CLEAN COOKING: SCALING UP WITH CROWDFUNDING

Hannah Blair (CLASP), 2016

REPORT 1 OF THE FINANCING CLEAN COOKING SERIES

MECS AND ENERGY 4 IMPACT
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CROWDFUNDING FOR CLEAN COOKING: **THE BIG PICTURE**

- Currently about 2.8 billion around the world lack access to clean cooking, including 87% of the population of sub-Saharan Africa.[1]
- The funding needed to achieve universal access to modern energy cooking services[2] by 2030 is estimated to be about $150 billion annually.[3]
- In 2019, $70 million was raised by 25 clean cooking companies tracked by the Clean Cooking Alliance[4].
- Crowdfunding for clean cooking is relatively small, with just $8 million raised across the sector between 2014 and 2020.
- About 99% of crowdfunding for clean cooking involves lending to micro-enterprises and larger companies.
- Future growth in crowdfunding will depend on providing support to build the pipeline of investible clean cooking companies.

1. ESMAP, 2020 *Tracking SDG7 Report*; IEA, World Energy Outlook 2019
2. 'Modern energy cooking services' refers to a household context that has met the standards of Tier 4 or higher across all six measurement attributes of ESMAP's Multi-Tier Framework: convenience, (fuel) availability (a proxy for reliability), safety, affordability, efficiency, and exposure (a proxy for health related to exposure to pollutants from cooking activities).
3. MECS and ESMAP, *The State of Access to Modern Energy Cooking Services* (2020)
4. Clean Cooking Alliance, 2021 *Clean Cooking Industry Snapshot*

Jon Leary (MECS), 2018

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THE FINANCING CLEAN COOKING SERIES
Energy 4 Impact and Loughborough University, the lead implementing partner on the UK aid-funded Modern Energy Cooking Services (MECS) programme, signed an agreement in 2020 to collaborate on research into financing for the clean cooking sector.

The **Financing Clean Cooking** series aims to facilitate the transition to clean cooking through financing and investment. The series is targeted at a diverse range of public and private stakeholders in clean cooking, including NGOs, donors, investors, and suppliers.

Clean Cooking: Scaling Up With Crowdfunding is the first report in the series and provides a snapshot of the state of crowdfunding for clean cooking. It explains the different crowdfunding models, reviews the current crowdfunding market for energy access and clean cooking, and evaluates the perspectives of different crowdfunding stakeholders, including platforms, borrowers and investors. It also provides recommendations on potential donor interventions to scale up crowdfunding for clean cooking.

Forthcoming reports in the series will include research into clean cooking appliance financing and clean cooking concessions for displaced people in humanitarian settings.

INTRODUCTION

Crowdfunding is the practice of funding a company or project by raising small amounts of money from a large number of people through online platforms. It is often overlooked as a source of financing for clean cooking. While **crowdfunding for clean cooking is still relatively small in volume**, both as an aggregate amount and as a proportion of energy access crowdfunding and overall clean cooking funding, it can be an **important source of future funding for the sector**. It is particularly interesting as a source of lending for clean cooking companies that might struggle to raise funds elsewhere.

Energy access crowdfunding reached a cumulative total of $159 million between 2015 and 2020. It roughly doubled every year until 2019, but fell 17% in 2020 due to the COVID-19 pandemic. This compares to a cumulative **$8 million of crowdfunding raised for clean cooking** between 2014 and 2020 in relation to a total investment of at least $70 million in clean cooking in 2019[5]. Despite the challenges during the recent pandemic, most crowdfunding platforms have held up well since the outbreak of the pandemic and crowdfunding is likely to remain resilient because **the majority of crowd lenders are driven by environmental and social impact** rather than financial returns.

5. According to the 2021 Clean Cooking Industry Snapshot, the total reported investment raised by 25 companies tracked by the Clean Cooking Alliance was $70 million in 2019, comprising $42 million equity, $20 million debt and $8 million grants. The total investment in the sector between 2017 and 2019 was $153 million.

