuals seek consumer loans (of say, \$200), P2P business lending allows energy access companies to bundle a group of consumer loans into the one facility (of say, \$1 million) leading to greater efficiency and access to capital.

P2P business lending platforms have tapped into the opportunity to connect investors in high-income countries – hungry for environmental, social and financial returns – with companies working to end energy poverty in sub-Saharan Africa and South Asia. In 2018, 139 campaigns raised \$27.5 million on P2P business lending platforms, compared to 49 campaigns in 2017, which raised \$9.4 million.

Perhaps even more intriguing is the fact that some of the largest companies in the sector – such as BBOX and Azuri Technologies – are also using P2P business lending to raise capital. P2P business lending is not just financing companies marginalised by established lenders and investors; it is attractive across a broad range of company profiles due to facility flexibility, transaction speed and competitive pricing.



Pollinate Energy

⁴ Dalberg Advisors and Lighting Global, 'Off-Grid Solar Market Trends Report 2018', World Bank Group, January 2018, https://www.lightingafrica.org/wp-content/uploads/2018/02/2018_Off_Grid_Solar_Market_Trends_Report_Full.pdf (accessed 14 March, 2019)



Little Sun

2018 | Top 5 Which energy access companies use P2P business lending?

P2P business lending is typically used on an ongoing basis, unlike equity crowdfunding where a firm may subsequently gain access to venture capital or private equity investment.

\$7.3M

BBOXX

TRINE + Energise Africa

\$1.5M

Solarworks

Lendahand + Energise Africa

\$1.9M

Azuri Technologies

TRINE + Energise Africa +
Lendahand

\$960K

OOLU

Energise Africa

\$1.7M

Sollatek

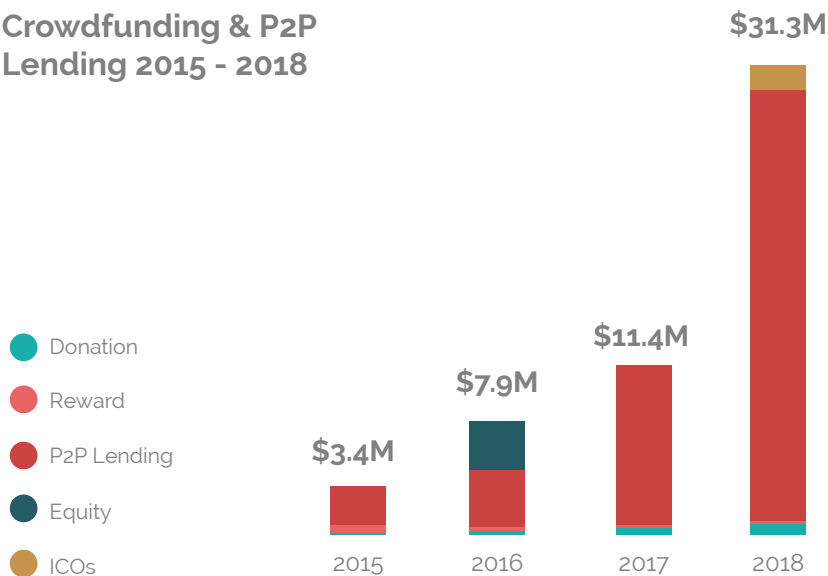
Lendahand + Energise Africa

But, why is reward and equity crowdfunding shrinking?

Both reward and equity crowdfunding for energy access companies appear to be contracting, however it's important to consider each of these models make up a small percentage of overall activity (1% and 0%, respectively, in 2018). Reward crowdfunding campaigns have raised an average of \$300,000 per annum over the past four

years. Equity crowdfunding has been erratic, with a range of \$3.4 million over the past four years, reflecting no successful campaigns in 2017 or 2018, and the \$3.4 million raised in 2016. The infrequent nature, and large size, of campaigns means growth rates often fluctuate as a single campaign can greatly impact results.

Crowdfunding & P2P Lending 2015 - 2018



Within reward crowdfunding, we see an increase in campaigns by early-stage startups raising seed capital (\$10,000 – \$50,000) from family and friends. However, we have seen fewer larger scale campaigns (\$100,000 – \$500,000) than in previous years, such as those by GravityLight and WakaWaka.

