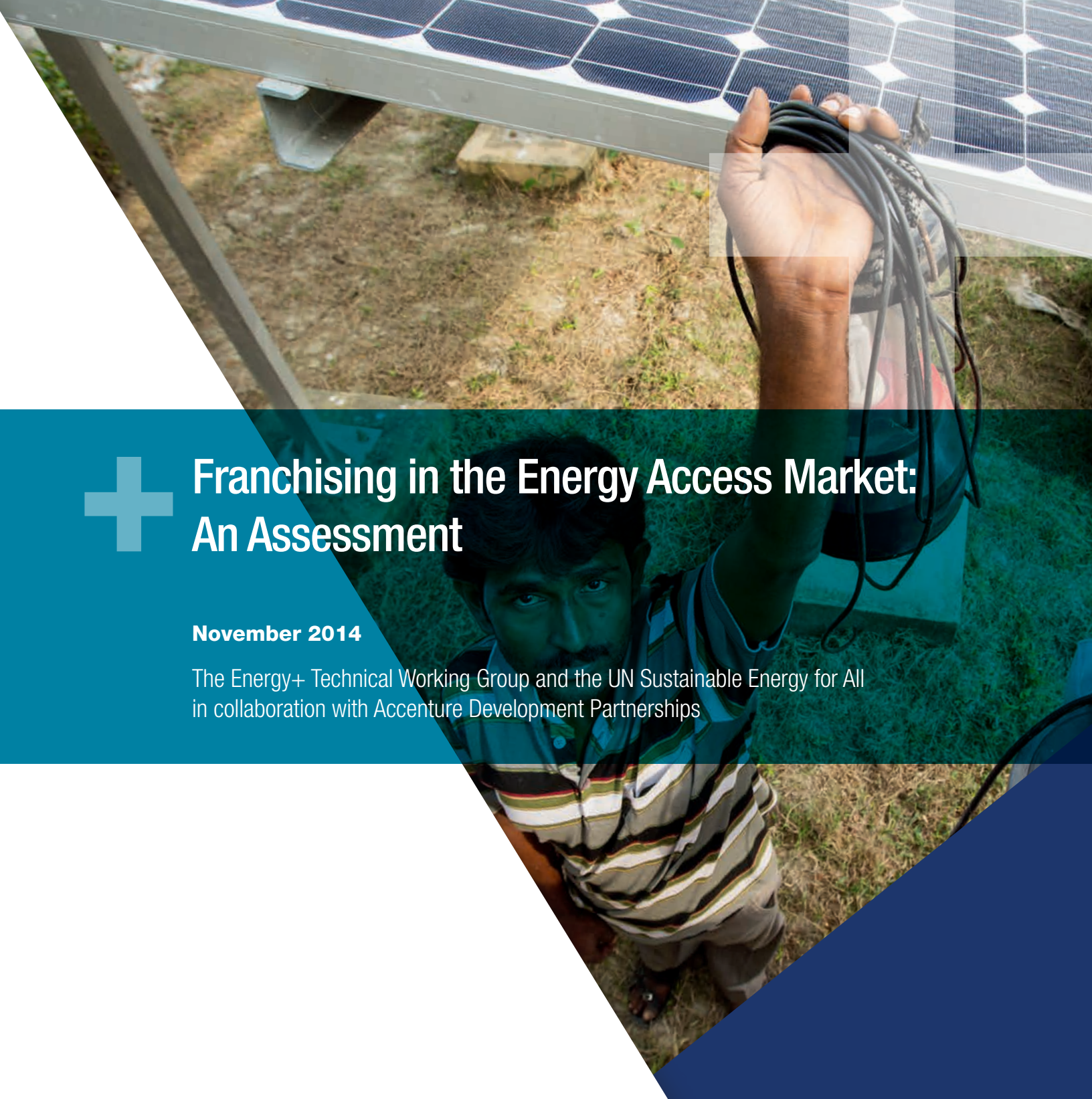

Franchising in the Energy Access Market: An Assessment

November 2014

The Energy+ Technical Working Group and the UN Sustainable Energy for All
in collaboration with Accenture Development Partnerships

A Report of the

E+TWG
Energy + Technical Working Group

SUSTAINABLE ENERGY FOR ALL

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This report is the result of a market assessment led by the United Nations Sustainable Energy for All (UN SE4All) initiative, the Energy+ Technical Working Group (E+TWG) and Accenture Development Partnerships (ADP), supported by funding from the Government of Norway.

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A step-change in approach is required to scale the market and achieve universal access to energy by 2030

Set up under the auspices of United Nations (UN) Secretary-General Ban Ki-moon, one of the three objectives of the UN's Sustainable Energy for All Initiative (SE4All) is universal access to modern energy services by 2030. Since its launch in 2011, the initiative has made tremendous strides in raising awareness of the 1.3 billion people still without access to modern energy and the 2.6 billion people still cooking with traditional fuels.[1] These efforts have yielded substantial results to date with an increased number of actors working in the sector and with technology advances further leading to increased capital flows and extensive market innovation.

Despite this progress, the World Bank Group (WB) estimates that under a business as usual scenario, 12 percent and 31 percent of the world's population would remain without electricity and modern cooking solutions respectively in 2030.[2] This indicates that current efforts to addressing this market opportunity are insufficient and demands a step-change in approach to meet the UN SE4All's target of universal access to energy by 2030.

Key challenges continue to hold back scale and present substantial market inefficiencies

An assessment of the East African energy access market revealed four key challenges holding back scale today, namely: limited access to affordable finance, inadequate levels of capacity, challenges in establishing effective distribution networks, and low levels of awareness by target consumers of product availability, quality and affordability.

Firstly, enterprises and consumers alike continue to demand greater access to affordable finance, with enterprises in need of funding for innovation and working capital. Enterprises are further restrained by the lack of local capability to support the growth and development of their businesses, ranging from business to technical skills. Moreover, the complexity of logistics and distribution remain a key challenge in many of these markets resulting in inefficient networks and high costs. Finally, consumers continue to show little awareness of the availability, quality and affordability of many of the clean energy products and services sold in these markets, meaning market penetration remains low.

While enterprises all continue to face the same challenges, they are largely working in silos to tackle them, building their own distribution channels, training their employees and conducting their own consumer awareness programs. This reveals a fragmented and inefficient market and calls for an assessment of new ways to drive efficiencies and coordination to more rapidly achieve scale and reach the SE4All's 2030 target of universal access to energy.

In early 2014, the Global Facilitation Team of SE4All, the Energy+ Technical Working Group, and Accenture Development Partnerships joined together to assess the market landscape and examine new models to accelerate access to energy products and services. As a starting point, the partnership explored the viability of a 'Master Franchise Model' at the market level that would support the proliferation of sustainable businesses that serve the last mile customers by providing a central resource point for local entrepreneurs or franchisees, including access to a framework and tools to develop a successful business, the rights to a proven business model, the training required to quickly implement and run the business, as well as facilitating the creation of leaner, more efficient supply chains through the standardization of distribution, maintenance and end of system recovery/ recycling. Assessing disruptive approaches that would accelerate access by last mile consumers to a suite of quality energy products and services underpinned the examination.

EXECUTIVE SUMMARY (CONTINUED)

Franchising offers a promising mechanism through which to drive market efficiencies and achieve scale at speed

Franchising is defined as 'franchising involves "a contractual relationship between a franchisee (usually a small business) and a franchisor (usually a larger business) in which the franchisee agrees to produce or market a product or service in accordance with an overall blueprint devised by the franchisor." [Stanworth J, et al., Franchising as a source of technology transfer to developing economies, accessed at: http://www.scribd.com/doc/45868111/IFRC-7-Stanworth-et-al-Jun-1995-Franchising-as-a-Source-of-Technology-Transfer-to-Developing-Economies, 2013.]'

It offers a promising mechanism through which to drive market efficiencies and achieve scale at speed – marrying the deployment of a proven business model and brand with local talent and market insights. This approach has seen significant success in other industries, with the International Franchise Association (IFA) estimating franchises to grow faster than other businesses.[3]

The increasingly recognised benefits of franchising have resulted in a growing number of organisations using the franchise approach in the energy access market. Micro-franchising enables individual entrepreneurs to sell and distribute products and services to the 'last mile' and has to date been the predominant model implemented within the market, with Solar Sister and Nuru Energy providing interesting examples of the latter. Other enterprises, namely Orb Energy, have used a more traditional approach, implementing a business format franchise model in which the entire business model is franchised at the local level. These variations indicate a rich and diverse market, with a number of lessons and best practices emerging.

Franchising may offer a viable business model to scale for some companies, but is not a 'one size fits all' solution

This assessment concludes that while franchising is offering a viable business model for growth for some companies, it is not a 'one size fits all' solution. The assessment of the energy access market and the various franchise models being implemented today reveals that, to be successful, franchising requires a simple and proven business model, substantial resources to standardise the model as well as the right enabling environment – including legal and regulatory frameworks, local skills and supply chains. Innovations that will foster the success of franchise models are occurring across markets and should be continued. As experience deepens and business models are proven, the ability to leverage existing infrastructure, best practices and lessons learned, and to develop the tools, templates and networks to support the franchisors/ franchisees, will be catalyzed.

Given that the success of franchising will always be highly context driven, with the right set of internal and external factors needing to be in place, additional models and approaches should be considered at both the enterprise and market levels. Enterprises should consider a broad remit of options including joint ventures and partnerships. At the market-level, wider collaboration and integration between market players is recommended. For each enterprise to tackle fundamental challenges in the enabling environment individually puts a strain on their limited resources and results in market inefficiencies. As such, instead of creating a 'Master Franchise,' a vehicle for bringing together a standardised set of solutions to the known challenges is required. Such aggregation would enable greater market efficiencies whilst supporting the growth of each individual enterprise making use of the support provided. This will better enable the creation of market efficiencies, in turn supporting more rapid scale up and attainment of the SE4All's 2030 target of universal access to energy.


Frootola

STUDY OVERVIEW

Context and Approach

Set up under the auspices of United Nations (UN) Secretary-General Ban Ki-moon, one of the three objectives of the UN's Sustainable Energy for All Initiative (UN SE4All) is universal access to modern energy services by 2030. Since its launch in 2011, the initiative has undoubtedly put the spotlight on the issue of energy poverty, declaring 2012 as the 'year of Sustainable Energy for All' to raise awareness that 1.3 billion people still live without access to modern energy and that 2.6 billion people continue to rely on traditional sources of energy such as biomass.[4] These efforts have yielded substantial results to date with an increased number of actors working in the sector and with technology advances further leading to increased capital flows and extensive market innovation. To further build on this momentum SE4All designated 2014 – 2024 as the 'decade of sustainable energy for all,' emphasising the need for continued action to meet the 2030 target.

Despite the progress achieved to date, data analysis indicates that the market is not scaling up quickly enough to meet the 2030 target with the World Bank estimating that under a business as usual scenario, 12 percent and 31 percent of the world's population would remain without electricity and modern cooking solutions respectively in 2030 – compared to a baseline of 17 percent and 41 percent.[5] There is therefore a clear need to find new ways to stimulate the market, in particular by designing and testing new business models.

The scale and complexity of the energy access challenge demands cross-sector collaboration, and stakeholders from both the public and private sectors must bring their respective expertise to the table and work together to develop impactful solutions. It is within this context that the Global Facilitation Team of SE4All, the Energy+ Technical Working Group, and Accenture Development Partnerships joined together to assess the market landscape and examine new models to accelerate access to energy products and services. As a starting point, the partnership explored the viability of a 'Master Franchise Model' that would support the proliferation of sustainable businesses that serve the last mile customers by providing a central resource point for local entrepreneurs or franchisees, including access to a framework and tools to develop a successful business, the rights to a proven business model, the training required to quickly implement and run the business, as well as facilitating the creation of leaner, more efficient supply chains through the standardization of distribution, maintenance and end of system recovery/ recycling. Assessing disruptive approaches that would accelerate access by last mile consumers to a suite of quality energy products and services underpinned the examination.

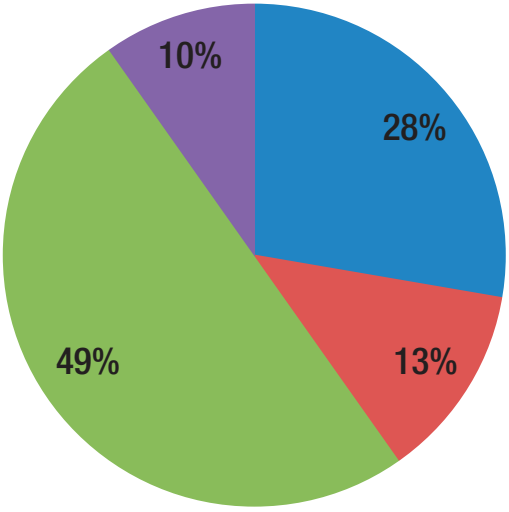


Figure I: Breakdown of stakeholders interviewed

- International and non-governmental organisations
- Investors and financial institutions
- For profit and social enterprises (Energy)
- For profit and social enterprises (Other)

A primary option that was considered as a means to achieve scale through standardisation and replication was franchising, defined as 'Franchising involves "a contractual relationship between a franchisee (usually a small business) and a franchisor (usually a larger business) in which the franchisee agrees to produce or market a product or service in accordance with an overall blueprint devised by the franchisor." [Stanworth J, et al., Franchising as a source of technology transfer to developing economies, accessed at: http://www.scribd.com/doc/45868111/IFRC-7-Stanworth-et-al-Jun-1995-Franchising-as-a-Source-of-Technology-Transfer-to-Developing-Economies, 2013.]'