Energy 4 Impact has a strong interest in crowdfunding for the energy access sector. In 2015, Energy 4 Impact began the Crowd Power programme to examine the role of crowdfunding and the impact of incentives on crowdfunding campaign performance. In 2017, the peer-to-peer (P2P) business lending platform Energise Africa was launched, following a competitive tender run by Energy 4 Impact and funded by UK aid. Energy 4 Impact continues to work closely with Energise Africa as the manager of UK aid's endowment to the platform. **Crowd Power 2** began in 2018 and seeks to understand the impact of innovative forms of crowdfunding on energy access companies, as well as the appetite of investors in high-income countries for investment opportunities with environmental and social returns. Crowd Power and Energise Africa have collectively raised over $30 million for energy access companies since 2015.

ENERGY ACCESS CROWDFUNDING REACHED A CUMULATIVE TOTAL OF

$159 MILLION

BETWEEN 2015 AND 2020.

TYPES OF CROWDFUNDING

99% of clean-cooking crowdfunding is lending-related and P2P business lending offers the best opportunity for future growth.

There are **six main crowdfunding models**: peer-to-peer (P2P) business lending, P2P micro-lending, equity, donation, reward, and initial coin offerings. These are summarised in Table 1.

P2P lending accounted for 88% of the $59 million energy access crowdfunding market in 2019, with the majority of this coming from P2P business lending.

In contrast **P2P lending accounted for 99% of crowdfunding raised by clean cooking companies, with more than half coming from P2P micro-lending.**

Table 1: **Crowdfunding Models**

CLASSIFICATION	CROWDFUNDING MODEL	MODEL DESCRIPTION	CAMPAIGN SIZE[1]	PLATFORM EXAMPLES
P2P Lending or Debt Crowdfunding	P2P Business Lending	Individual or institutional investors lend to a business through different financial instruments e.g bonds or securitized loan parts	$10,000 – $7,000,000	Kiva direct lending, Charm Impact, bettervest, Lendahand, Energise Africa, Trine, CrowdCredit
	P2P Micro-lending	Individual or institutional investors provide a loan to a consumer or micro-enterprise, usually via a microfinance institution or social enterprise that is a field partner of the crowdfunding platform	$100 – $3,000	Kiva, Milaap, Lendwithcare
Other Crowdfunding	Equity Crowdfunding	Individual or institutional investors purchase shares issued by a company.	$100,000 – $3,000,000	Crowdcube, Seedrs, FundedByMe
	Donation Crowdfunding	Individual donors provide funding to individuals, companies or projects based on philanthropic or civic motivations with no expectation of monetary reward.	$5,000 – $20,000	GlobalGiving, GoFundMe
	$5,000 – $20,000 GlobalGiving, GoFundMe	Backers provide funding to individuals, companies or projects in exchange for non-monetary rewards or products.	$5,000 – $50,000	StartSomeGood, Indiegogo, Kickstarter
	Initial Coin Offering (ICO)	Individual or institutional investors purchase tokens issued by a company. Investors may use cryptocurrencies or fiat to invest.	$100,000 – $3,000,000	Ethereum

1. The larger campaign sizes quoted here are typically broken down into several smaller campaigns spread over months.

P2P BUSINESS LENDING

The single most important development in crowdfunding over the last 5 years has been the emergence of **P2P business lending. P2P business lending is where an individual or institutional investor lends to an SME[6] on a crowdfunding platform**. This has scaled for two main reasons. Firstly, established debt platforms, such as Kiva and Lendahand, which historically lent to microfinance institution (MFI) partners, began lending directly to social enterprises in 2016. Secondly, the growth of alternative finance – at the juncture between impact investment and financial technology (fintech) – has resulted in many new platforms entering the market such as Trine, Energise Africa, bettervest, CrowdCredit and Charm Impact. This increase in activity was tied closely to increased demand for social and environmental impact investments by retail investors in high-income countries.

There are two main types of P2P business lending platform. The first type, also known as **venture debt**, targets small, early-stage companies that borrow from $10,000 to $200,000 and includes two platforms (Kiva direct lending[7] and Charm Impact). The second type targets **growth companies** that borrow from $200,000 to $7,000,000 and includes a much larger group of platforms.

P2P MICRO-LENDING

P2P micro-lending is where an individual or institutional investor provides a loan to a consumer or micro-enterprise on a crowdfunding platform. P2P micro-lending has become less important over time, but still plays a key role in clean cooking. **Micro-loans are originated by partners of the platform, typically local financial institutions or social enterprises**. Unlike P2P business lending platforms, crowd lenders do not usually earn interest on micro-loans. Kiva is the dominant player in micro-lending, but other platforms such as Lendwithcare and Milaap are also active in the energy access market.