The growth of equity crowdfunding for energy access companies remains constrained due to regulatory reasons, which contribute to the concentration of platforms in only a few countries, and to the mismatch between the typical energy access company profile and that of successful equity campaigns. However, as financial regulators begin to take interest in equity crowdfunding – including regulators in East Africa – we anticipate a ramping up of activity over the coming years.

Donation crowdfunding for energy access has grown steadily over the past four years (46% average year-on-year growth), with the majority of activity on micro-donation platforms such as GlobalGiving (UK, USA) and GoFundMe (USA). Donation crowdfunding remains a small component of overall activity, accounting for 2% of all funds raised. We anticipate philanthropic micro-donations will continue to support grassroots organisations in the delivery of energy solutions to the poor, however it is unlikely to be an area of high growth for market-based approaches.

This is the first year E4I has tracked data on ICOs, which are sales of tokens or ‘crypto-assets’ to individual and institutional investors. ICOs typically raise funding in the

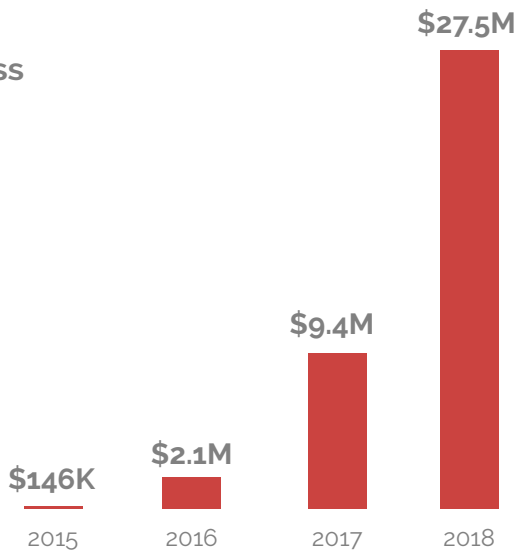
form of cryptocurrencies (e.g. Bitcoin), but may also accept fiat currencies. In the energy access context, ICO proceeds may be used to fund a particular project (e.g. capital expenditure associated with developing mini-grids), however it is important to note that the ICO landscape is relatively unregulated. ICOs can be an alternative to the traditional capital raising process and allow companies to raise funding without relinquishing ownership.

In 2018, the most prominent energy access ICO was from South Africa-based solar micro-leasing platform, Sun Exchange, and Kenya-based mini-grid developer, Powerhive. The token issue aimed to raise \$23 million to build 150 new mini-grids, however the raise fell short of expectations and raised \$1.1 million. E4I will continue to track the status of ICOs in the energy access space over the duration of Crowd Power 2, however the programme is unlikely to provide financial support to ICOs.

5

P2P Business Lending

P2P Business Lending
2015 - 2018



P2P business lending accounts for 88% of all energy access related crowdfunding and P2P lending activity. P2P business lending has emerged as an important financing tool for energy access businesses seeking to obtain meaningful sums of debt finance. In 2018, \$28.7 million was raised by energy access businesses across 139 campaigns.

Since 2016, P2P business lending has grown 3 to 4 times per annum. Specialist platforms, such as TRINE and Energise Africa, have emerged that are focused on the off-grid energy market in low-income and middle-income countries. The average campaign size has also grown steadily, from \$80,000 in 2016, to \$168,000 in 2017, to around \$200,000 in 2018. BBOXX raised the largest

facility via a P2P business lending platform, in 2018, borrowing over \$7.3 million through the TRINE and Energise Africa platforms.