In essence, franchising enables the replication of a proven business model in a local context, and has been successfully used as a means of scale across multiple industries globally.[6]

To explore the viability of a 'Master Franchise Model,' a high-level market assessment was conducted to identify the key challenges holding back scale today, to determine whether franchising presents a viable means to achieve scale and to test the potential and demand for a 'Master Franchise.' Findings were based on desk-based research as well as interviews with more than 60 stakeholders across the market, including energy enterprises, investors, international institutions and franchise organisations (see figure 1 for a breakdown of stakeholders interviewed and the report Appendix for a full list).

This study presents the findings of this assessment and is divided into four key sections:

- Section 1 presents a high-level assessment of the energy access market today, including market trends, best practice and key challenges holding back scale.
- Section 2 provides an overview of franchising and how it has been implemented across industries and markets.
- Section 3 focuses on franchising in the energy access market more specifically, showcasing best practice and lessons learned.
- Section 4 summarises the key findings and presents our conclusions on the potential of franchising in the energy access market today.

The appendix provides supporting data including short profiles on organisations that have used franchising as a means to achieve scale – both within the energy access market and across other industries.

Study Scope and Limitations

The study covers an assessment of energy access as defined by the UN SE4All's Global Tracking Framework which identifies five tiers of energy usage (Table 1).[7]

While this covers a range of household and productive products and services including stand-alone systems and micro-grids, the study focuses on stand-alone systems, including clean cookstoves, solar lanterns and solar home systems but excludes community-level systems such as micro, mini-grids and grid extensions. This is a result of the stakeholders interviewed as well as time constraints, and presents a first limitation for those interested in understanding the potential of franchising as a means to scale micro or mini grid models.

With regards to geographic scope, the study focuses primarily on East Africa in assessing the key challenges holding back market scale today – and specifically five countries in the region: Ethiopia, Kenya, Mozambique, Tanzania and Uganda – but takes a global approach to assessing franchise models.

Table I: Five tiers of energy usage (as defined by the UN SE4All Tracking Framework)

Tier	Definition
Tier 1	Task lighting and phone charging (or radio)
Tier 2	General lighting and television and fan (if needed)
Tier 3	Tier 2 and any low-power appliances
Tier 4	Tier 3 and any medium-power appliances
Tier 5	Tier 4 and high-power appliances

ENERGY ACCESS MARKET ASSESSMENT

The energy access market has witnessed tremendous innovation in recent years

Based on current expenditures on poor quality energy solutions for lighting and charging ($18 billion) and cooking and heating ($19 billion) by the poor, the International Finance Corporation (IFC) estimates the market for modern energy services to be worth around $37 billion per annum[8] – including $31 billion for devices and household-level systems.[9] As such, it posits that energy access is 'a real market opportunity for the private sector'.[10]

Myriad private sector players are recognising this opportunity and entering the market, driven by a 'confluence of factors' including new technologies, reduced technology costs, new business models and the continued growth of microfinance and social entrepreneurship.[11] These players include multinational corporations (MNCs) such as Schneider Electric, Total S.A. and Koninklijke Philips N.V., international start-ups like Azuri Technologies Ltd, Barefoot Power Pty Ltd and Mobisol GmBh, and emerging market conglomerates like Tata Power Solar Systems Ltd. In Africa, the overall number of manufacturers selling pico-powered lighting systems (PLSs) has grown from 20 in 2008 to approximately 80 in 2012.[12]

These players are fundamentally altering the overall energy access landscape in new ways. Indeed, innovation is happening at pace across the market, with many examples of best practice emerging. In particular, mobile technology and data are increasingly being embedded throughout the value chains, enabling more efficient, lower cost services and increased ability to track products and customers. Market leaders are capturing large volumes of data on their operations which they can then use to further refine their models, and provide increased confidence to investors on customer characteristics and payment rates. Market players like M-KOPA Kenya™, BBOXX Ltd and Azuri are using cloud-based platforms to manage this data.

As well as addressing specific chokepoints in the value chain and more closely meeting customer demand, these approaches can be used to further enhance performance, for example through a heightened understanding of customer needs and behaviours (e.g. through geo-marketing) made possible via data collected through sophisticated models. The market as a whole is increasingly benefiting from this emerging best practice, as showcased by market leaders. And this is opening up new opportunities as businesses continue to experiment and test new models.

A second emerging trend is that energy is increasingly being sold as a service instead of a product. This trend recognises that consumers want energy – not for its own sake – but for what it enables through the multiplier impact. This is transforming business models. Tanzanian-based Off-Grid Electric for example maintains asset ownership throughout the relationship with the customer (see Box 1).

Box 1: Spotlight on… Off-Grid: Electric

Off-Grid Electric (OGE) is a solar energy as a service company that uses mobile technology extensively in its business model. Customers never actually own the product and pay purely for the service on a Pay-As-You-Go (PAYG) basis. They have an innovative distribution model that leverages existing transport networks such as public buses to distribute their products to their network of sales agents.

To maximise the number of customers reached and penetrate this still largely untouched market (only 4% penetration across Africa in 2012 for the off-grid lighting market),[13] enterprises are pursuing a multi-pronged approach to distribution.[14] This includes creating their own channels or 'piggy backing' off of established channels such as microfinance institutions (MFI) or mobile company networks. One Degree Solar for example has three main channels – institutional sales, retail, and sales agents.[15] In India, New Ventures India is brokering the links between existing distribution networks and energy companies through its village level entrepreneur network (VLE) (see Box 2).

Box 2: Spotlight on… New Ventures India's Village Level Entrepreneur (VLE) network

A project led by New Ventures India – the 'VLE – Clean energy access company partnerships project'–aims to: i) help clean energy companies understand the current VLE networks, how they work and how to leverage their network; ii) help VLE networks interested in distributing and/or servicing clean-energy products, to understand the clean energy products, marketing techniques and after-sales service better; iii) develop stronger partnerships between clean energy access companies and VLE networks.[16]

Finally, there is an increased emphasis on maintenance and after-sales services by players. This is reflected both in customer value propositions and also in the emphasis on the need for and investment in local technical capacity. This becomes increasingly important as systems increase in size, as with increased size often comes added maintenance complexity.

Looking ahead, the market is likely to move beyond basic access towards providing long-term solutions, with a growing emphasis on after-sales and the long-term sustainability of energy products (through the availability of spare parts,

modularity of system expansion and wider potential for recycling). Further product innovation will drive lower costs and address higher energy demands, resulting in increasingly large systems (up to 200W) used for revenue-generating services (e.g. solar irrigation systems), entertainment etc. New disruptive technologies will move the market forwards in ways still unknown and enable more rapid scale-up, with, for example, the potential for Machine-to-Machine (M2M) technologies to support the development of connected homes.[17]

Despite this, several key challenges continue to hold back scale

Although new solutions are constantly changing the energy access landscape, several barriers continue to hold back the market from scaling more rapidly. These challenges have been extensively documented across multiple publications by leading organisations – some more focussed on a specific sub-sector (e.g. off-grid lighting), others on a particular market challenge (e.g. financing).[18] Interviews carried out with over 60 stakeholders across the market as part of this study highlighted four major barriers to growth, namely limited access to affordable finance (both from an enterprise and consumer perspective), inadequate levels of capacity, challenges in establishing effective distribution networks, and low levels of customer awareness of product availability, affordability and quality.

Limited access to affordable finance

The single most significant barrier to growth for enterprises in this market is limited access to affordable finance, both at enterprise and consumer levels, as highlighted by myriad market studies and surveys.[19] [20] The financing needs and obstacles for energy enterprises vary depending on their level of maturity (see Figure 2).[21] For new enterprises, there is a huge need for start-up capital (e.g. seed capital). As enterprises mature, working capital and trade finance become critical to support the development and commercialisation of their products and business models.[22] Working capital is a real constraint to growth as enterprises tie up a large portion of their capital in inventory often for long periods of time whilst navigating immature supply chains. This problem is exacerbated in PAYG models given the longer payback periods,

Figure 2: Financing needs and obstacles early in the energy enterprise lifecycle[27]

Players	← Energy enterprises →				← Distributors →	← End consumers →
Investment Cycle	Business start up	Proof of Concept	Reaching maturity	On-going operations	On-going distribution	On-going consumption
Purpose of investment	• Turn a business idea into a solid concept and prove technical feasibility	• Prove commercial viability	• Enter steadier ground • Start to focus on scale	• Develop and commercialise new products/ technologies and new business models	• Distribute energy products and services to end consumers	• Use of energy products and/or services
Financing requirements	• Early stage, incubator support to finance the Proof of Concept	• Funds to prove commercial viability, e.g. Acumen's 'patient capital' (a debt or equity investment in an early-stage enterprise)	• Long-term investment in the form of both debt and equity to support scaling up of the business • Project finance	• Working capital to purchase raw materials, provide credit to distributors, cover delays in collections	• Working capital to purchase inventory and sustain and expand their operations	• Financing to purchase energy products and services
Key challenges in accessing financing	• Lack of early stage, incubator, high risk/ innovation finance • Companies have untested products and limited management experience, and face high R&D and other development costs	• Revenue generation and operational breakeven can take time • Cash-burn is high while revenues are low • Entrepreneurs are rarely able to borrow from banks	• Many SMEs find it difficult to borrow money – e.g. don't have sufficient collateral to secure capital from local banks asking for high guarantees • Local banks tend to be fairly risk-averse and have high interest rates, both of which make it difficult for energy enterprises to access financing from them		• Limited availability of finance in the absence of collateral	• Unable to afford modern energy improvements when banks and microfinance institutions do not offer credit for these investments.
Financing players	• Donors; private funds	• Donors; private funds	• Local banks; private funds		• Local banks; MFIs; non-for-profit finance institutions	• MFIs, SACCOs, donors

Key finance needs (as highlighted by interviews)

making it difficult to maintain inventory or make discounted bulk purchases.

Enterprise financing aside, enterprises also require access to end consumer finance, particularly when operating in markets where consumer financing options are not widely available. From the consumer perspective, the availability of financing is one of many dimensions hindering access to these products and services, which also include affordability and willingness to pay (see more on this below).

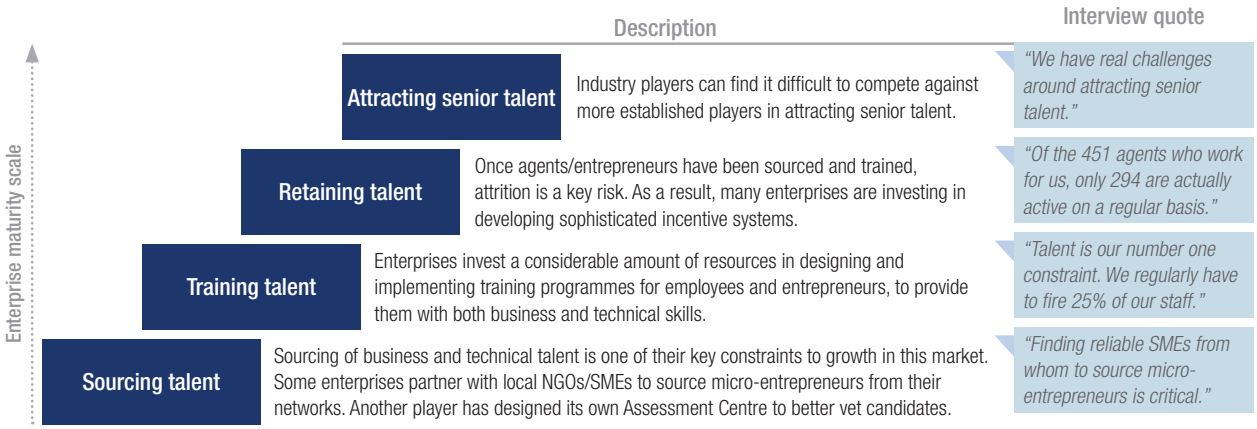
Sourcing financing that is affordable is challenging. At the market level, energy enterprises face similar challenges to Small and Medium Enterprises (SMEs) in other sectors in sourcing financing, for instance from local banks offering prohibitively high interest rates and collateral requirements. Indeed, some enterprises in East Africa have reported that commercial loans in the region can come with interest rates above 20 percent and collateral requirements up to 150 percent of the value of the loan.[23] From an investor's perspective, the unproven nature of many business models in the market is seen as high risk – in some cases, these perceptions are compounded by a limited understanding of the market. As such, there is a fundamental disconnect between the investment required – and the types of financing available. As an example, a lot of the financing available is relatively short-term (with expectations of short-term returns),[24] when more long-term – patient–capital is needed by enterprises to support them in the long-term.[25] In the same way, few investors are willing to provide the smaller size investments required to support smaller micro entrepreneurs.[26]

Inadequate levels of capacity

In many of the markets where energy enterprises are addressing access, the availability of local experience and know-how is limited. Whilst finding the right local capacity is a challenge for many SMEs in other sectors across East Africa,[28] recruiting the right people is made more difficult for a market that is still relatively immature and unknown in these countries. As energy enterprises mature, this local capacity challenge is apparent at four levels: sourcing, training, and retaining local talent, and finally attracting senior talent (see Figure 3).