While the aforementioned platforms have rigorous due diligence processes in place to monitor their field partners (e.g. MFIs), researchers have highlighted potential challenges of the P2P micro-lending model regarding the treatment of end customers. One issue relates to the sharing of borrower information online, which may involve making public some basic facts of a borrower's identity, such as age, gender, loan purpose, business and family information, in addition to photographs. In some rare instances, borrowers have not understood that their information was posted online. However, the major platforms conduct regular audits on their field partners to ensure borrowers understand that their information will be made publicly available on the internet.

6. Small- and medium-sized enterprises
7. Kiva direct lending is different from Kiva's traditional micro-lending business. Kiva direct lending provides working capital loans directly to social enterprises.

THE SINGLE MOST IMPORTANT DEVELOPMENT IN CROWDFUNDING OVER THE LAST 5 YEARS HAS BEEN THE EMERGENCE OF P2P BUSINESS LENDING.

OTHER TYPES OF CROWDFUNDING

Other types of crowdfunding are less relevant for energy access and clean cooking. Equity crowdfunding volumes have fluctuated a lot over the past five years, but have picked up in 2020. **Equity crowdfunding campaigns tend to work best with highly innovative and technology-centered companies** operating in high-income countries and domiciled in an equity crowdfunding friendly jurisdiction (e.g. the UK). Investors on equity platforms are primarily driven by financial returns rather than impact, so are likely to be less interested in clean cooking companies. We were not able to identify any clean cooking company that had run equity crowdfunding campaigns.

Donations and rewards are a very small part of the energy access and clean cooking crowdfunding markets, accounting for less than 1% of funds raised. However, they can be useful for early-stage companies looking to raise pre-seed or seed capital from family and friends and typically raise up to $20,000.

An **Initial Coin Offering** (ICO) is a new form of crowdfunding and is the cryptocurrency industry's equivalent to an initial public offering. There have been several energy access ICOs, but none in clean cooking and we do not expect them to be relevant to the energy access or clean cooking sector in future.

CROWDFUNDING PLATFORMS

Jon Leary (MECS), 2018

Crowdfunding volumes in clean cooking are relatively small compared to the wider energy access crowdfunding market and other investments in clean cooking

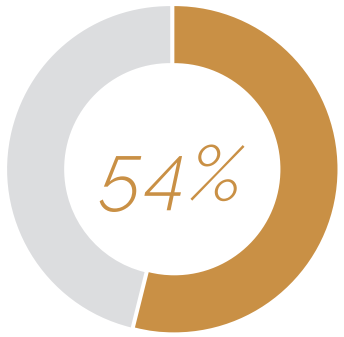
CROWDFUNDING VOLUMES

Clean cooking organisations raised nearly $8 million through crowdfunding from January 2014 to September 2020. This compares to $159 million of energy access crowdfunding investments over the same period and a total investment of at least $153 million in clean cooking between 2017 and 2019[8].

Table 2 provides a breakdown of volume by crowdfunding type for clean cooking companies since 2014. **P2P micro-loans accounted for 54% of the crowdfunding** volumes, compared to about 10% for the broader energy access market. This difference highlights the lack of bankable clean cooking enterprises, relative to the pay-as-you-go (PAYG) solar sector, which dominates energy access-related crowdfunding. Most of the clean cooking-related P2P micro-loans were consumer loans, originated by social enterprises and non-profits. A small number of clean cooking-related P2P micro-loans were working capital loans for micro-businesses.

P2P business lending accounted for 46% of clean cooking crowdfunding volumes between 2004 and 2020. There was a significant increase in P2P business clean cooking lending from 2017 onwards, reflecting the growth of P2P business lending more generally.

8. 2021 Clean Cooking Industry Snapshot (Clean Cooking Alliance, March 2021)



P2P MICRO-LOANS ACCOUNTED FOR 54% OF THE CROWDFUNDING VOLUMES, COMPARED TO ABOUT 10% FOR THE BROADER ENERGY ACCESS MARKET.