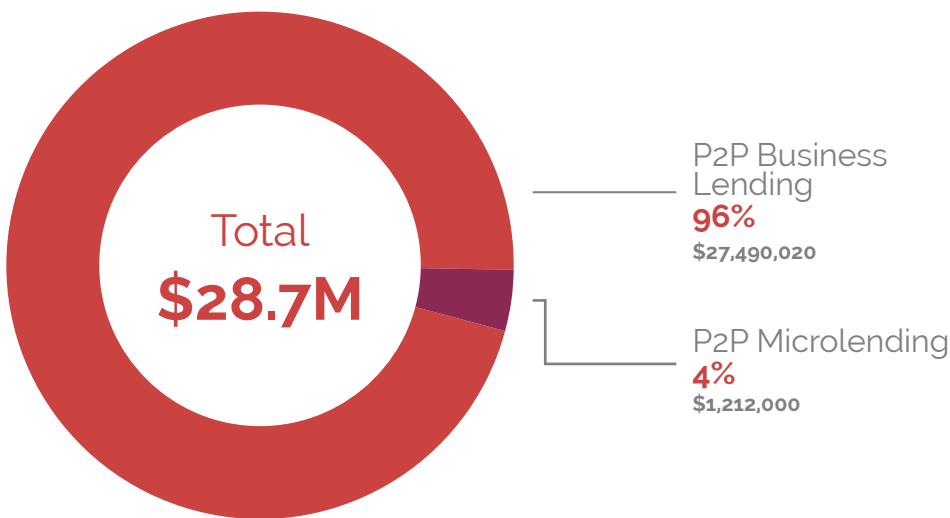
Growth rates are impressive, however we note that P2P business lending platforms currently offer debt facilities in GBP and EUR. For P2P business lending to continue on this high growth trajectory there may be a need to introduce USD and local currency lending facilities, particularly as the attractiveness of borrowing in GBP declines as a result of Brexit uncertainty.



P2P business lending is where a group of individuals lend money to a business. The lender usually receives a financial return on their investment. Individual investors own 'loan-parts', which may in fact be securitised, and receive loan repayments from the borrower over the duration of the loan. Lenders are typically motivated by social and environmental impact, as much as financial return. Business loans tend to raise working capital or project finance.