- **Sourcing** – Finding entrepreneurs with the right skills in specific markets is a major constraint to growth particularly in the early stages of the business when recruitment is particularly critical. One enterprise director interviewed talked about how difficult it was to find the 'right type of people' and lamented the lack of standardised way to screen potential employees. A number of enterprises interviewed have developed innovative recruitment approaches, including working closely with local Non-Governmental Organisation (NGO) partners to access already 'vetted' candidates; another enterprise highlighted that they rely largely on their existing sales agents to recommend people they 'know and trust' within their community; finally, a further enterprise has designed a comprehensive set of assessments that candidates carry out during an 'Assessment Centre' day.
- **Training** – Once the right individuals have been recruited, enterprises invest a considerable amount of resources in designing and implementing training programmes to provide their employees with both the business and technical skills required to fulfil their duties. As an example, Ethiopia-based Solar Energy Foundation (SEF) has developed a comprehensive and specialised training curriculum for its solar technicians across Ethiopia, and is now developing this further to benefit the Ethiopian market as a whole.[29]
- **Retaining** – Once agents or entrepreneurs are sourced and trained, attrition is a key risk. And given the level of investment in training employees, high turnover rates can potentially be very damaging for smaller players. One enterprise interviewed described how a whole swathe of newly trained employees left the company only a few months following the completion of their training to work for a local competitor offering higher rates. As such, a number of energy enterprises – particularly those leveraging local entrepreneurs for selling and distributing their products – are investing their efforts in developing basic incentive systems. In the case of one enterprise interviewed, sales agents receive a service bonus for every customer that continues to use their system at the end of each month. This is in addition to the more traditional rewards that agents receive for each system they have installed over the course of a month (as well as bonuses paid for achieving specific targets, for example on customer complaints and sales).[30] This creative, three-tiered, incentive system enables sales agents to benefit from an ongoing revenue stream in exchange for maintaining good customer relationships (and therefore loyalty).

Figure 3: The different dimensions of the capacity challenge[31]



- **Attracting senior talent** – Finally, industry players can find it difficult to compete against more established players in other sectors in attracting more senior talent. One enterprise based in Kenya commented that "there is a pressure to work for big, established, companies in Kenya. As a result, it's difficult for us to compete for senior talent against these businesses. Raising the profile of the industry is critical in addressing this issue."

Challenges in establishing effective distribution networks

A high number of target customers for these energy enterprises are located in remote, rural areas in markets with few established distribution chains. And with limited existing transport infrastructure in many East African countries, the onus is on enterprises themselves to set up their own distribution channels in the most effective way. Ethiopia for example has a huge rural population and one of the lowest road densities in the world making transportation of goods to reach potential customers a real challenge.[32] This can be complex–and costly. This is driven by a number of factors, including challenges when importing products into specific markets, the state of national transport infrastructure, the costs of warehousing, to name but a few. Those prepared to go 'beyond the tarmac' and tackle the distribution challenge head on will quickly run up high costs in managing this complexity.

Given these challenges, a number of enterprises in East Africa make use of third party logistics providers for distribution of their products to points of sale. Even then challenges remain, with one interviewee reporting that it is still unclear whether it has been more effective to use a reputable third party logistics provider than to manage logistics entirely in-house. Another company, citing the complexity of last-mile distribution for larger solar products, has even decided not to offer delivery to customers at all, putting distribution in the hands of the consumer.

Furthermore, other challenges are compounded at this end of the value chain. For instance, limited access to working capital for suppliers, importers and distributors prohibits the scale up of distribution to more areas. One interviewee stated that 'putting the distribution and support networks in place to get products out to customers' was one of their main challenges.

Low levels of awareness by target customers of product availability, quality, and affordability

Many enterprises interviewed mentioned low levels of consumer awareness of the availability, quality and affordability of clean energy solutions as a barrier to scale. In addition to limited access to financing options to afford these products (see above), customers across East Africa still have low levels of awareness of the quality and availability of energy products and services. Indeed, despite product quality and durability being one of the highest priorities for consumers,[33] most find it difficult to differentiate between high and low quality products.[34] The flooding of cheap, poor quality products in some markets has compounded this challenge, having a substantive negative impact on consumer trust on the ground in markets where word of mouth plays a large role. In terms of product availability, the lack of market penetration of these products serves to reinforce customers' lack of awareness of where to source products from, [35] or unable to procure these locally.[36]

Finally, before even considering the types of financing available to them, most customers' perception is that of expensive products – particularly for households where cash flow is a major

constraint.[37] This high perceived cost only increases when taking into account the potential loss from products failing.

As a result of these barriers to growth, investors remain hesitant to invest in the market, energy enterprises remain few in number – and enterprises already active in the market are not scaling fast enough.

Although a number of providers are offering energy enterprises support in tackling these challenges, the solutions available remain relatively dispersed, uncoordinated, immature and not always widely known

A variety of 'service providers' are supporting energy enterprises in the market (see Appendix 1). These players range from more traditional donor-funded initiatives, international organisations (e.g. the Global Village Energy Partnership, or GVEP), or private sector support (e.g. through the global logistics firm DHL International GmbH) to new forms of private sector support–both from small niche start-ups such as Embark Energy or from energy enterprises themselves developing offerings based on their market knowledge (e.g. Prosonergy).

Broadly speaking, the types of support provided can be categorised as financial and non-financial (e.g. technical assistance). Whilst financial assistance is relatively clearly defined – for instance through the requirements of a specific Fund – technical assistance can include a wide range of services from market intelligence (as provided by, for instance, the International Finance Corporation (IFC) and the World Bank Lighting Global initiative), mentoring (e.g. for Ashden Award winners) to market development (e.g. the Climate Innovation Centre).

Many of these solutions are still relatively immature, uncoordinated and not always widely known by their target segments or not specific enough to the requirements of the market. One enterprise interviewed mentioned that they use the global logistics market leader DHL for some of their logistics, but only as a 'default option' in the absence of any better provider. Indeed, whilst DHL provides some support with the running of their operations, it is not sufficiently well adapted to the requirements of the market – for instance, it does not always serve the most remote locations. In addition, there are areas where there is little or no support available to enterprises.

As an example, providing customers with appropriate after sales services is expected to increase in importance as the market matures. Enterprises are actively developing sophisticated systems to track system performance and customer feedback, as well as to provide after sales support to their customers. However there are currently only few providers offering this to enterprises 'as-a-service', with the Base Of the Pyramid After Sales Alliance (BOPASA) offering one example of this.[38] BOPASA offers producers and distributors of solar products the opportunity to track after sales requirements of their products through a simple 'BOPASA sticker' system. Customers scratch these stickers when purchasing solar products and verify the codes displayed via text message. When issues arise with the product, BOPASA automatically informs the seller and then confirms with the end user that the problem has been solved. This service 'reduces the risk for end-users and provides much needed feedback data to [energy producers and/ or distributors using the service]'.[39] This forms one of the few examples of a discrete component of the value chain being provided 'as-a-service' to enterprises in the market.

Energy enterprises are thus committing significant time and resources to overcoming these challenges on their own, driving fragmentation and inefficiencies in the market

With enterprises selling different products (cooking, agriculture, and lighting) and largely working in silos to build their own distribution channels, train their employees and raise awareness to consumers, the overall market is fragmented. The knock-on effect is that whilst there are differences in the extent of these challenges across different enterprises and markets, the market analysis highlighted that many enterprises are facing these same challenges – and most are seeking to address these in their own way. Thus enterprises are developing their own training programs and bespoke Customer Relationship Management (CRM) or Management Information Systems (MIS) in the absence of any standardised solution available for the market as a whole. This demands greater coordination and efficiencies in the market, as a key enabler of scale.

FRANCHISING OVERVIEW

Franchising enables local replication of a proven business model, enabling scale at speed

The IFA–the world's oldest and largest organisation representing franchising worldwide–defines franchising as 'Franchising involves "a contractual relationship between a franchisee (usually a small business) and a franchisor (usually a larger business) in which the franchisee agrees to produce or market a product or service in accordance with an overall blueprint devised by the franchisor." [Stanworth J, et al., Franchising as a source of technology transfer to developing economies, accessed at: http://www.scribd.com/doc/45868111/IFRC-7-Stanworth-et-al-Jun-1995-Franchising-as-a-Source-of-Technology-Transfer-to-Developing-Economies, 2013.]'

In essence, franchising enables local replication of a proven business model, and has been successfully used as a means of scale across multiple industries globally.[40] The primary benefits of franchising for companies seeking to expand can broadly be categorised as follows:

- **Financial and operational efficiency:** the standardisation and streamlining of operations across an entire franchise network creates market efficiencies by enabling entrepreneurs to leverage a proven business model and processes instead of each investing time and resources to create their own. The size of the network further helps enterprises achieve cost savings. For example by aggregating purchases across a number of enterprises, the franchisor is able to negotiate better rates with suppliers–thus achieving economies of scale that would otherwise not be possible for individual business owners.[41] Using a consistent set of vetted suppliers also ensures product quality is maintained throughout the franchise network.
- **Access to local talent and innovation:** Franchisees are often recruited from the local area in which the franchise will be established, providing the franchisor with access to local market insights, influence and relationships. This approach can lead to innovations that enable franchisors to more appropriately tailor their proven model to local market contexts.[42] Additionally, as business owners, a franchisee's personal success feeds directly into the success of the franchise business–thus aligning incentives between franchisee and franchisor.

Organisations have implemented a plethora of franchising models based on their specific context to best capture the benefits that franchising offers, applying them to a wide range of products, services, industries and markets. This study defined five key levers as a framework through which to compare and contrast different franchise models. These are described in Figure 4.

Historically, two primary franchise models have emerged: product distribution franchising and business format franchising.

The oldest form of franchising, product distribution franchising–sometimes referred to as 'traditional franchising'- is primarily a supplier-dealer relationship.[44] In this model, the franchisor provides a license to franchisees to use its trademark and sell its products and services. The franchise does not include a complete business model for the franchisee to operate. The revenue model for the franchisor is based on the margins applied to the sale of goods by the franchisee.

Applying the five levers defined above, the product distribution model is shown to have low franchisor input into the franchisee's business operations (see Figure 5). There

Figure 4: Five levers defining different franchise models[43]

Lever	Description
Brand power	The extent of control the franchisor has over their brand once franchised and whether or not it is diluted at all by the presence of other brands
Control over supply chain	The extent to which the franchisor retains control over the entire supply chain (from procurement to distribution) or simply provides the franchisee with a set of standards to adhere to during sourcing and procurement
Share of costs	The share of costs, both upfront and ongoing, between the franchisor and the franchisee to operate the franchise unit
Control over business operations	The extent to which the franchisor retains control over all aspects of business operations including business processes, management systems, development of marketing materials etc.
Share of revenue	The share of revenues between the franchisor and the franchisee

is also greater potential for the brand to be diluted by the presence of other brands within the franchisee's business, whether competitive or not. Franchisors minimise their share of overall costs but only generate revenue from margin on products sold to the franchisee. For the franchisee, this model provides an opportunity to combine an established brand with specific market insights coupled with the freedom to operate more independently.

Business format franchising is perhaps the most common form of franchising being used around the world. It entails franchising the entire business for replication in a local context. This model gives franchisees relatively little freedom to shape how they operate their business, since they are required to comply with every part of the manual. Franchisors typically charge an upfront fee to the franchisee, as well as an ongoing fee or royalty payment.

Figure 5: Product distribution franchise model characteristics[45]

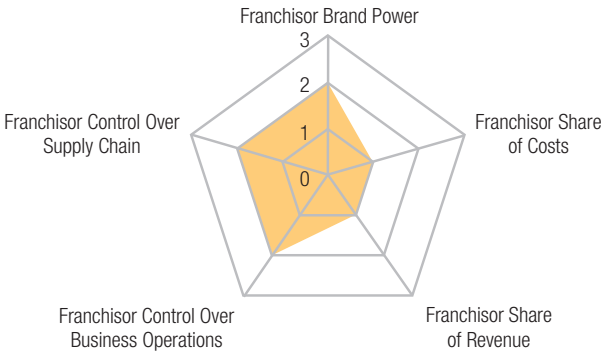
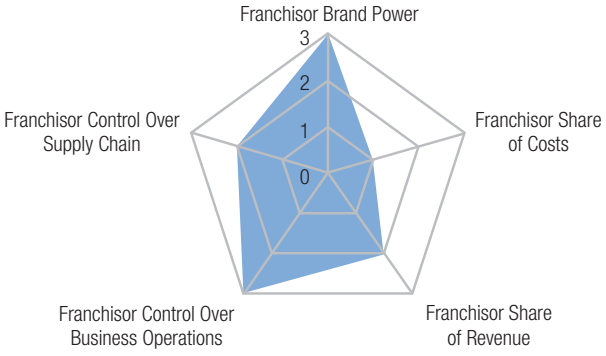


Figure 6: Business format franchise model characteristics[47]



In contrast to the product distribution franchise model, the business format franchise model is shown to be high on franchisor control (see Figure 6). In providing the franchisee with the products and trademark, as well as the complete method for running the business, the franchisor specifies exactly how the business should be operated. To support franchisees and ensure full adherence to the franchised model, franchisors will typically provide ongoing support and training to individual franchisees.[46] The benefits case from the franchisee's perspective is therefore clear. However it does reduce the scope for developing individual entrepreneurial talent, and franchisees traditionally retain most of the cost burden by paying upfront fees, ongoing royalty payments to the franchisor, as well as day-to-day business expenses.