Table 2: Clean Cooking Crowdfunding Volumes in USD 2014-2020

	2014	2015	2016	2017	2018	2019	2020	TOTAL
P2P Business Lending	$0	$0	$178,883	$643,946	$651,530	$1,197,680	$899,723	**$3,571,764**
P2P Micro-lending	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**$4,246,125**
Donation	$5,774	$0	$65,013	$0	$0	$0	$0	**$70,787**
Reward	$1,580	$0	$0	$0	$0	$3,845	$0	**$5,425**
Equity	$0	$0	$0	$0	$0	$0	$0	**$0**
Total	$7,354	$0	$243,896	$643,946	$651,530	$1,201,525	$899,723	**$7,894,101**

PLATFORM DUE DILIGENCE

Crowdfunding platforms carry out their own due diligence on investees prior to launching any campaigns. However, the "crowd" investors ultimately assume the risk of any investment they make. While platforms tend to carry out most of their due diligence in-house, the approach to due diligence varies between platforms, different crowdfunding models and jurisdictions.

SOME PLATFORMS, PARTICULARLY THE DONATION AND REWARD FUNDING PLATFORMS, ALSO USE SPECIAL ALGORITHMS TO DETECT FRAUD.

P2P business lending platforms are responsible for assessing the credit risk of their borrowers and may outsource audits and technical feasibility work. With the notable exception of Kiva, most P2P business lending platforms are subject to the same financial regulations as other lenders in their jurisdiction. Equity platforms are primarily focused on ensuring that the information provided by their investees is true and correct (e.g. pitch deck, financials). In the UK, due diligence is primarily about verification rather than valuation or risk assessment (the approach in other countries varies). Most of the due diligence by P2P micro-lending and donation platforms is centered on the partners (e.g. MFIs or non-profit organisations) that originate the loans or campaigns rather than on the individual or end user transactions. Some platforms, particularly the donation and reward funding platforms, also use special algorithms to detect fraud.

PLATFORM CASE STUDIES

Two of the most active crowdfunding platforms for clean cooking are Kiva (direct lending for early-stage companies and micro-lending through partners) and bettervest (debt for growth companies). The case studies below examine their strategies and their appetite for the clean cooking sector.

PLATFORM	FIT WITH CLEAN COOKING
KIVA DIRECT LENDING LAUNCH DATE 2016	Kiva is an impact-first lender, thus clean cooking is attractive because of its positive impacts on the environment, health and gender equality. While Kiva is driven by impact, the underlying investment must still be sound and borrowers must demonstrate an ability to repay the loan.
KIVA MICRO-LENDING LAUNCH DATE 2005	Kiva's direct lending programme spun out of the 'traditional' Kiva model, which raises funds for MFIs to provide micro-loans to individuals and groups. Kiva's original micro-lending model was based on offering 'loan-parts' to private lenders (typically individuals living in high-income countries) in order to fund loans originated by MFIs in low- and middle-income countries. Kiva then expanded the model to include social enterprises offering credit to their customers (including those selling cookstoves on credit), before formally starting a direct lending programme for social enterprises in 2016. This programme initially offered working capital loans of $10,000 – $50,000, but now offers working capital loans of up to $100,000 or higher. Kiva's lenders do not receive interest on their loans. This distinguishes Kiva from other P2P business lending platforms, which offer interest to investors and are therefore subject to local financial regulations. Kiva's lenders are generally more philanthropically motivated than those on other P2P business lending platforms, which tend to prioritize financial return alongside impact. However, Kiva still aims to ensure capital preservation for their lenders. Kiva's due diligence process is less onerous than other P2P business lending platforms, but they still must get comfortable with the borrower's ability to service the loan and ensure that the loan does not create over-indebtedness. Kiva's clean cooking borrowers include Bidhaa Sasa, Biolite, Burn Manufacturing and Prime Cookstoves.
BETTERVEST FOUNDED 2012	bettervest is a German platform that is interested in clean cooking primarily because of its social and environmental impact. Unlike most other platforms which offer unsecured loans, bettervest usually requires collateral to be pledged to an SPV which acts as the issuer of the debt to the crowd. In the case of clean cooking, the collateral comes from a mix of carbon credits, inventories, receivables and corporate equity. bettervest invests in renewable energy projects across multiple sectors and countries. The bettervest crowd is 'hardcore green' but also very traditional. They prefer well-established technologies, robust business models and solid management teams. Therefore clean cooking is not necessarily a natural fit, even though they have managed to get comfortable using carbon credits as collateral despite the material delivery risk involved. bettervest has completed five campaigns in clean cooking since 2019: Greenway Appliances Zambia, Bidhaa Sasa Kenya, Burn Manufacturing Kenya and Sanergy Kenya. Two of the completed transactions relied heavily on sales of carbon credits: • **Greenway Appliances** is the largest manufacturer and seller of biomass stoves in India and recently entered the Zambian market. Greenway sells stoves that usually retail at €20 to households in Zambia for just €2-3 by transferring the carbon credits from the sales to a Korean trader at a pre-agreed floor price. Greenway raised a four year loan of €337,000 through bettervest to fund the purchase, sale and marketing of Greenway's stoves. The loan was made to a Singaporean special purpose vehicle (SPV) set up for the transaction because of the complex financial regulations around foreign loans to Indian entities. The loan is being repaid in hard currency from the sale of the carbon credits, so there is very limited exposure to sales in the volatile local currency. The loan is secured on the income from the sale of the carbon credits and equity in Greenway's India business. • **Burn Manufacturing** is a manufacturer and distributor of clean cookstoves headquartered in Kenya. They set up an SPV for a six-year loan of €370,000 to fund the cost of raw materials for the production of stoves. Burn invested 12% of their own equity in the SPV. The collateral for the loan came from the firm's inventories and receivables (60% of the loan amount) and certified voluntary carbon credits (40% of the loan amount) owned by Burn. bettervest's investment team includes one full-time staff member, who previously lived in Nairobi and worked in Kenya, Ethiopia and Tanzania, and one part-time chief risk officer based in Germany, who has decades of experience in international banking. This has led to a strong investee bias towards Kenya and a greater willingness to consider more structurally complex transactions than other platforms. bettervest appears to take a more bespoke approach and has raised much smaller volumes for the energy access sector – $2.1 million in 2019 – relative to other platforms, e.g. Trine and Lendahand raised $20.4 million and $8.3 million in 2019 respectively.