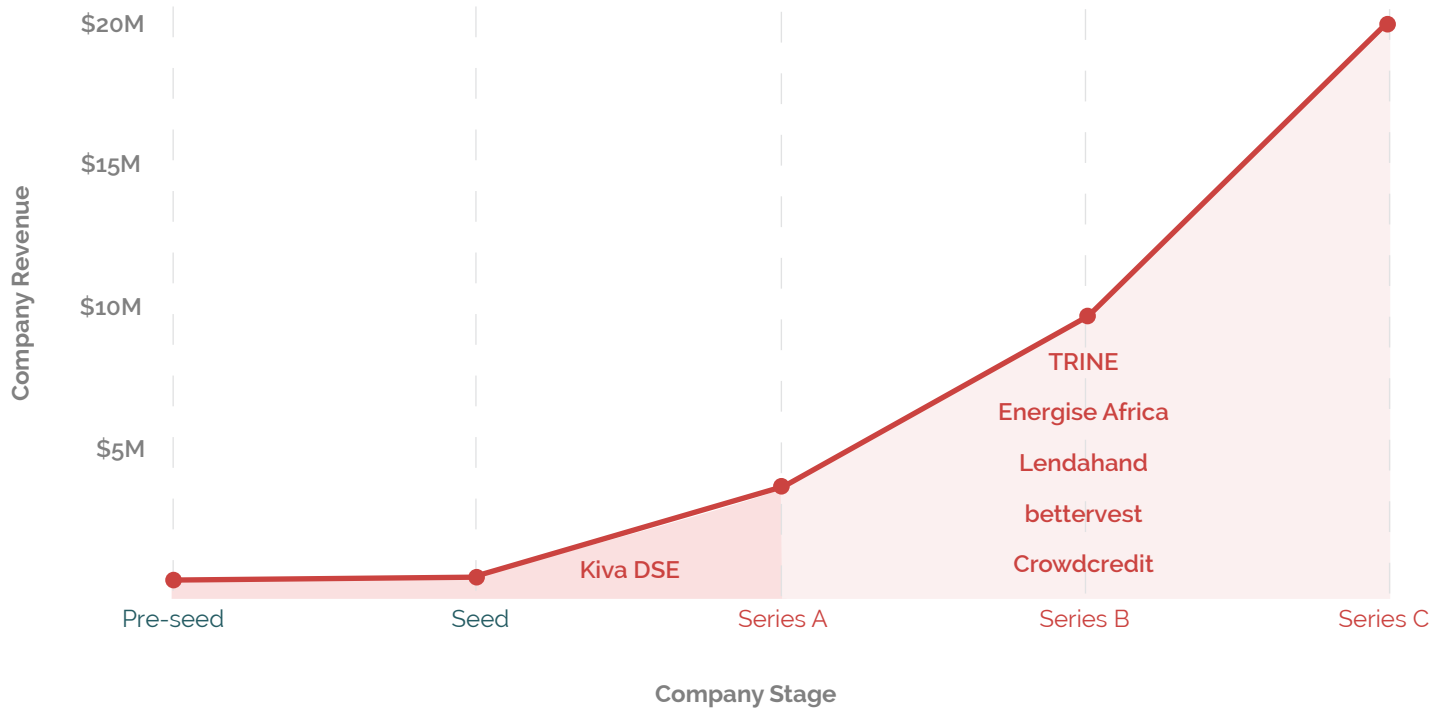
P2P Lending 2018



Top 5 P2P Business Lending Platforms For Energy Access

- 1/ TRINE
- 2/ Energise Africa
- 3/ Lendahand
- 4/ bettervest
- 5/ Kiva DSE

P2P Business Lending Across the Business Life Cycle

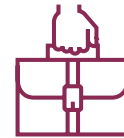
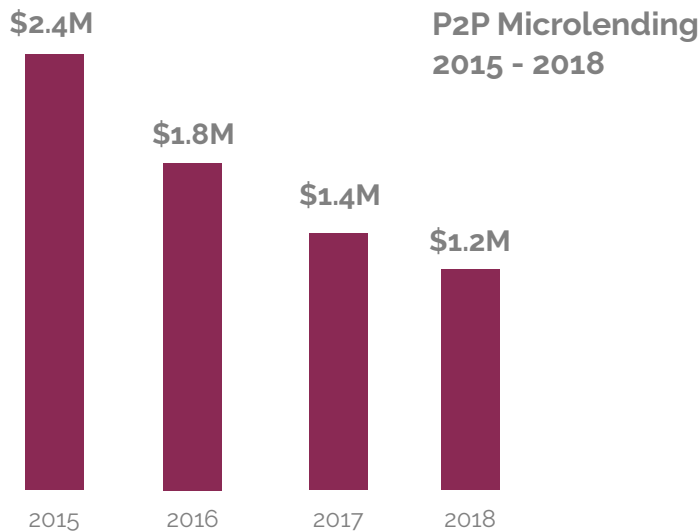


Source: Shell Foundation⁵; Energy 4 Impact

⁵ Catalyst Off Grid Advisors, 'Achieving SDG 7: The Need to Disrupt Off-Grid Electricity Financing in Africa', Shell Foundation, October 2018, <https://shellfoundation.org/app/uploads/2018/10/Achieving-SDG-7-The-Need-to-Disrupt-Off-Grid-Electricity-Financing-in-Africa.pdf> (accessed 7 May 2019).

6

P2P Microlending



P2P microlending is where a group of individuals lend money to an individual, group or entrepreneur. The lender effectively holds a 'loan-part' and expects to be repaid by the borrower over the agreed loan term. Lenders on microlending platforms tend to be motivated by social impact and, due to legal and administrative considerations, often do not receive repayments inclusive of interest. In the eyes of the lender, microlending may be viewed as a more effective form of donation – which offers capital preservation alongside impact.

While P2P lending accounts for 92% of all energy access related crowdfunding and P2P lending activity, P2P microlending has reduced in both absolute and relative terms. Energy access related P2P microlending declined at an average rate of 20% each year from 2015 to 2018. P2P microlending raised \$2.4 million for energy access campaigns in 2015, while \$1.2 million was raised in 2018.

The reasons for the decline in activity are less clear. The bulk of P2P microlending campaigns

occur on the Kiva platform, which has maintained steady overall growth from 2015 to 2018. However, Kiva partners that were previously active in energy access lending appear to have reduced lending in this area. These partners include microfinance institutions in the Philippines and Peru, and a bank in Kyrgyzstan. We are unsure of the reasons for reduced activity, however note that the majority of energy access campaigns are concentrated with just a few partners, which can result in fluctuations in activity.