Franchising has seen substantial success in developing markets, given the ability to marry a proven model with local adaptation and innovation. There are many successful examples of both commercial and social franchise models applied in these markets. However, in most cases established franchise models, such as those identified here, have had to be adapted to the specifics of these markets to address specific market barriers and realise the full potential of the approach. In particular these barriers have included limited access to affordable finance, lack of a legal and regulatory framework and limited capacity of local talent.

When faced with limited access to affordable finance for franchisees, companies have adjusted models to keep upfront costs low and some even provide finance for franchisees either directly or by facilitating access to finance from banks. For example, Population Services International (PSI), a healthcare franchisor, offers collateral to local banks in order to support their franchisees in accessing loans.[48] Similarly, Sidai Africa Ltd, a franchise organisation operating in the livestock sector in Kenya, has negotiated a competitive interest rate with a local commercial bank on loans for their franchisees.[49]

In countries with little or no legal and regulatory frameworks for franchising, business models are simplified and often focused on product distribution meaning franchisees have limited intellectual property to manage.[50] The commercial arrangement between franchisor and franchisees is also easier to terminate given fewer assets are involved.

Developing markets can be plagued by limited capacity and limited supply of talent due to low general levels of education and compounded by a departure of highly-educated workers

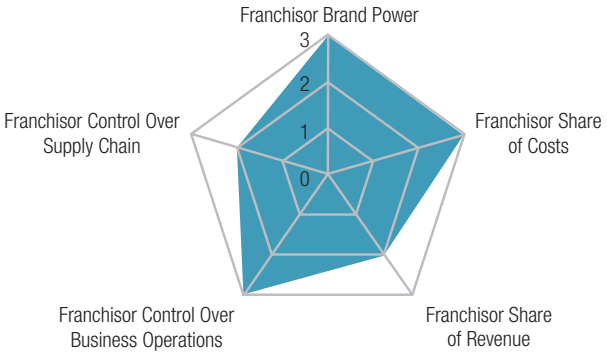
for other countries.[51] One-person 'micro-franchisees' are therefore common because this model reduces the need for sophisticated business and management skills to operate successfully as a franchisee given the small size of the operation. Additionally, training is also a key element of franchise businesses in developing markets to ensure appropriate support is provided to make the franchisee successful. Living Goods, for example, provide individual entrepreneurs with a 'business-in-a-bag' for them to sell health products door to door in rural communities following an 'Avon-like' model. There is an initial training period of two to three weeks during which franchisees are trained on key health issues and also broader business skills (see organisation profile in the Appendix for more details).[52]

Micro-franchising has been particularly successful as it enables more rapid distribution to the 'last mile'

Given its focus on reaching the 'last mile', 'micro-franchising' is arguably the most established form of franchising in developing markets. Indeed, it has been argued that 'micro-franchising could do for developing country economies what franchising has done in developed ones'.[53] In this model, individual entrepreneurs become 'micro-franchisees' and are equipped by the franchisor to distribute their products and services to the 'last mile.'

An analysis of the micro-franchising model through the lenses of the five levers of control highlights the degree of control – of brand, costs, and operations – retained by the franchisor in this model. Indeed, costs weigh heavily on the franchisor, to tackle the challenge of access to finance. Franchisors also typically retain greater control over business operations to ensure control over their financial investment and to proactively support the capacity building of their franchisees. For the franchisee, there is an opportunity to control aspects of the supply chain with some micro-franchisees selling other products alongside those supplied by the franchisor. JITA, a Bangladeshi social enterprise, is one such example where the micro-franchisee is able to add other products to their basket of goods with the franchisor only specifying items that must not be included e.g. cigarettes.[54]

Figure 7: Five levers of control for a micro-franchise model[55]



FRANCHISING ENERGY ACCESS

In the energy access market franchising has been used successfully by a number of enterprises – specifically to address some of the market barriers outlined in the market assessment. Based on lessons learned from these experiences, it is possible to start to identify best practice for franchising in this market.

Franchising has been increasingly used in the energy access market to more rapidly reach the 'last mile'

As highlighted previously, franchising can be used to improve financial and operational efficiency, and to access local talent and innovation, for example when entering a new market. In a market where setting up distribution channels is immensely challenging, energy enterprises have identified franchising as an effective means to do this whilst retaining a high degree of control over products and services sold.

As ever, definitions of franchising vary between enterprises. Indeed the term is sometimes used to refer to different kinds of models which don't always meet the formal definition of franchising. For example, the term is sometimes used interchangeably with the partnership model, whereby an enterprise distributes its product through Village Level Entrepreneurs (VLEs). According to this interpretation, it would be possible to describe some agent models as 'micro-franchise models' – as one interviewee said, 'we wouldn't call it franchising as such, but we work hands-on with our partners – they use our marketing materials, our back end servers, and we create knowledge management systems specifically for them to use. We spend a lot of time monitoring our distribution partners.' In some cases, energy enterprises stopped using the franchising descriptor because of the legal implications this has in some countries. For the purposes of this report, we refer to enterprises that we have interviewed who explicitly describe their models as franchises in order to distil the key challenges, the best practice and the lessons learned from franchising in this market.

Looking at the landscape of franchising in energy access, the majority of examples of franchising in this market are micro-franchises, with only a few examples of more commercial models (see Appendix for individual organisation profiles on these enterprises). Specific examples of micro-franchise models in this market are shown in Table 2 below. One outlier in this market – and one of the rare examples of a business format franchise – is Orb Energy, a Bangalore-based business selling solar energy systems, including lanterns, solar kits and solar heaters, including through a network of franchisees operating Orb Energy-branded branches (see Box 3).

Despite variations in approach, these businesses have used a franchise model to reach the most remote customers by leveraging the local knowledge and trust of the franchisees to build awareness and drive sales. Further benefits of adopting this model can include providing access to credit to end consumers (SolarNow offers a 'PayPlan' option), as well as offering a modular range of products under the same brand.

Table 2: Select examples of micro-franchises in the energy access market

Enterprise	Description
Barefoot Power Uganda Ltd.	With headquarters in Australia, Barefoot Power is a global provider of affordable renewable energy to people in developing countries. It designs, manufactures and distributes micro-solar lighting and phone charging products. Barefoot Power Uganda Limited, the Ugandan subsidiary of the global business, operates a micro-franchise network to distribute its products.
Nuru Energy	Nuru Energy is a social enterprise operating in East Africa and India working with local organisations to recruit and train local Nuru Energy Entrepreneurs (also described as VLEs) to sell Nuru's Light-emitting diode (LED) lights and offer recharging services through its trademarked POWERCycle™ pedal generator for a small fee.
Pollinate Energy	Pollinate Energy is a Bangalore, India-based social enterprise fully owned by an Australian charity with a network of franchisees ('Pollinators'), trained and financed by Pollinate Energy, who distribute products vetted and branded by Pollinate Energy in their local communities.
SolarNow	SolarNow is a Uganda-based social enterprise selling its high-quality modular solar PV home systems (SHS) products through a network of local franchisee-managed stores across the country.
Solar Sister	Solar Sister is a social enterprise operating across East Africa that provides entrepreneurs with training and support to create micro-businesses based on selling solar lanterns, SHS, and plug-and-play products for households and businesses.

Box 3: Spotlight on… Orb Energy's franchise model

Orb Energy franchisees run branded branches according to the same operating procedures as a branch run directly by Orb Energy. The franchisee can only sell Orb Energy's products, and must devote 100 percent of their time to the franchise.

Franchisees have exclusive territorial rights and support the upfront costs of setting up the business, including the franchise fee, the property lease (in their name) and the working capital.

Orb Energy operates two types of franchises: the 'standard' franchise and the 'mini' franchise (a smaller store with a smaller product range).

This enables customers to purchase different products from the same enterprise over time, whilst continuing to deal with an enterprise they know and trust. Additionally, most of these enterprises have used their franchisee networks to establish after-sales support networks, thus enabling broader improvements in customer experience. This is particularly important in a market where 'the main word that drives [each] business is trust'.[56]

From the franchisee's perspective, this is an opportunity to build skills, with franchisors often providing standardised training and support to franchisees and their employees. All enterprises using franchising and interviewed as part of this study provide some type of training to their franchisees. In some cases, franchisors also act as guarantors for franchisees to access loans from banks.

Based on interviews conducted as part of this study, challenges when deploying these models highlight how 'labour intensive' this type of model can be. Indeed energy products and services in themselves are not perceived to be highly desirable products by consumers and require drive and entrepreneurship to educate consumers on the benefits they bring (charged phones, lighting the home, water pumping etc.) and sell to them.[57] Franchisees therefore need to have high levels of entrepreneurial spirit and proactivity to go in search of sales, reaching out to local communities. Finally, the market is dispersed and largely rural requiring a network of franchisees operating across large geographic areas to ensure good market penetration. This presents challenges for monitoring of performance and adherence to the franchise agreement as well as to the cost structure of the model.

The experiences of organisations implementing franchising in the energy access market enables identification of emerging best practice

Three primary best practices can be identified:

Prove your model and keep it simple

Proving the business model is successful before replicating it is one of the 'golden rules' for franchising successfully. To franchise before proving the model risks the replication and compounding of issues already faced. The model employed is best kept as simple as possible. In this way entrepreneurs will quickly see the value in it and be able to operate the business effectively from day one whilst retaining the opportunity to tailor it for market-specific needs over time.

Embed strict quality control

To protect the franchised brand and enable a consistent customer experience, it is important to set and maintain high quality standards from the start. This will ultimately raise brand value, and lead to increased customer satisfaction and repeat sales.

Implement rigorous training and monitoring

Robust training and monitoring is critical when the franchisee is expected to operate the business in adherence with the franchisor's prescribed model. Monitoring of performance is also important to protecting the business brand and quality of service offered to customers. This also means that best practice can be shared across the franchise network thus raising performance on a larger scale. As part of this, some franchise models have sophisticated incentive systems to keep franchisees engaged and motivated. Pollinate Energy Ltd for instance provides training and mentoring to their franchisees through their Fellowship Scheme, a one-month training programme where Fellows support franchisees to go out to communities, survey them, and conduct their first sales (see organisation profile in the Appendix of this report).

The experiences of organisations implementing franchising in the energy access market also highlights key lessons learned for other organisations looking to use franchising

The experience of enterprises that have successfully used franchising as a tool for replication highlights several lessons learned.

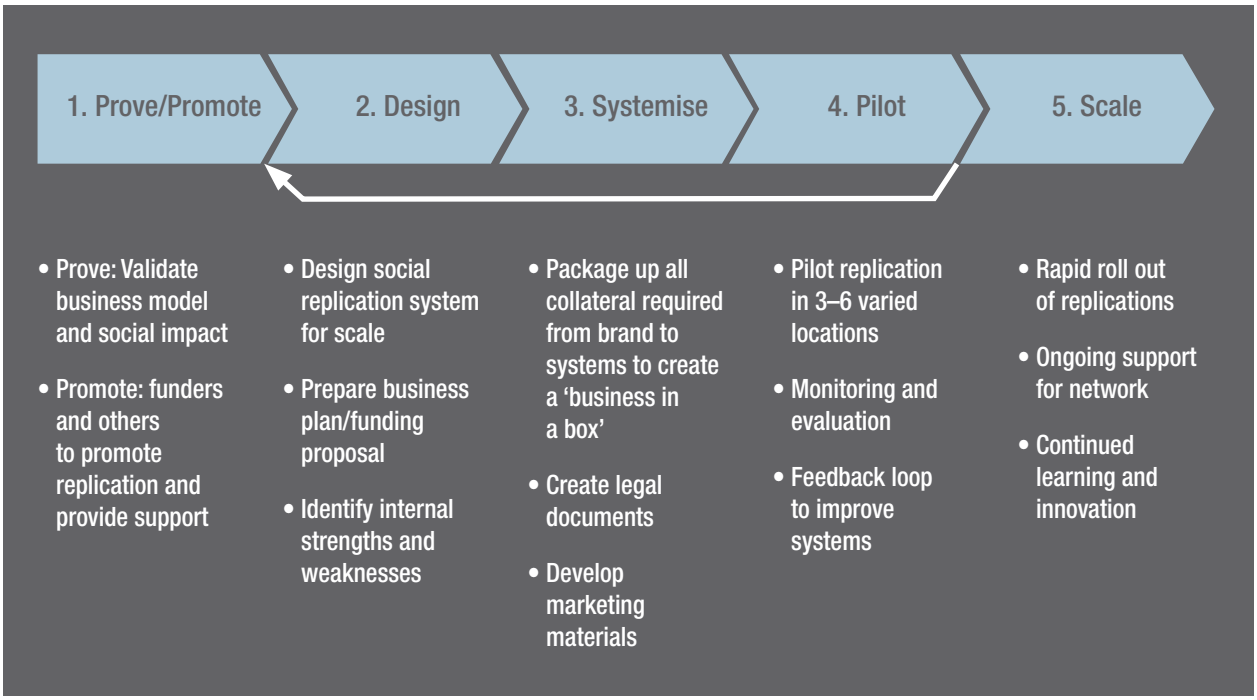
Don't franchise too early

A proven business model is a key success factor for any franchise model to take off–but it is only the first step on a longer journey to successful franchising. All of the enterprises interviewed highlighted the need for a careful and considered approach to franchising to increase likelihood of success – and in particular, the need to prove the business model before franchising it. As a lesson learned on this journey, SolarNow commented that "[they] would have got there faster if [they] had started slower".[58] In the case of Orb Energy, the initial franchise expansion was halted and franchise branches were converted to wholly owned stores to build consumer awareness of the Orb Energy brand before re-converting these branches to franchises. In some cases, it is best to test out various models before finally opting for franchising. This confirms the first stage of the International Centre for Social Franchising (ICSF)'s five stages for social franchises to replicate at scale – proving/validating the model (see Figure 8 below).[59]

Franchising requires a lot of resources and takes time

Once a proven business model is established, it is critical to systematise and standardise key components of this model so that it can be effectively packaged for replication. This process takes a considerable amount of time and requires extensive resources. It can take up to five to ten years to replicate to even a small number of units.[60] For example, SunnyMoney – a social enterprise owned by the charity Solar Aid selling solar lights across Africa–is taking the time to document their processes and operations very carefully with a view to using this 'SunnyMoney Way' as a manual for potential franchisees. Solar Sister also highlighted the amount of effort and patience required when setting up a franchise, given the attention required to support existing franchisees and ensure that the right balance is struck between maintaining global consistency of the core business model whilst allowing for some tailoring to local markets.