CROWDFUNDING BORROWERS

Jon Leary (MECS), 2018

Companies should assess their own funding needs and stage of maturity when choosing a crowdfunding platform

SELECTING A PLATFORM

One of the challenges for organisations considering crowdfunding is selecting the right platform for their needs. The main factors in this decision are the **type of business (profit or non-profit), the level of company maturity (pre-seed, seed, series A, or Series B) and the size of the funding need.** Table 3 summarises the crowdfunding platform options open to companies based on these three factors.

Table 3: **Choosing the Right Platform**

COMPANY MATURITY	FUNDING NEED	CROWDFUNDING MODEL	CAPITAL TYPE	SUITABLE PLATFORMS
Pre-seed – Seed or Nonprofits	\$100 – \$20,000	Reward Donation	Grant Grant	StartSomeGood, Indiegogo, Kickstarter M-Changa, GlobalGiving
Seed – Series A	\$10,000 – \$50,000	P2P Business Lending Equity	Debt Equity	Kiva direct lending, Charm Impact Crowdcube, Seedrs, FundedByMe
Series A – C+	\$300,000 – \$7,000,000	P2P Business Lending Equity	Debt Equity	bettervest, Lendahand, Energise Africa, Trine Crowdcube, Seedrs, FundedByMe
Direct consumer loan	\$100 – \$5,000	P2P Micro-lending	Debt	Kiva micro-lending

Generally speaking, non-profits and earlier stage companies are better suited for donation and reward crowdfunding, with equity crowdfunding an option for select companies in this category as well. A small number of early-stage companies may have capacity for debt and be able to raise funds on venture debt platforms. Growth stage companies meanwhile are better suited for business lending platforms. The micro-lending platforms are more targeted at financial intermediaries and social enterprises wishing to offer micro-loans to their customers.

Most companies use P2P business lending platforms to raise working capital and finance accounts receivables, although some, such as Burn Manufacturing, have borrowed for capital expenditure, in their case to purchase raw materials for stove production in Kenya. As clean cooking companies begin to sell stoves on a PAYG basis, the quality of receivables will become an important component of the due diligence process. Crowdfunding loans have also occasionally been used as a bridge to results-based grants (e.g. ECS Zambia) and the sale of carbon credits (e.g. Greenway Appliances).

BORROWER CASE STUDIES

This section contains case studies of two clean cooking companies that have used crowdfunding, namely ATEC and Sistema Bio.