Top 3 P2P Microlending Platforms for Energy Access

1/
Kiva

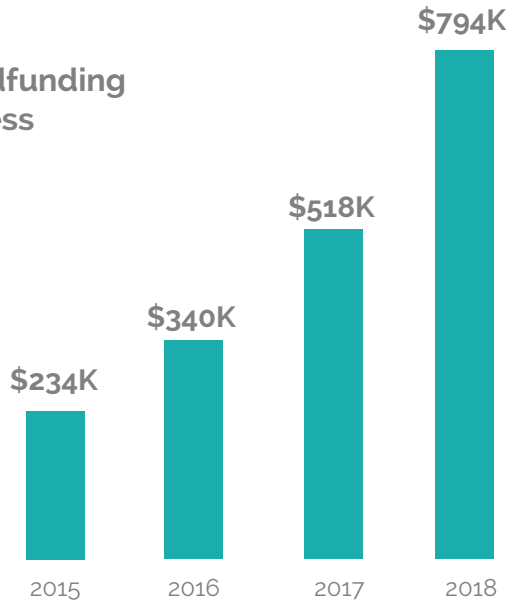
2/
Milaap

3/
Zidisha

7

Donation Crowdfunding

Donation Crowdfunding for Energy Access 2015 - 2018



Donation crowdfunding is where individuals, non-profits or businesses raise capital, in the form of donations, from a group of individuals via a crowdfunding platform. Individual donors are usually motivated to give because of a personal connection to the fundraiser or for philanthropic reasons.

Energy access related donation campaigns raised \$794,000 in 2018, demonstrating steady growth since 2015, when we began tracking energy access related donation crowdfunding data. Donation crowdfunding accounts for 3% of all energy access related crowdfunding and P2P lending. Energy access related donation crowdfunding grew at an average annual rate of 46% year-on-year between 2015 and 2018.

GlobalGiving is the dominant platform for donation fundraising of this kind and accounts for 64% of the amount raised. Typically,

campaigns are run by non-profits that join the platform to raise funds periodically. Campaigns are for specific programmes or initiatives, such as solar lanterns for school children or installing energy efficient cookstoves. In 2018, there was also a successful campaign on the Charidy platform, by India-based solar lantern and cookstove distributor Pollinate Energy, which raised around \$50,000. This was a 24-hour campaign, which had match funding from three sources – resulting in a quadrupling of individual donations.

Top 5 Donation Platforms for Energy Access

1/

GlobalGiving

2/

GoFundMe

3/

betterplace

4/

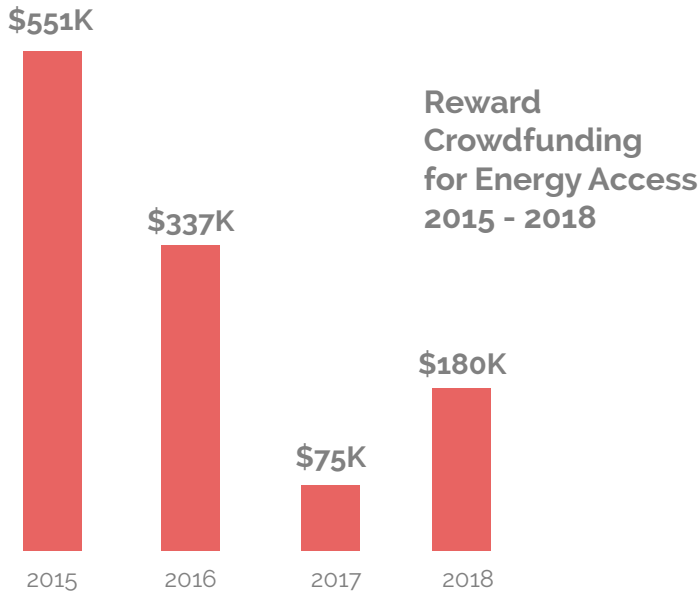
Just Giving

5/

M-Changa

8

Reward Crowdfunding



Reward crowdfunding is when a non-profit or business raises capital from a group of individuals, in return for a reward. Reward crowdfunding is sometimes referred to as a 'pre-sale' as it is often used to fundraise the development of new technologies (e.g. pico-solar lantern). Reward campaigns for social causes will try to minimise the cost of reward delivery by including rewards with a low monetary value, such as a thank you posted to their website. Individual contributors are usually motivated by a connection to the fundraiser or the value of the reward offered.