Figure 8: Five stages of social replication



Franchising is dependent upon several key market enablers to realise its full potential

For franchising to reach its full potential, it is critical that the local environment in which the standardised, proven model is being replicated in be receptive to it. There are a number of pre-requisites for this, namely an adequate and supportive legal framework, access to local talent and resources, and established supply chains. Such requirements highlight why franchising is even more complex in developing markets where the enabling environment is not as strong as in developed markets.

In the absence of such market enablers, many of the franchisors engaged with as part of this project are building out their own enablers. This involves supporting franchisees with access to capital (particularly working capital), enabling access to consumer finance and identifying effective strategies to recruit, incentivise and train local talent. Solar Energy Foundation, for instance, has established the International Solar Energy Institute in Ethiopia to train solar technicians, and in partnership with NIWA Solar Products and SunTransfer, SEF have established an assembly plant in Ethiopia for solar off-grid products.[61] Such efforts to enhance the enabling environment with a qualified talent pool and effective supply chain are commendable but require significant additional investment.

SUMMARY CONCLUSIONS

Franchising offers a promising mechanism through which to drive market efficiencies and achieve scale at speed

As the study has shown, franchising offers a promising mechanism through which which to drive market efficiencies and achieve scale at speed – marrying the deployment of a proven business model and brand with local talent and market insights. This approach has seen significant success in other industries, with the International Franchising Association estimating franchises to grow faster than other businesses.[62]

The increasingly recognised benefits of franchising have resulted in a growing number of organisations using the franchise approach in the energy access market. Micro-franchising enables individual entrepreneurs to sell and distribute products and services to the 'last mile' and has to date been the predominant model implemented within the market, with Solar Sister and Nuru Energy providing interesting examples of the latter. Other enterprises, namely Orb Energy, have used a more traditional approach, implementing a business format franchise model in which the entire business model is franchised at the local level. These variations indicate a rich and diverse market, with a number of best practices emerging.

Franchising may offer a viable business model to scale for some companies, but is not a 'one size fits all' solution

This assessment concludes that while franchising is offering a viable business model for growth for some companies, it is not a 'one size fits all' solution. The assessment of the energy access market and the various franchise models being implemented today reveals that, to be successful, franchising requires a simple and proven business model, substantial resources to standardise the model as well as the right enabling environment – including legal and regulatory frameworks, local skills and supply chains. Innovations that will foster the success of franchise models are occurring across markets and should be continued. As experience deepens and business models are proven, the ability to leverage existing infrastructure, best practices and lessons learned, and to develop the tools, templates and networks to support the franchisors/ franchisees, will be catalyzed.

To support these efforts, and unleash the full potential of franchising, the ICSF identifies five key enablers, ranging from point interventions to broader cross-industry support (Figure 9). Investors and donors supporting franchises should consider exploring these enablers to strengthen their investments.[63]

Figure 9: Key enablers to support social franchises

Given that the success of franchising will always be highly context driven, with the right set of internal and external factors needing to be in place, additional models and approaches should be considered at both the enterprise and market levels. Enterprises should consider a broad remit of options including joint ventures and partnerships. At the market-level, wider collaboration and integration between market players is recommended. For each enterprise to tackle fundamental challenges in the enabling environment individually puts a strain on their limited resources and results in market inefficiencies. As such, a vehicle for bringing together a standardised set of solutions to the known challenges is required. As such, instead of creating a 'Master Franchise,' a vehicle for bringing together a standardised set of solutions to the known challenges is required.

This will better enable the creation of market efficiencies, in turn supporting individual enterprise efforts, more rapid scale-up and attainment of SE4All's 2030 target of universal access to energy.

APPENDICES

Acronyms

ADP	Accenture Development Partnerships
AfDB	African Development Bank
BoP	Base of the Pyramid
CREEC	Centre for Research in Energy and Energy Conservation
DoE	Department of Energy
E+ TWG	Energy + Technical Working Group
EIB	European Investment Bank
ESCO	Energy Service provider/ Company
FDI	Foreign Direct Investment
FMCG	Fast Moving Customer Goods
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GVEP	Global Village Energy Partnership
HF	HealthStore Foundation
ICSF	International Centre for Social Franchising
IEA	International Energy Agency
IFA	International Franchise Association
IFC	International Finance Corporation
KEREA	Kenya Renewable Energy Association
M2M	Machine-to-Machine
MDC	Manual Distribution Centre
MFI	Microfinance Institution
MoP	Middle of the Pyramid
MNC	Multinational Corporation
OGE	Off-Grid: Electric
PAYG	Pay As You Go
PPP	Purchasing Power Parity
PV	Photovoltaic
SACCO	Savings and Credit Cooperative
SADC	South African Development Committee
SEF	Solar Energy Foundation
SHS	Solar Home Systems
SME	Small and Medium Enterprise
UECCC	Uganda Energy Credit Capitalisation Company
UNF	United Nations Foundation
UNICEF	United Nations Children's Fund
UNIDO	United Nations Industrial Development Organization
UNDP	United Nations Development Programme
UN SE4All	United Nations Sustainable Energy for All Initiative
VLE	Village Level Entrepreneur
W	Watt
WB	World Bank
WRI	World Resources Institute

$ = U.S. Dollar, unless otherwise indicated.

List of stakeholders interviewed

This report has benefited from the valuable inputs from the different stakeholders listed below.

Interviewee	Organisation
Sam Duby	**Access Energy Ltd**
Afshin Ghassmi	**Acumen**
Martha Irungu	**Africa Turnaround Ltd**
Timo Teinila	**African Development Bank Group**
Nicola Armacost	**Arc Finance**
Jiwan Acharya	**Asian Development Bank**
Simon Bransfield-Garth	**Azuri Technologies Ltd**
Rick Hooper	**Barefoot Power Pty Ltd**
Laurent van Houcke	**BBOXX Ltd**
Dipal Barua	**Bright Green Energy Foundation**
Francis Songela	**CARE**
Liesbet Peeters	**D.Capital**
Jamie Yang	**EGG-Energy, Inc.**
Donatien Mourmant	**EGG-Energy, Inc.**
Phil LaRocco	**Embark Energy**
Stephen Macharia	**Equity Bank Limited**
Brian Warshawsky	**Fenix International**
Daniel Wanjohi	**Global Alliance for Clean Cookstoves**
Laure Vincotte	**GDF Suez**
Bozhil Kondev	**Deutsche Gesellschaft fur Internationale Zusammerbeit (GIZ) GmbH**
Mary Roach	**GSM Association**
Laura Clough	**GVEP International**
Lindsay Van Landeghem	**GVEP International**
Patrick Ngowi	**Helvetic Solar**
Russell Sturm	**IFC, World Bank Group**
Dan Berelowitz	**International Centre for Social Franchising (ICSF)**
James Kakeeto	**Independent Consultant, Uganda**
Yariv Cohen	**Kaenaat**
Charles Muchunku	**Kenya Renewable Energy Association (Kerea)**
Cecile Pompei	**Microfranchise Accelerator (The MFA)**
Jesse Moore	**M-KOPA Kenya™**
Michael Njoroge	**Multilink Group Limited**
Stefan Mard	**Novozymes**
Siddarth Jain	**Nuru Energy**

Interviewee	Organisation
Graham Smith	**Off.Grid:Electric**
Paul Okech	**One Degree Limited**
Gaurav Manchanda	**One Degree Limited**
Andreas Zeller	**Open Capital Advisors**
Damian Miller	**Orb Energy**
Dirk Muench	**Persistent Energy Partners**
Frida Petterson	**Persistent Energy Partners**
Christoph Castellaz	**Koninklijke Philips N.V.**
Ties Kroezen	**Koninklijke Philips N.V.**
Dr Maarten van Herpen	**Koninklijke Philips N.V.**
Harry Verhaar	**Koninklijke Philips N.V.**
Katerina Kimmorley	**Pollinate Energy Ltd**
Ewan Bloomfield	**Practical Action**
Tim Young	**Practical Action**
Julie McBride	**Population Services International**
Tom Walsh	**Renetech AB**
Martin Hiller	**Renewable Energy & Energy Efficiency Partnership**
Dr. Russell deLucia	**S^{3}IDF**
Thomas Andre	**Schneider Electric**
Harish Hande	**SELCO Solar Pvt. Ltd.**
Pradeep Pursnani	**Shell Foundation**
Simon Desjardins	**Shell Foundation**
Christie Peacock	**Sidai Africa Ltd**
Tayeb Noorbhai	**Simgas**
Joe Fernandez	**Solageo**
Harald Schutzeichel	**Stiftung Solarenergie - Solar Energy Foundation**
Samson Tsegaye	**Stiftung Solarenergie - Solar Energy Foundation**
Willem Nolens	**SolarNow**
Katherine Lucey	**Solar Sister**
Peter Gutman	**Standard Chartered**
John Keane	**Sunny Money**
Samir Ibrahim	**SunCulture**
Ibrahim Rehman	**The Energy and Resources Institute (TERI)**
Richenda Van Leeuwen	**United Nations Foundation**
Koffi Ekouevi	**The World Bank Group**
Mohammed Papria	**Zara Solar**

ORGANISATION PROFILES– ENERGY ACCESS FRANCHISES

Nuru Energy[64]

Organisation profile	
Nuru Energy is a social enterprise operating in India and East Africa, and offering affordable and reliable energy solutions to customers.	
Headquarters	Kigali, Rwanda
Established	Seed-funded by the World Bank in 2008 and commercially financed by the Bank of America Merrill Lynch and the Africa Enterprise Challenge Fund in 2011
Partners	World Bank Bank of America Merrill Lynch Africa Enterprise Challenge Fund REEEP (Renewable Energy and Energy Efficiency Partnership) SIDA (Swedish International Development Cooperation Agency)
Impact areas	India (Mumbai, New Delhi, Bihar) East Africa (South Africa, Rwanda, Kenya, Uganda, Tanzania)
Products	■ Portable modular LED lights ■ Solar powered Nuru portable lights ■ POWERCycle™ pedal generator (off-grid recharging platform used to recharge mobile phones and Nuru's LED lights)
Impact	■ Job creation: 70 Village Level Entrepreneurs (VLEs) trained by 2010 (with the aim to train 10,000 by the end of 2016) ■ Poverty alleviation: 10,000 Nuru Lights distributed by 2010 (with the aim to distribute 1.8 million by the end of 2016) ■ Income generation: Mobile-money enabled POWERCycle provides VLEs with an additional source of income (typically earning in 20 minutes what they used to earn in an entire day) ■ Education ■ Increased health and safety ■ 0.08 tonnes of carbon mitigated yearly per Nuru light
Franchise model	
Franchisee name	Nuru Energy Entrepreneurs/ VLEs
Number of franchisees	*Not available*
Type of franchise	Micro-franchising
Model overview	■ Nuru Energy works with local organisations to recruit and train micro-franchise entrepreneurs (Nuru Energy Entrepreneurs) to sell Nuru's LED lights to their community and then offer POWERCycle recharging services for a small fee, typically earning in 20 minutes what they previously earned in an entire day.

Model highlights	Key challenges
■ Nuru Energy's product, the POWERCycle, is a community-based product. Members of the community can use this recharging service in exchange for a fee. ■ **Finance** – Self-help groups and microfinance institutions are the main sources of finance for franchisees. ■ **Capacity-building** – Nuru provide training and support to franchisees on sales and technical service, rural marketing techniques, accounting and invoicing. ■ **Distribution** – in addition to Nuru Energy products, franchisees are able to distribute other products to boost their income.	■ It is 'time-consuming' and 'expensive' to train the Entrepreneurs to sell the products. ■ The revenue model for the recharging POWERCycle is largely dependent on how frequently people recharge.