COMPANY/PLATFORM	DESCRIPTION
ATEC BIODIGESTERS CAMBODIA PLATFORM: KIVA	ATEC Biodigesters is an Australian-Cambodian social enterprise that produces and sells small-scale biodigester systems to farmers and rural households in Cambodia. ATEC secured a loan of \$25,000 via Kiva direct lending's platform in three days. No collateral was required from ATEC and the loan had 0% interest. The funds were used as a financial buffer to enable ATEC to establish a micro-lending platform with a local MFI. ATEC partnered with AMK, a French MFI based in Cambodia, and deposited the funds received from Kiva in their account at the MFI. This allowed AMK to offer loans to ATEC's customers, which previously would not have qualified due to the collateral requirements. AMK was responsible for the credit administration process and issuing the micro-loans to ATEC's customers. ATEC piloted the partnership for 12 months and provided 70-80 loans to end customers through AMK. ATEC later became a field partner of Kiva and is now able to offer loans directly to its customers through Kiva's platform. Since the pilot with Kiva, ATEC has closed a series B equity investment of \$1.6 million to commence expansion in Bangladesh in 2019. ATEC is currently developing licence agreements so they can licence their technology to distributors in other countries. They are also looking to partner with other debt financing partners based in the USA, Australia and Singapore.
SISTEMA.BIO GLOBAL PLATFORM: KIVA LENDAHAND	Sistema.bio is a social enterprise that operates in Latin America, India, and East Africa. It manufactures, sells, installs and finances biodigester systems for small and medium-scale farmers to convert their waste into economic, health and environmental benefits. In 2012, Sistema.bio partnered with Kiva to provide their rural customers with 0% interest micro-loans to purchase biodigester systems. In 3.5 years, Sistema.bio provided 454 loans to their customers via Kiva's platform in four countries – Kenya, Mexico, Colombia and Nicaragua. It took approximately two days for their customers to raise a 14-month loan worth \$785. In 2016, Sistema.bio became a Kiva field partner, allowing them to lend Kiva funds directly. To date, they have provided \$1,885,000 in loans to 2,373 customers, of which 35% were women. Sistema.bio began raising debt on Lendahand in 2018. They have since launched over 17 campaigns, raising €1.7 million (\$2.03 million) in working capital.

CROWDFUNDING INVESTORS

Most crowd investors make investments that align with their personal values

The growth of energy access crowdfunding is driven by retail demand for impact investments and the local regulatory environment for platforms. Nearly all the crowd investors come from high-income countries. Energy 4 Impact has carried out research on the motivations of over 900 crowd investors in energy access-related campaigns. We found that, while the reasons for investing differed slightly between different P2P lending models, the vast majority of crowd investors make investments that are aligned with their personal values. Other important considerations include social and environmental impact and financial return. For more information, please see Figures 1 and 2 below.

Figure 1: **Primary Motivations for Crowd Investing on P2P Business Lending Platforms**

Figure 2: **Primary Motivations for Crowd Investing on P2P Micro-lending Platforms**

DONOR INTERVENTIONS

Financial support from donors – such as match funding, investor guarantees, funding platform opex and technical assistance – is important for facilitating crowdfunding

The four most important donor interventions for facilitating crowdfunding are **first-loss match funding, investor guarantees, financial support for platform operating costs** and **technical assistance (TA) for borrowers and platforms**.

Match funding refers to investments by donors in socially impactful crowdfunding campaigns. **First-loss match funding** are investments where, if a borrower or investee defaults, the donor is the first to lose their funds, i.e. they are paid out after the crowd. The goal of first-loss match funding is to increase and speed up the participation of the crowd in campaigns by demonstrating financial commitment from donors and de-risking the transaction through first-loss.

Investor guarantees are usually provided by third-party companies (the guarantors) to protect individual investments in P2P lending campaigns if a borrower defaults (the crowdfunding platforms themselves are not necessarily obliged to honour the guarantee if the guarantors do not meet their obligations). Investor guarantees differ from first-loss match funding because they are, typically, 'at call' rather than invested in the campaign itself. While first-loss match funding covers a percentage of the borrower's total loan principal, investor guarantees protect all or part of an individual's original investment. Although investor guarantees are generally easier for the crowd to understand than match funding, they are usually much more complicated to set up due to the need to comply with local financial regulations pertaining to guarantees and marketing.

Most of the energy access crowdfunding platforms are run on very tight budgets and would greatly benefit from **financial support to cover their operating costs**. The support could target different areas including pipeline growth, product development, expansion of the investor base, and the development of strategic partnerships.