Reward crowdfunding accounted for less than 1% of energy access crowdfunding and P2P lending activity in 2018, and raised a total of \$180,000. While a small component of overall activity, reward crowdfunding represents an opportunity for early-stage companies to raise seed capital. For start-ups in ideation phase – or that have completed initial market scoping and testing – but don't have an established business model and track-record, this can be one of the few available options to raise finance.

In 2018, the average campaign size varied greatly across platforms. The average energy access campaign on the Indiegogo platform was \$35,000, while on Kickstarter it was just over \$100. The discrepancy in size may reflect the low success rate on Kickstarter; the five campaigns we examined raised around 1% of their targets. The most successful reward campaign of 2018 was by the makers of GravityLight, and raised close to \$150,000. This represents GravityLight's third campaign in recent years, with \$850,000 raised in total.

Top 5 Reward Platforms for Energy Access

1/
Indiegogo

2/
Charidy

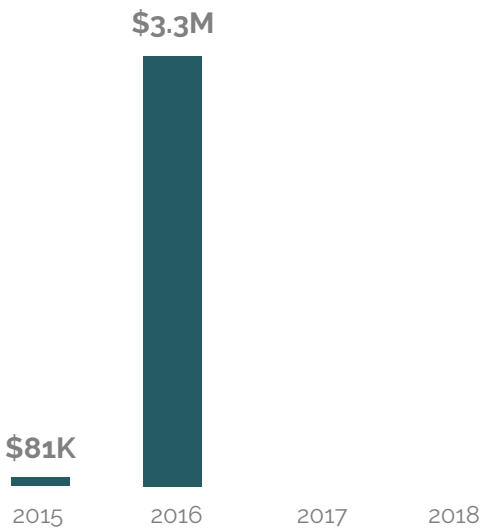
3/
Kickstarter

4/
StartSomeGood

5/
Pozible

9

Equity Crowdfunding



Equity crowdfunding is where individual investors provide funding to a company in exchange for shares in the company. The equity crowdfunding platform may also operate a secondary market, which allows shareholders to sell their shares, however in most cases, shares are fairly illiquid. Start-ups typically raise equity capital for product development and growth.

In 2017 and 2018, there were no successful equity campaigns by energy access companies, while in 2016, energy access companies raised \$3.4 million via equity crowdfunding. There was one unsuccessful equity campaign during 2018, by ECO POW3R, Rwanda, which failed to reach its target of £250,000 (\$333,333). Equity crowdfunding campaigns typically operate on an all-or-nothing basis, so if the campaign does not reach its target no funds will be disbursed.

The UK has one of the most mature equity crowdfunding

markets globally, and most energy access campaigns have been on UK-based platforms. Financial regulators can restrict participation of fundraising companies to those domiciled in the platform's jurisdiction. Several platforms in the UK restrict fundraising to companies domiciled in the UK or certain EU countries.

Successful equity campaigns are often by highly innovative companies. Investors are buying a vision, and the product and business model must appeal to investors (largely based in the UK, Europe and the USA). The

suitability of equity crowdfunding is currently limited in the off-grid context, due to regulatory restrictions and company profile suitability, however this may change as regulators in low- and middle-income countries explore equity crowdfunding. Equity crowdfunding may also be bolstered by increased energy access company awareness on what is required for a successful campaign and the increased awareness of platforms on untapped opportunities in emerging markets.

Top 5 Equity Platforms for Energy Access

1/

Crowdcube

2/

Syndicate Room

3/

Seedrs

4/

Uprise.Africa

5/

FundedByMe

10

Initial Coin Offerings (ICOs)



E4I began tracking energy access related ICOs in 2018, and thus cannot compare fundraising activity with previous years. Energy access ICOs are a niche component of energy and utility related ICOs, and raised just \$1.6 million in 2018, through two offerings.

The Powerhive X SunExchange ICO used the Ethereum platform to raise \$1.1 million through the sale of the SUNEX reward token,

which effectively securitises solar PV cells and allows token holders to earn revenue over the life of the project. The SunExchange platform provides token holders with real-time access to solar cell performance and revenue generation, from their projects in South Africa and Kenya. CryptoLeaf is a platform for investors to fund 'green' projects globally, which include projects in low-income countries; the ICO raised \$500,000.