Nuru Energy[65] continued

Best practice and lessons learned
■ The distribution model (including franchising) is selected based on population density and product acceptance in a particular location. ■ VLEs work hand-in-hand with local 'self-help' groups, for example women's groups, energy groups, agriculture groups – this is an effective way of reaching out to the market. ■ It is 'not possible to rely only on micro-franchising' in the long-term – you have to follow a multi-pronged approach to distribution. Nuru Energy also distributes their products through local distributors, multi brand outlets, department stores etc. ■ There is a market that exists in semi urban areas for Nuru products. These areas are "on – grid" but face frequent power shortages and behave as "off-grid" markets at that time. These markets are attractive since the distribution network is more established, capacity to pay is higher and quality products are valued. ■ Solar and pedal powered lights both have their distinct markets depending on consumer need. For further information please contact: Siddarth Jain – sjain@nuruenergy.com Deepak Punwani – dpunwani@nuruenergy.com

Orb Energy[66]

Organisation profile	
Orb Energy is a leading provider of solar energy systems. Its mission is to make solar energy more 'accessible, affordable and hazard-free' for both residential and commercial customers.	
Headquarters	Bangalore, India
Established	October 2006
Partners	Partners include MFIs and banks in India and Kenya – providing financing to customers for solar purchases
Impact areas	India – *with expansion to East Africa (emerging presence in Kenya with 50 branches planned by end 2016)*
Products	■ Products: Solectric (lantern, plug and play, DC, AC, hybrid), Sunstream water heaters, Solite (solar street lights), for both residential and commercial applications ■ Services: installation and servicing of Orb Energy products
Impact	■ 150+ Orb Energy branches across India, of which 80% are franchised ■ 400 direct personnel, 600 including franchisee personnel
Franchise model	
Franchisee name	Orb Energy Partners
Number of franchisees	120 (out of a total of 150+ branches)
Type of franchise	Business format franchise
Model overview	■ The franchisee runs a branded branch according to the same standard operating procedures as a branch run directly by Orb Energy. The franchisee can only sell Orb Energy's products, and ideally will devote 100 percent of their time to the franchise.

Model highlights	Key challenges
■ Exclusive territorial rights are given to each franchisee. ■ Franchisees support the upfront costs of setting up the business, including the franchise deposit, the property lease (in their name) and the working capital. ■ Orb Energy operates two types of franchises: the 'standard' franchise and the 'mini' franchise (a smaller store with a smaller range of product displays).	■ Franchising in new markets requires a lot of 'groundwork'. This includes identifying areas to franchise in, sourcing entrepreneurs, selling the franchise, training the franchisees, 'hand-holding' them during the business start-up etc. ■ Some donors/ investors have expressed reservations about the potential success rate of replicating a franchise concept in Kenya.

Best practice and lessons learned

- Orb Energy retains a number of stores to benchmark the performance of its franchises against them (Note – 20 percent of the branches remain wholly-owned).
- The success of each individual franchise will depend to a large extent on the drive and entrepreneurship of the individual franchisee.
- Brand is an important ingredient to the success of the franchise – Orb Energy started with branded shops before converting these to franchises once the brand was more established.

Pollinate Energy Ltd[67]

Organisation profile	
Pollinate Energy Ltd's mission is to improve the lives of India's urban poor, empower local Indian entrepreneurs and make social business mainstream. It is a social enterprise wholly owned by an Australian charity.	
Headquarters	Bangalore, India
Established	2012
Partners	AECOM; CUNDALL; EPURON; Green Building Council Australia; NetBalance; Norton Rose Fulbright; Thomson Reuters Foundation; UNSW; HAS; the ERM Foundation, Assetz Homes; the Funding Network
Impact areas	Bangalore – *with expansion planned to Hyderabad in 2014, and to five more Indian cities in 2015*
Products	■ Greenlight Planet's SunKing Pro, Solo and Eco ■ Greenway Grameen Infra cookstoves ■ Orb Energy – Solectric SHS with fan
Impact	■ As of June 2, 2014 (18 months of operation) ■ 5,050 systems installed, ■ 23,230 people reached ■ 513 communities served ■ 8.8 million Rupees saved ■ 198,380 litres of kerosene saved ■ 476,112 kg of CO2 emissions saved
Franchise model	
Franchisee name	Pollinators
Number of franchisees	20 Pollinators
Type of franchise	Micro-franchising
Model overview	■ Pollinate Energy operates a 'franchise model within a franchise model', with 20 franchisees operating across 30 – 50 urban slums each in Bangalore.

Model highlights	Key challenges
■ Pollinate Energy use a 'franchise model within a franchise model' – the Pollinators themselves are given the opportunity to operate their own micro-franchise network of 'Worker Bees'. ■ **Finance** – it takes $50,000 – 100,000 to set up a new franchise in a new city. This is fully financed by Pollinate Energy (does not include a contribution from each individual Pollinator). ■ **Capacity-building** – Pollinate Energy provides training and mentoring to their franchisees through their Fellowship Scheme, a one-month training programme where Fellows support franchisees to go out to communities, survey them, and conduct their first sales. ■ **Distribution** – Most Village Level Entrepreneurs (VLE) don't work full-time because the margins aren't high enough to incentivise them. However, Pollinate Energy provides each Pollinator with a full 'business in a bag' solution allowing them to reach targets that cover local operational costs including their salary.	■ Accessing the upfront capital required to start the franchises ($50,000 – 100,000). ■ Defining the right incentive structure to keep franchisees motivated. ■ Supporting franchisees and customers by keeping margins low.

Best practice and lessons learned
Best practice: ■ Pollinate Energy operates a Fellowship Programme whereby both Indian and non-Indian fellows shadow and mentor a Pollinator for a period of one month. This has been identified as a successful approach to limit attrition amongst franchisees. ■ Pollinate Energy operates a target-based incentive system for franchisees–a five-star scaling of Pollinators which includes incentives such as preferential access to loans, insurance etc. based on performance. **Lessons learned:** ■ Various distribution models should be tested before opting for franchising. ■ Customer relationships are fundamental to the success of the model. ■ Strong suppliers with aligned mission and effective distribution and warranty procedures. ■ Technology solutions such as mobile apps are key enablers when scaling up a franchise model. ■ Branding is very powerful, across two different dimensions: from a customer perspective, and from a potential donor/ investor's perspective.

SolarNow[68]

Organisation profile	
SolarNow sells and distributes high-quality modular solar photovoltaic home systems (SHS) with an end-user credit facility ("PayPlan") through a dedicated franchise network in rural Uganda. Its mission is to make solar energy accessible and affordable to millions of off-grid people in Africa.	
Headquarters	Kampala, Uganda
Established	2011
Partners	Investors: management (61 percent), institutional (20 percent) and private (19 percent)
Impact areas	Uganda – *with expansion into Kenya and Tanzania from 2015*
Products	■ **Products:** solar home systems 50-500W tailor made to customer's needs and consisting of the following modules: start pack ($192), 50W power pack ($223), light pack ($74), TV/ DVD pack ($223) and AC pack ($192) ■ **Services:** 24 months full installation and maintenance; 18 months credit
Impact	■ **Job creation:** 31 full-time staff ■ **Poverty alleviation:** 4,074 SolarNow clients (with 4,510 sales to date, and a total installed capacity of 322 KW). 33 percent of SolarNow customers are at the Bottom of the Pyramid (61 percent if beneficiaries of business systems are included). ■ **Income generation:** 35 percent of SolarNow clients use their systems to enhance their business by increasing productivity or reducing energy expenditures. ■ **Education:** 143 schools use SolarNow systems to better serve their students.
Franchise model	
Franchisee name	SolarNow branches
Number of franchisees	43 franchisees
Type of franchise	Micro-franchise
Model overview	■ SolarNow operates a network of 43 franchises across Uganda operating SolarNow-branded shops.

Model highlights	Key challenges
■ **Finance:** SolarNow customers pay SolarNow directly. Customer payments do not go through the franchisees, who earn a commission based on their sales. The company does not (yet) charge franchise goodwill payments, but retains part of the franchisee's commission as to manage its credit and operational risk. ■ **Capacity-building:** SolarNow provides their franchisees with a full training course, including an initial two-week classroom training course, followed by two, four-week trainings 'in the field', shadowing other franchisees. ■ **Distribution:** SolarNow franchisees receive all marketing and promotional materials for product distribution from SolarNow HQ, however they are responsible for staffing and local store management.	■ **Access to finance.** Funding constraints are key barriers to growth of the model. ■ **Consumer awareness.** Target customers have been confronted with low-quality solar products for years, so trust levels can be very low to start with. ■ **Perceived risk of asset finance model.** Providing credit to customers to buy products adds risk and complexity to the business model and therefore can pose a challenge when attracting investment.

Best practice and lessons learned
Best practice: ■ **Product modularity.** Provide customer choice through a modular range of SHS systems (50 to 500Wp) as well as a host of appliances, with a 24-months warranty. ■ **ERP platforms.** Use of custom-designed OpenERP platform integrating client, credit, logistics and accounting modules across all of SolarNow's operations. **Lessons learned:** ■ **Proving the model.** It is important to start by running the business model yourself first (before franchising it) to get to know the market and the products – and to 'prove the concept'. Besides, by allowing yourself to start small, the risk of funding constraints, that tend to eat up margins, and disrupt operations, can be reduced. ■ **Customer relationships.** Customer relationships are an essential part of the success of the franchise. The local franchisee is at the core of this relationship – and these franchisees are selected from the region where the store will be located. The other side of this customer relationship is the guarantee of high quality products. In SolarNow's case, this is exemplified by the fact that more than 80 percent of SolarNow customers are referrals. ■ **Branding.** To create awareness, you need a brand name. Each component needs to be branded to give the customer the quality guarantee (and to provide product modularity) and to allow the supplier to change manufacturers without the customer noticing.

Solar Sister[69]

Organisation profile

Solar Sister is a social enterprise that provides women entrepreneurs with training, business support and ongoing mentoring to create micro-businesses, providing much needed household income for the entrepreneurs and much needed clean energy (like portable solar lights, mobile phone chargers and clean cookstoves) for their communities.

Headquarters	Bristol, Rhode Island
Established	2009
Partners	Ashoka, Draper Richards Kaplan Foundation, ExxonMobil's Women's Economic Opportunity Initiative, GSBI, USAID
Impact areas	Nigeria, Tanzania, Uganda
Products	■ Solar lanterns manufactured by a range of players (including Barefoot Power, d.light, Greenlight Planet ■ Solar Home Systems manufactured by BBOXX ■ Plug and play products for households and businesses ■ Clean cookstoves
Impact	■ **Job creation:** over 724 entrepreneurs ■ **Poverty alleviation:** 1113,550 people benefiting from clean energy through Solar Sister Entrepreneur network ■ **Income generation:** One dollar invested in a Solar Sister Entrepreneur generates over $46 of economic benefit in the first year alone.

Franchise model

Franchisee name	Solar Sister Entrepreneurs (SSEs)
Number of franchisees	724 entrepreneurs
Type of franchise	Micro-franchising
Model overview	■ An Avon like women driven last mile distribution model for clean energy.

Model highlights

- The Solar Sister Entrepreneur network focuses on women entrepreneurs. In select cases, Solar Sister "Brothers" are also recruited.
- The model is brand-agnostic: Solar Sister sources from a variety of manufacturers–the focus is on distribution and customer service.
- **Finance:** Solar Sister leverages relationships with local women's groups to help their entrepreneurs access financing, rather than providing it themselves.
- **Capacity-building:** Solar Sister provides training, mentoring and continued business support to franchisees.
- **Distribution:** The franchise is non-exclusive, i.e. SSEs can be involved in other income-generating activities. In this sense, Solar Sister has little control over the entrepreneurs.

Key challenges

- Attracting and recruiting the right entrepreneurs and supporting them (e.g. through mentoring) in the right way is a challenge. Energy access enterprises would benefit from sharing best practice on this.

Best practice and lessons learned

Best practice:

- Solar Sister's franchise model can be adapted to local conditions – however the model has to be customized for different markets.

Lessons learned:

- The micro-consignment model (whereby the initial loan is provided through the inventory as start-up capital) has its limitations. Solar Sister initially followed this model, but soon realised that entrepreneurs were using this as a means to access credit rather than to start a long-term business. Today, Solar Sister leverages relationships with local women's groups to help their entrepreneurs access financing, rather than providing it themselves.
- Franchising is a 'labour-intensive business' – the franchisor spends a considerable amount of time and resources to source, train and support people on a regular basis.

ORGANISATION PROFILES– DEVELOPING COUNTRY FRANCHISES

JITA Bangladesh[70 71 72 73]

Organisation profile	
Originally founded as a CARE Bangladesh initiative in 2004, JITA has developed into a for-profit business with a strong social mission. It provides new income opportunities for rural women selling products door-to-door in remote areas cut off from traditional markets. It is owned by CARE Enterprises Inc. and Danone Communities.	
Headquarters	Dhaka, Bangladesh
Established	2011 (as for-profit spin-out from CARE)
Revenue (year)	$240,000 (2013)
Impact areas	Bangladesh
Products & services	Products: Improved seeds, hygiene products, solar lanterns, shoes, yogurt, shampoos, face creams and skin care products. *Note–Sales agents are also able to sell products they source themselves with the franchisor specifying items that must not be sold e.g. weapons.*
Key facts	JITA has three main revenues streams: ■ Inception and training fees that companies pay when they first partner with JITA ■ Sales commissions paid to JITA with a commission to Aparajitas and hub managers on each product sold ■ Consulting, market creation and research fees for those interested in accessing the rural Base of the Pyramid market

Franchise model	
Franchisee name	JITA 'Aparajitas'
Number of franchisees	Over 4,700 agents
Type of franchise	Micro-franchise
Model overview	■ Hub managers buy from the sales partners and sell to the Aparajitas who then sell to their customers. Service providers delivering goods from the network hub to the Aparajitas are paid a set commission of 2 percent directly by JITA, while commission rates for the Aparajitas vary from 10 to 25 percent. Both the Aparajitas and the hub managers can return unsold merchandise to the upstream party.