TA for clean cooking companies is also important. Depending on the company, they may need help in setting up their campaigns or implementing their projects. The crowdfunding platforms may also need support in building their pipeline, for example conducting due diligence on potential borrowers.

MOST OF THE ENERGY ACCESS CROWDFUNDING PLATFORMS ARE RUN ON VERY TIGHT BUDGETS AND WOULD GREATLY BENEFIT FROM FINANCIAL SUPPORT TO COVER THEIR OPERATING COSTS.

CALL TO ACTION

While energy access crowd lending has grown rapidly in the last few years, there are still relatively few borrowers coming from the clean cooking sector. It is clear that any interventions designed to encourage crowdfunding in the clean cooking sector must address the **limited pipeline of investible companies.**

This report focuses on donor interventions that directly relate to crowdfunding. However, these will need to build on broader industry interventions around consumer awareness raising, appliance financing, testing of business models, research and development, policy and regulations.

Crowdlending platforms offer several advantages that are not available from traditional financiers. Two platforms – Kiva direct lending and Charm Impact – are set up for small ticket loans and are potentially well suited for early-stage cooking companies provided they are able to service loans. Few other commercial lenders are willing to take on such small transactions. Other advantages of crowd lending include **flexibility** (on timing of campaigns and number of tranches), **transaction speed** (typically 3 months which is faster than most impact funds), and **diversification of funding sources**.

With this in mind, we call on donors to take the following actions to stimulate crowdfunding in clean cooking:

- **Support the scale up of venture debt platforms** (e.g. Kiva direct lending and Charm Impact) and those growth debt platforms that have appetite for clean cooking (e.g bettervest). In the first stage, this support could cover the origination of pipeline and the due diligence costs of platforms. In the later stages, it will be important to also provide first-loss match funding and investor guarantees for campaigns. Whatever interventions are made, they should be platform-led and not imposed on platforms before the market is ready.
- **Provide TA to clean cooking companies** so they can meet the requirements of the crowd lenders. This could include support on setting up and preparing due diligence for campaigns, plus other areas tailored to the companies' growth needs. The TA should be provided to both existing borrowers and potential future borrowers that are not yet debt-ready.
- **Promote and build knowledge of the clean cooking sector**, including information on the most viable business models, technologies, and funding programmes. Disseminating information about the beneficial social and environmental impacts, as well as case studies of successful transactions (debt, equity, blended finance), including crowdfunding campaigns, is highly recommended.
- **Improve platform understanding and awareness on the use of carbon credits** as a source of revenue and collateral for clean cooking loans, and their implications for loan servicing.

THIS REPORT FOCUSES ON DONOR INTERVENTIONS THAT DIRECTLY RELATE TO CROWDFUNDING. HOWEVER, THESE WILL NEED TO BUILD ON BROADER INDUSTRY INTERVENTIONS AROUND CONSUMER AWARENESS

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ABOUT ENERGY 4 IMPACT

Energy 4 Impact is a non-profit organization that works to increase the quality of life for people in developing countries through access to energy, including clean cooking. We provide operational, financial and technical advice to accelerate the growth of private sector businesses that deliver energy access. We have been running a UK aid-funded research and development programme called Crowd Power since 2015 which facilitates crowdfunding in energy access. For more information on all our programmes, please visit www.energy4impact.org.

ABOUT MECS

Modern Energy Cooking Services (MECS) is a five-year programme funded by UK aid which aims to spark a revolution through rapidly accelerating the transition from biomass to clean cooking on a global scale. By integrating modern energy cooking services into energy planning, MECS hopes to leverage investment in renewable energy (particularly in electricity access, both grid and off-grid) to address the clean cooking challenge. Modern energy cooking is tier 5 clean cooking, and therefore MECS also supports new innovations in other relevant cooking fuels such as biogas, LPG (bio) and ethanol. The intended outcome is a market-ready range of innovations (technology and business models) which lead to improved choices of affordable, reliable and sustainable modern energy cooking services for consumers. We seek to have the MECS principles adopted in the SDG 7.1 global tracking framework and hope that participating countries will incorporate modern energy cooking services in energy policies and planning.

ENERGY4IMPACT
ACCELERATING ACCESS TO ENERGY

MECS
Modern Energy
Cooking Services