Initial coin offerings (ICOs) are where a project or company sells tokens to the public (typically international investors) in exchange for cryptocurrencies or national currencies. ICOs offer an opportunity for project developers and companies to raise funds for project development costs. ICOs provide an alternative source of capital to traditional equity and debt investments.

Energy Access ICOs 2018

1/

Powerhive X SunExchange

2/

Cryptoleaf



Success Story.



Mee Panyar
Myanmar



Natasha Allen
Founder & Managing Director

Mee Panyar is an early-stage social enterprise focused on improving the efficiency of locally managed diesel mini-grids in Myanmar.

Mee Panyar's mission is to give communities the tools to hybridise and maintain energy-efficient mini-grids to reduce household energy costs, increase operator income and reduce carbon emissions. Myanmar has over 13,000 community run brownfield mini-grids.

In February 2019, Mee Panyar raised \$47,500 in seed capital on StartSomeGood, a reward crowdfunding platform geared toward social enterprises. Crowd Power 2 provided \$2,500 as an anchor-sum to begin the campaign and \$10,000 in match funding during the campaign.

Why did you start Mee Panyar?

In 2016 I was working in Myanmar on a research project focused on community-based electrification. During this time, I learnt about the local practice of self-help electrification and I spent time learning from local electricians that had built mini-grids for their villages. They told me that they needed more skills and training to help them provide better and cleaner electricity to their communities. So I started working to develop the training idea, behind Mee Panyar, and started the company officially in July 2018.

How did you finance Mee Panyar in the early days?

I participated in and won a startup pitch competition at University College London, through the University College London Hatchery incubator program. It was a 6 week program with weekly workshops and mentoring to develop your idea and prepare to pitch. The programme ended with

a pitch competition, where I won a £5,000 (\$6,667) award. I used the funding to visit roughly 40 villages, selecting a site for the pilot project. I also used my own savings and a small loan from family to support myself during this time.

Why did you decide to use crowdfunding to raise funds?

Prior to our campaign, we had been working with our target customers - rural electricians in Myanmar - to identify their needs and to discuss appropriate solutions. We believed we had found a good opportunity, but because we are working with mini-grids, which inherently have a high upfront cost, we could not test the concept. We decided to launch a crowdfunding campaign to raise funds for a pilot, which we can then demonstrate as proof of concept to future investors.



How did you decide which platform to use?

We decided to use StartSomeGood because we appreciated the time and effort they put into answering questions and providing input into our campaign. There is a lot that goes into executing a successful campaign and their suggestions helped us navigate the process. The platform is also geared toward social enterprises.

How did you plan the campaign, manage outreach and reach your target?

Setting up the campaign was a lot of work but very rewarding! We started by setting our target and making a detailed budget. This helped us determine the minimum amount required to launch a successful pilot.

From there, we mapped out our network, starting with the immediate, first-circle personal connections of our team, to see how much of our target could be raised from that network. The idea behind this process was to determine how and to whom we would do our outreach. We found that we could probably get 30% reliably from our first circle, which meant that we had to be really diligent about our outreach.

Moving forward ambitiously (and admittedly a little nervously!), we put together a plan for social media posts throughout the campaign, drafted emails to send to friends and family, and did our best to personally contact as many people as possible. Learning to be ok with bothering people was really important during this process. This only ramped up once the campaign was live and was a lot of work, but it paid off!



Xaume Olleros, Power Africa

How did the funding from Crowd Power impact campaign performance?

The funds definitely gave non-family and friend contributors confidence in our mission and team. It acted as a sort of approval stamp. Even for family and friends, the cornerstone funding [\$2,500] at the beginning of the campaign gave the campaign a good boost, and gave us confidence, as a team, that we could reach our target.

Now that you've reached your target, what are your plans for 2019 in terms of operations and financing?

The funds we raised during the campaign will see us through building out and evaluating our pilot project. This includes

buying equipment, developing a coherent training program with our partners, and hiring local staff to be on the ground, working closely with the village we have chosen for the pilot, as well as monitoring the project's progress. As we move through the process, we are already talking to potential equity investors to turn our pilot results and lessons into a scalable business model in a seed round.