Model highlights	Key challenges
■ Deep trust earned as a CARE Bangladesh project allowing JITA to enter local villages and engage communities. ■ Partnership with companies supplying desirable goods for the agents to sell and willing to pay a commission to both JITA and Aparajitas.	■ Increasing competition between partners as the variety of products sold increases. ■ Potential increase in retail shops in less urbanized areas following infrastructure improvements in Bangladesh.

Best practice and lessons learned

- Limit the number of agents working in each geographical area to prevent competition.
- Diversify the product and company mix to create demand and to help agents earn a stable income.
- Delicate transition process from NGO to for-profit organization.

Living Goods[74 75 76 77]

Organisation profile	
Living Goods is a network of "micro-entrepreneurs" providing health education and selling basic medicines, health products, high-efficiency stoves and solar lights. Its mission is to combine best practices from microfinance, franchising, and public health to create a sustainable system for improving the health, wealth, and productivity of the world's poor.	
Headquarters	San Francisco, USA
Established	2007
Revenue (year)	*Not available*
Impact areas	Kenya and Uganda
Products & services	■ Health products (e.g. mosquito nets, water purification tablets and antimalarial drugs) ■ Personal care products (e.g. soap and toothpaste) ■ Pro-poor innovations (e.g. solar lanterns and efficient stoves) ■ Services: health education and advice
Key facts	■ Not-for-profit organisation but aiming to become self-sustainable through profitability at micro-entrepreneur level, branch level, and at country level. ■ Provide advisory services to help others adapt and scale their model ■ Involved in a joint venture with BRAC (one of the world's largest NGOs) in Uganda

Franchise model	
Franchisee name	Living Goods
Number of franchisees	Over 1000 agents
Type of franchise	Micro-franchise
Model overview	■ Micro-entrepreneurs are trained and provided with a "business-in-a-bag" including uniform and basic health and business tools enabling them to travel door-to-door in local communities to sell consumer products and medicines. A branch network supports the micro-entrepreneurs with each branch supporting 20-40 sales agents and employing 1 or 2 branch managers.

Model highlights	Key challenges
■ Agents earn margins of 15 to 25 percent on goods sold. ■ Product mix enables greater sales volumes and allows for cross-subsidisation of prices to reduce cost of key impact items. ■ Use of mobile phones and smartphone apps to gather market data that will help the entrepreneurs market products, and run promotions. Mobile technology is also used to manage the workforce – branch managers are alerted as to which of their agents need praising or support.	■ Recruiting top talent is the number one challenge and constraint to growth in all markets. ■ Enabling the business to operate as a self-funded enterprise.

Best practice and lessons learned
■ Working capital loans are provided to the agents. ■ Cutting out layers of resellers and harnessing the buying power of over 1,000 agents increases product availability while decreasing the price of products. ■ Rigorous tracking and evaluation of operating metrics such as key health metrics, sales and profitability. ■ Cash incentives are used to encourage agents to drive health behaviour changes e.g. ensuring newborns are visited within 48 hours of birth. ■ Branch managers are also incentivised to drive performance of the agents e.g. cash incentive if 95 percent of agents submit their sales and health reports.

Sidai Africa Ltd[78]

Organisation profile	
Sidai Africa Ltd is a social enterprise operating in the livestock sector in Kenya. Its aim is to revolutionize the provision of livestock and veterinary services to pastoralists and farmers across Kenya by creating a more sustainable service delivery model.	
Headquarters	Nairobi, Kenya
Established	2011
Revenue (year)	$3 million (2013)
Impact areas	Kenya
Products & services	■ **Products:** wide product range including animal feeds, agrochemicals, veterinary and farm equipment. In total, Sidai stocks 2,000 products from 40 different suppliers ■ **Services:** range of services including clinical services and training on animal health. *Note–over time, new products (including Sidai branded goods) and services (diagnostic tests, financial services and livestock insurance) are expected to be added to this range.*
Key facts	■ Sidai is the largest player in the Kenyan agro-vet market ■ All Sidai centres are owned and run by qualified veterinarians, livestock technicians and other livestock professionals ■ Sidai works closely with regulators to help improve the national regulatory environment for veterinary services
Franchise model	
Franchisee name	Sidai
Number of franchisees	70 franchises *(with the aim to reach 150 franchises by the end of 2015)*
Type of franchise	Business format franchise
Model overview	■ Sidai's franchise model is a 'hub and spoke' model, with company-run retail stores at the regional level and franchises at the local level. The company-run stores act as a showcase for the brand and carry stock for the retail and franchise sales. ■ Each franchisee runs a branded Sidai Service Centre according to Sidai's Standard Operating Procedures. A franchisee can only sell Sidai-approved products (this is key to preserving the quality control required in this sector).

Model highlights	Key challenges
■ The **franchisee value proposition** from Sidai includes: ■ Sourcing and purchasing of products ■ Branding and marketing ■ Business training and IT ■ Technical training and diagnostics ■ Access to competitive finance (Sidai has negotiated competitive interest rates with a local bank for franchisees to be able access affordable finance). ■ New business opportunities	■ **Franchisees not paying for Sidai products.** In some cases, franchisees were not paying for their stock. As a result of this, a number of franchisees had to be de-franchised. ■ **Franchisees selling non-Sidai-approved products.** In some instances, franchisees were found to be selling products not purchased from Sidai, despite the franchise agreement stating that franchisees must buy products exclusively from Sidai. ■ **Maintaining margins on products sold.** This challenge has led Sidai to develop their own-branded products and import them directly from manufacturers overseas.

Best practice and lessons learned
Best practice ■ **Rigorous approach to quality control** – including vetting of suppliers and completing independent verification of product quality. ■ **Bespoke IT systems** – developed for improved business management. ■ **Business and technical training** provided to franchisees. **Lessons learned** ■ Drivers of success for franchising include: getting the price right, getting the margin right, getting the incentives right and getting the marketing right. ■ The key is finding the sweet spot of overlapping interests between the franchisor and franchisee. ■ The most basic part to get right with a franchise model is the recruiting of franchisees. ■ The power of branding – the Sidai brand makes their products premium products. In Kenya, where branding is very little developed, this is 'like something from another planet'.

Population Services International[79 80 81]

Organisation profile	
Population Services International is a global health organization dedicated to improving the health of people in the developing world by focusing on serious challenges like a lack of family planning, HIV and AIDS, barriers to maternal health, and the greatest threats to children under five, including malaria, diarrhoea, pneumonia and malnutrition.	
Headquarters	Washington DC
Established	1970
Revenue (year)	$546.4 million (2012)
Impact areas	69 countries worldwide including Kenya, Tanzania, Ethiopia, Mozambique and Uganda in East Africa
Products & services	■ **Products:** contraceptives, STI treatment kits, water treatment solutions, medications and vaccinations ■ **Services:** male circumcision, Malaria nets, Malaria tests and treatments
Key facts	■ PSI is the largest social franchising organization in the world, operating multiple franchises in Asia, Africa and Latin America delivering services to more than 10 million clients each year ■ PSI is heavily donor-funded but generates some revenue from their franchises
Franchise model	
Franchisee name	*Various (e.g. Tunza Family Health Network in Kenya, ProFam in Tanzania)*
Number of franchisees	31 franchises (in 30 different countries) with 10,000 franchisees
Type of franchise	Social Franchise
Model overview	■ The franchise model applies commercial franchising strategies to the non-profit health sector. Franchisees go through a rigorous recruitment process followed by a training programme before signing an agreement defining roles and responsibilities and being able to add the specific PSI brand logo to their clinic.

Model highlights	Key challenges
■ Significant scale working in 69 countries worldwide. ■ Sourcing is done centrally while individual countries determine quantity of supply allowing better rates and higher efficiency.	■ Further standardization of operating model across all franchises in different countries. ■ Long-term sustainability of franchises given reliance on donor-funding.

Best practice and lessons learned

- Rigorous franchisee recruitment process to select good and dedicated providers with suitable facilities located in the communities.
- Collateral offered to banks to enable franchisees to access capital.
- Training in itself is not enough – there is a need for on-going support and monitoring.
- On-going use of public health and business metrics to assess performance with feedback provided to franchisees.
- Measure customer and franchisee satisfaction to ensure headquarters are providing the support they need to.
- Franchising allows for better control on quality of the service.
- There is an ongoing need for incentivizing the right behavior.

The HealthStore Foundation[82 83]

Organisation profile

The HealthStore Foundation (HF) was created to improve access to essential drugs and basic healthcare for children and families in the developing world. HF run a network of Child and Family Wellness Shops (CFWshops) and Child and Family Wellness Clinics (CFWclinics) that provide marginalized people with basic outpatient services and access to vital medicines.

Headquarters	Minneapolis, USA
Established	1997
Revenue (year)	*Not available*
Impact areas	Kenya and Rwanda
Products & services	■ **Products:** hygiene products and generic drugs for specific diseases causing 70-90 percent of illnesses and deaths in local communities ■ **Services:** health education and advice, medical examinations
Key facts	■ CFWshops are located in rural market centres, peri-urban and urban areas with populations of at least 5,000 people ■ HF are a member of the International Franchise Association

Franchise model

Franchisee name	CFWshops, CFWclinics
Number of franchisees	66 in Kenya and 56 in Rwanda
Type of franchise	Business Format Franchise
Model overview	■ Franchisees run branded shops and clinics according to a system of rules and standards defined by HF. CFWshops are run by community health workers whereas CFWclinics are run by trained nurses who can provide a greater range of medicines and health services. Typically, a franchisee invests $300 matched by a SHF loan of about $1,200 (1 percent interest, repaid over 3 years) to provide the start-up costs and initial drug purchases and HF covers cost of equipment for the clinic (desks, chairs, exam table, etc.) for an estimated value of $2,000, covered by donor funds.

Model highlights	Key challenges
■ Operating system includes an operating manual complete with policies, procedures and forms constituting a turn-key management system to enable franchisees to perform successfully from day one.	■ Clearly define goals and financial expectations with franchisees.

Best practice and lessons learned

- Record keeping regime that compiles patient records and vital health statistics, as well as financial performance statistics for each HF outlet.
- Sourcing of a limited range of medicines is done centrally to leverage buying power to obtain quality medicines from reputable suppliers at the lowest possible price.
- Thorough training program on how to diagnose target conditions, prescribe medicines and run the business. Ongoing training programs on clinical skills and management practices.
- Ongoing and strict oversight ensuring that every franchisee is operating to required standards and not engaging in practices that could incur liability.
- Marketing and branding are critical for driving customer visits.
- Collecting revenues at the time of inventory purchase rather than time of sale reduced underreporting practices.

Coca-Cola Sabco[84 85 86 87 88 89 90]

Organisation profile	
Coca-Cola Sabco is one of Coca-Cola's largest bottlers in Africa, operating 18 bottling plants and employing more than 7,900 people in Eastern and Southern Africa. It also employs around 900 people across 3 plants in Sri Lanka and Nepal.	
Headquarters	Port Elizabeth, South Africa
Established	1940 (1999 first MDC centre)
Revenue (year)	*Not available*
Impact areas	9 countries in Eastern and Southern Africa and Asia
Products & services	■ The range of products varies between different countries. They can include Coca-Cola, Coke Light, Coke Zero, Fanta, Sprite, Tab, Stoney, Iron Brew, Bonaqua, Valpre, Powerade, Minute Maid, Appletiser, Grapetiser and those from the Schweppes, Sparletta, Krest and Twist groups.
Key facts	■ Coca-Cola Sabco is 80 percent owned by a private investment group, Gutsche Family Investments, and 20 percent by Coca-Cola. ■ Over 80 percent of CocaCola's business in key East African countries goes through the MDC network.

Franchise model	
Franchisee name	Manual Distribution Centres (MDCs)
Number of franchisees	Over 3,000 MDCs
Type of franchise	Micro-franchise
Model overview	■ MDC are small depots serving shops that are not big enough to take in large amounts of inventory or difficult to reach. MDC are independent but receive a lot of support from the bottlers, who view them as a vital part of the company's value chain. MDC's owners can typically realize monthly revenues of $20,000 to $30,000. On average, MDC owners pay-off their start-up loans of $10,000 to $15,000 within 3-5 years.

Model highlights	Key challenges
■ Local bottlers provide daily business operations support and assistance in account development, merchandising, and product availability tracking. ■ MDCs are assigned an Area Sales Manager to support their business and act as the key contact with the bottling plant.	■ Ensuring rigorous data collection at all levels, to optimise the allocation of stock, resulting in economies of skill.

Best practice and lessons learned

- Local bottlers manage the process of setting up an MDC, from market viability assessments to participating in owner/operator recruitment, assisting in the set-up of the MDC, and providing training and assistance.
- Local engagement and understanding of barriers to market growth.
- Importance of conducting frequent network studies to optimise use of own and partner resources.
- Have a single entity that manages quality of information.

REFERENCES

[1] International Energy Agency (2013) *Global Status of Modern Energy Services* [Online] Available at: http://www.worldenergyoutlook.org/resources/energydevelopment/globalstatusofmodernenergyaccess/

[2] Banerjee, Sudeshna Ghosh; Bhatia, Mikul; Azuela, Gabriela Elizondo; Jaques, Ivan; Sarkar, Ashok; Portale, Elisa; Bushueva, Irina; Angelou, Nicolina; Inon, Javier Gustavo. 2013. *Global tracking framework*. Vol. 3 of *Global tracking framework*. Sustainable energy for all. Washington D.C.; The World Bank. [Online] Available at: http://documents.worldbank.org/curated/en/2013/05/17765643/global-tracking-framework-vol-3-3-main-report

[3] International Franchise Association (2005) *Economic Impact Study*. Based on 2001 – 2005 study of franchises across the US

[4] International Energy Agency (2013) *Global Status of Modern Energy Services* [Online] Available at: http://www.worldenergyoutlook.org/resources/energydevelopment/globalstatusofmodernenergyaccess/

[5] Banerjee, Sudeshna Ghosh; Bhatia, Mikul; Azuela, Gabriela Elizondo; Jaques, Ivan; Sarkar, Ashok; Portale, Elisa; Bushueva, Irina; Angelou, Nicolina; Inon, Javier Gustavo. 2013. *Global tracking framework*. Vol. 3 of *Global tracking framework*. Sustainable energy for all. Washington D.C.; The World Bank. [Online] Available at: http://documents.worldbank.org/curated/en/2013/05/17765643/global-tracking-framework-vol-3-3-main-report

[6] Products and services franchised include automotive products, food, financial services, hotels, real estate services, training. *See Franchise Opportunities by Industry*. http://www.franchise.org/franchisecategories.aspx for further categories.

[7] Banerjee, Sudeshna Ghosh; Bhatia, Mikul; Azuela, Gabriela Elizondo; Jaques, Ivan; Sarkar, Ashok; Portale, Elisa; Bushueva, Irina; Angelou, Nicolina; Inon, Javier Gustavo. 2013. *Global tracking framework*. Vol. 3 of *Global tracking framework*. Sustainable energy for all. Washington D.C.; The World Bank. http://documents.worldbank.org/curated/en/2013/05/17765643/global-tracking-framework-vol-3-3-main-report

[8] Based on current cash spending on traditional energy.

[9] International Finance Corporation (2012) *From Gap to Opportunity: Business Models for Scaling Up Energy Access*.

[10] International Finance Corporation (2012) *From Gap to Opportunity: Business Models for Scaling Up Energy Access*

[11] International Finance Corporation (2012) *From Gap to Opportunity: Business Models for Scaling Up Energy Access*.

[12] Lighting Africa (2013) *Lighting Africa Market Trends Report 2012. Overview of the Off-Grid Lighting Market in Africa*

[13] Lighting Africa (2013) *Lighting Africa Market Trends Report 2012. Overview of the Off-Grid Lighting Market in Africa*

[14] Lighting Africa (2013) *Lighting Africa Market Trends Report 2012. Overview of the Off-Grid Lighting Market in Africa*

[15] One Degree Solar (2014), *Accenture interview*

[16] New Ventures India (2013) *The Last 50 Mile: Using VLE networks for increasing clean energy access*.

[17] GSMA (2014), *Accenture interview*

[18] GIZ, IFC & DoE (2013) *Last Mile Distribution of Off-grid Solar Products: Support Needs, Concerns, and Opportunities*. Workshop Summary Report; Lighting Africa (2013) *Lighting Africa Market Trends Report 2012. Overview of the Off-Grid Lighting Market in Africa*.

[19] United Nations Foundation Energy Access Practitioner Network (2013) *Investing for Energy Access–2013 Directory of Investment and Funding Opportunities*.

[20] A.T. Kearney (2014) *Investment and Finance Study for Off-Grid Lighting*. An A.T. Kearney report in collaboration with GOGLA

[21] International Finance Corporation (2012) *From Gap to Opportunity: Business Models for Scaling Up Energy Access*.

[22] Ekouevi, K. (2013) *Scaling Up Clean Cooking Solutions. The Context, Status, Barriers and Key Drivers*. International Finance Corporation.

[23] WRI (2014) *4 Insights on Unlocking Finance for Clean Energy Access in Africa* [Online] Available at: http://www.wri.org/blog/2014/01/4-insights-unlocking-finance-clean-energy-access-africa

[24] World Economic Forum (2013) *Scaling Up Energy Access through Cross-sector Partnerships*. Industry Agenda.

[25] GIZ, IFC & DoE (2013) *Last Mile Distribution of Off-grid Solar Products: Support Needs, Concerns, and Opportunities*. Workshop Summary Report.

[26] Accenture Interview (2014)

[27] Adapted from International Finance Corporation (2012) *From Gap to Opportunity: Business Models for Scaling Up Energy Access*, Accenture analysis.

[28] Open Capital Advisors (2012) *Toward an Ecosystem for Early-Stage Incubation of Social Enterprises*. Supported by USAID, Acumen Fund, Rockefeller Foundation, ANDE and Care [Online] Available at: http://www.aspeninstitute.org/sites/default/files/content/docs/resources/Early-Stage%20Social%20Enterprise%20Ecosystem%20Workshop%20-%20Full%20Paper.pdf

[29] SEF (2014), *Accenture interview*

[30] Energy enterprise (2014), *Accenture interview*

[31] Accenture analysis.

[32] World Bank–Ethiopia Overview (2014). [Online] Available at: http://www.worldbank.org/en/country/ethiopia/overview; CIA World Factbook – Ethiopia (2014) [Online] Available at: https://www.cia.gov/library/publications/the-world-factbook/geos/et.html

[33] Lighting Asia – India Program (2014) *Market Presence of Off-Grid Lighting Products*. Insights from a study in Bihar and Odisha. [Online] Available at: http://api.ning.com/files/bDmjSM9kXXbyPBOHAuzSE5MiNkGnbb9eLe6sQohE2PiSlZoJUQ1peSuYpklGoJ9fJy9MstHaU1shnGMC13BZ0cypvTC*fDKg/MarketPresenceReportExecSummary.pdf

[34] GIZ, IFC & DoE (2013) *Last Mile Distribution of Off-grid Solar Products: Support Needs, Concerns, and Opportunities*. Workshop Summary Report.

[35] GIZ, IFC & DoE (2013) *Last Mile Distribution of Off-grid Solar Products: Support Needs, Concerns, and Opportunities*. Workshop Summary Report.

[36] GEF (2003) T*ransformation of the Rural Photovoltaic Market in Tanzania*.

[37] Ekouevi, K. (2013) *Scaling Up Clean Cooking Solutions. The Context, Status, Barriers and Key Drivers*. International Finance Corporation

[38] BOPASA (2014) http://bopasa.org/

[39] BOPASA (2014) http://bopasa.org/

[40] Products and services franchised include automotive products, food, financial services, hotels, real estate services, training. See *Franchise Opportunities by Industry*. http://www.franchise.org/franchisecategories.aspx for further categories

[41] The International Centre for Social Franchising (2013) *Realising the Potential of Social Replication*.

[42] Lehr, D. (2008) *Microfranchising at the Base of the Pyramid*. Acumen Fund

[43] Accenture analysis

[44] Gompers, P. A. (2012) *A Note on Franchising*

[45] Accenture analysis

[46] Gompers, P. A. (2012) *A Note on Franchising*

[47] Accenture analysis

[48] PSI (2014), *Accenture interview*

[59] Sidai (2014), *Accenture interview*

[50] Deelder, W. & Miller, R. A. (2009) *Franchising in Frontier Markets*. Dalberg.

[51] Meacham, M., Tymms, A., Moolman, T., and de Montgolfier, J. (2012) *Lessons from Africa's Pioneers–How Successful Consumer Products Companies Overcome the Five Great Challenges of Doing Business on the Continent*. Bain & Company.

[52] Living Goods (2014) [Online] Available at: http://livinggoods.org/

[53] Lehr, D. (2008) *Microfranchising at the Base of the Pyramid*. Acumen Fund

[54] Ashcroft (2013) *The JITA Sales Network: An Inclusive Business on the Rise*. Business Innovation Facility

[55] Accenture analysis

[56] Solar Energy Foundation (2014), *Accenture interview*

[57] SolarNow (2014), *Accenture interview*

[48] SolarNow (2014), *Accenture interview*

[59] Berelowitz, D., Richardson, M., and Towner, M. (2013) *Realising the Potential of Social Replication*. International Centre for Social Franchising

[60] Deelder, W. & Miller, R. A. (2009) *Franchising in Frontier Markets*. Dalberg.

[61] Sun Connect (2014) [Online] Available at: http://www.sun-connect-news.org/?tx_news_pi1%5Bnews%5D=299&tx_news_pi1%5Bcontroller%5D=News&tx_news_pi1%5Baction%5D=detail&cHash=b44dd1978756465603ce4362f88aafaa

[62] International Franchise Association (2005) *Economic Impact Study*. Based on 2001 – 2005 study of franchises across the US

[63] Berelowitz, D., Richardson, M., and Towner, M. (2013) *Realising the Potential of Social Replication*. International Centre for Social Franchising

[64] Barefoot Power (2014), *Accenture interview*

[65] Nuru Energy (2014), *Accenture interview*

[66] Orb Energy (2014), *Accenture interview*

[67] Pollinate Energy (2014), *Accenture interview*

[68] Solar Now (2014), *Accenture interview*

[69] Solar Sister (2014), *Accenture interview*

[70] JITA Bangladesh (2014) *Public website* [Online] Available at: http://www.jitabangladesh.com/

[71] Business Innovation Facility (2014) *Project Profile – JITA Rural Sales Programme, Bangladesh* (2014) [Online] Available at: http://businessinnovationfacility.org/page/project-profile-jita-rural-sales-programme-bangladesh

[72] Business Innovation Facility (2013) *Inclusive business in practice – Case studies from the Business Innovation Facility portfolio* [Online] Available at: http://api.ning.com/files/poTC6m2b82q-v8d8DC95d1iedIVCJ8hJaLGRB0nLk13Dt*eqjeEtaq7X7xZD85lnUgjth 1GWNWU7F6tYv-zPUsyoOjOc*FQM/Deepdive_JITA_HUB.pdf

[73] Said Business School (2014) Profile of Said Al-Rashid, Founding Director & CEO, JITA [Online] Available at: http://www.sbs.ox.ac.uk/community/people/saif-al-rashid

[74] Center for Health Market Innovations (2014) *Living Goods profile* [Online] Available at: http://healthmarketinnovations.org/program/living-goods

[76] Forbes (2013) *Q&A with Chuck Slaughter, Living Foods Founder and CEO* [Online] Available at: http://www.forbes.com/sites/ashoka/2013/06/17/qa-with-chuck-slaughter-living-goods-founder-and-ceo/

[76] Entrepreneur (2014) *How Social Franchising Is Bringing Jobs to the Developing World* [Online] Available at: http://www.entrepreneur.com/article/232260

[77] CISCO (2014) *Impact Story: Living Goods Uganda* [Online] Available at: http://csr.cisco.com/casestudy/living-goods

[78] Sidai (2014), *Accenture interview*

[79] PSI (2014), *Accenture interview*

[80] PSI Kenya (2014) *Public website* [Online] Available at: http://www.psikenya.org

[81] Impact (2014) Strength in numbers: Community health workers in social franchise networks [Online] Available at: http://blog.psiimpact.com/2014/04/strength-numbers-community-health-workers-social-franchise-networks/

[82] Lehr, D. (2008) *Microfranchising at the Base of the Pyramid*. Working Paper, Acumen Fund

[83] CFWshops (2014) Public website [Online] Available at: http://www.cfwshops.org/

[84] Coca-Cola Great-Britain (2014) *Micro Distribution Centres* [Online] Available at: http://www.coca-cola.co.uk/community/micro-distribution-centres.html

[85] Nelson, J et al. (2008) *Developing Inclusive Business Models – A Review of Coca-Cola's Manual Distribution Centers in Ethiopia and Tanzania*. Harvard Kennedy School and International Finance Corporation [Online] Available at: http://www.hks.harvard.edu/m-rcbg/CSRI/publications/other_10_MDC_report.pdf

[86] Accenture Analysis

[87] Coca-Cola Sabco (2011) *Coca-Cola Sabco 2011 Sustainability Review* [Online] Available at: http://assets.coca-colacompany.com/45/44/9849056c4488a087daa05b1bb0a4/CSRsabco-2011-Report-FINAL-lowres.pdf

[88] IFC (2010) *Coca-Cola SABCO* [Online] Available at: http://www.ifc.org/wps/wcm/connect/fb3725004d332e078958cdf81ee631cc/Coca+Cola.2010.pdf?MOD=AJPERES

[89] Coca-Cola Sabco (2014) *Public website* [Online] Available at: http://www.cocacolasabco.com/

[90] Business Call to Action (2014) Coca-Cola Case study [Online] Available at: http://www.businesscalltoaction.org/wp-content/files_mf/1286826974CocaColaCaseStudyFORWeb.pdf.html

About the Energy+ Technical Working Group: In late 2010, the Government of Norway asked the World Wildlife Fund's U.S. Policy Program Office to convene and manage an Energy+ Technical Working Group (E+ TWG) to advise on the design and deployment of the Energy+ initiative. Since then, the E+ TWG has mobilized a network of experts to advise the Energy+ Partnership on energy access, renewable energy, and energy efficiency strategies and to facilitate the dialogue between Energy+ and other donors, financial institutions, governments, businesses and civil society. For more information on the E+TWG, please visit our website **www.technicalworkinggroup.org**.

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