Energy Africa - Kenya

Compact development - Final Report

September 2016

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1. Summary

Energy Africa is a DFID-led initiative to accelerate the expansion of the household solar market in Africa, and help achieve universal energy access by 2030 instead of 2080 on current trends. It seeks to accomplish this by aligning supportive policy with co-ordinated donor support, to improve market conditions and increase investment. Kenya is one of 14 countries that has joined the Energy Africa campaign.

Kenya has one of the largest markets in Africa for small-scale solar photovoltaics (PV) products. Given limited grid connectivity and high demand for lighting and phone charging, off-grid solutions such as solar home systems (SHS) and pico-solar have thrived in Kenya, driven primarily by over-the-counter sales. Lighting Africa has calculated approximately 2.7 million systems sold in total in the country.

The private sector has played a pivotal role in this success, with an increase in the penetration of off-grid solar solutions from 5% in 2009 to 20-25% in 2015. Factors include a favourable tax regime, emergence of a home-grown global leader in mobile-phone based “pay as you go” (PAYG) solar access and the success of a local solar manufacturer / assembler that supplies the lion’s share of solar systems in the East African region.

The Kenyan government is receptive to new approaches to off-grid electrification and is pro-private sector. They set an ambitious target to achieve universal electrification by 2030, building on great strides in increasing electricity access since 2009. The National Electrification Strategy, to start in Q3/Q4 2016, will acknowledge small-scale solar within a “tiered” off-grid electrification approach. However, some challenges remain to sector growth, including:

- Changes in taxation regimes exclude appliances which exclusively use solar energy and provide value addition and cost savings
- Low-quality, low-cost equipment undercuts the market and diminishes the reputation of solar
- High up-front costs and long repayment times for low-income consumers
- High costs of marketing, distribution and after-service in remote counties
- Lack of finance for hiring or training staff and inventory
- Delays and costs from customs clearance of solar component parts and appliances.

These challenges are surmountable. The Compact proposes the following actions, agreed by the Kenyan government and key stakeholders, to further “unlock” the household solar sector:

- Include small-scale and off-grid approaches in national policy and planning
- Implement and enforce existing regulations (e.g. duty and VAT exemption) and quality standards
- Improve supply chain finance to bridge credit gaps and expand to difficult markets
- Provide support for efficient appliances[1] and lighting associated with off-grid solar systems (including tax incentives)
- Foster stronger engagement at county level on awareness, planning and implementation
- Mainstream gender in energy projects and programmes

This report presents these challenges and proposed actions in more detail, and outlines the main implementing partners. DFID will lead the implementation, working in close coordination with the Ministry of Energy and Petroleum (MoEP) and alongside a core group of stakeholders who have endorsed the Compact and stand ready to contribute.

[1] See GOGLA/GIZ (2016) Catalogue PV Appliances for Micro Enterprises

2. Policy Compact Context

Energy Africa Access Campaign

Launched in October 2015, Energy Africa is a DFID-led initiative to accelerate the expansion of the household solar market in Africa, and help achieve universal energy access by 2030 instead of 2080 on current trends. It seeks to accomplish this by aligning supportive policy with co-ordinated donor support, to improve market conditions and increase investment. The Campaign grew out of DFID's longstanding commitment to energy access, and its multi-sector country-level development experience.

The Campaign is both global – in advocacy, programs and mobilizing stakeholder partners – and local, in 14 countries in Africa where DFID have a presence on the ground. This document conveys the results, process and learnings from its intervention in Kenya. It describes a voluntary agreement between the governments of Kenya and the UK, with endorsement from other key energy sector stakeholders, regarding the policy changes, and co-ordinated support to accelerate the development of the household solar market.

National overview

Kenya has an estimated population of 45 million people of which 75% live in rural areas. The Kenyan economy is market-based and characterised by liberalised external trade. The country is perceived as the eastern African financial, industrial and communications hub. It had a GDP growth of 5.6% in 2015, led by strong foreign direct investments. Kenya has a private sector that has evolved under relatively friendly investment policies, relative political stability (see section 3) and a growing middle class. Kenyan GDP was $61 billion in 2014, the 72nd largest economy worldwide and the largest in East Africa.

In 2010, Kenya ratified a new constitution that introduced a devolved governance structure. It gives new authority to the 47 Counties and budget allocation to support it. Although energy sector governance remains centralised, some counties have established energy programmes and positions. This is a sign that the local governments recognise energy as important for stimulating sustainable human development and eradicating extreme poverty.

Kenyan energy sector

Electricity access. The Kenyan government, through the Vision 2030 economic and social development blueprint, has recognised universal electricity access as key to transforming the country into a middle income economy by 2030. Kenya Power (the state utility) reported that as of June 2015, 3.6 million customers were connected to the grid (20%). Of these, 60% are concentrated in commercial centres and 7% in rural areas.

To achieve this progress, efforts have been made in developing the Last Mile (grid extension) program. This is led by the government with support from development agencies and targets connecting 70% of households by the end of 2017. But remote, off-grid homes might not be economically viable consumers for grid connection. These homes could be pico-solar or solar home system markets but are not being targeted for commercial product sales either. This is due to logistical or financing constraints for the distributor, lack of spending power, or for other reasons (as discussed in more depth in the Compact and Annexes).

Market trends. Kenya has one of the largest markets in Africa for small-scale solar PV. Given limited grid connectivity and high demand for lighting and phone charging, off-grid solutions such as solar home systems (SHS) and pico-solar have thrived in Kenya. Over-the-counter sales dominate the market. Lighting Africa has calculated approximately 2.7 million systems sold in total in the country with nearly 500,000 Lighting Africa verified pico systems sold in the Kenyan market in the first half of 2016 alone. Non-certified product sales mean that total figures are certainly much higher.

Lighting Africa estimates off-grid solar product penetration as 20-25% of the Kenyan population but more data is needed. For purposes of estimating a rate of "off-grid access" it is not yet possible to know what portion of solar consumers might be grid-connected (using pico/SHS as backup), might have more than one solar solution in the household, or might own a pico system that doesn't provide enough power as to be considered reliable energy access.

Innovative business models have emerged to address constraints around quality and up-front payments. Pay-As-You-Go market leader M-KOPA now serves more than 300,000 households. A local solar manufacturer / assembler (Solinc, formerly called Ubbink) supplies the lion's share of solar systems in the East African region. A number of the international Lighting Africa brands have offices in Nairobi (e.g. d.light, BBOXX, Greenlight Planet, etc.). The number of local companies active in the pico/SHS supply chain is in the thousands – a recent IFC Kenyan retail market "Deep Dive" study found that around 1,700 of 8,000 retailers surveyed were selling solar products.

Key features of the market include:

Fiscal incentives

- Historically favourable tax framework, with duty and VAT exemption for a range of solar products. There are ongoing challenges with implementation however, detailed below.
- Some market distortion is caused by uneven subsidies and product 'giveaways'

Financing

- Large investments announced in the last 18 months, signalling a positive shift in international investor perceptions about the sector
- High distribution and logistics costs to reach dispersed populations
- Difficulty accessing investment at early stages of company development
- Low-income, remote consumers present a difficult market for local companies.
- Innovations in micro-financing (including Pay-As-You-Go)

Consumer protection & job creation

- Sub-standard or counterfeit products and installations harm consumers and negatively affect consumer perception. Quality standards are in place, but implementation and enforcement remain challenging
- Training by leading technical and industry groups to create jobs and meet quality standards in product assembly, sales, installation and after-service.

3. Political environment & key stakeholders

Political environment

The current government is receptive to new approaches to off-grid electrification and is pro-private sector. However, the focus remains heavily on large on-grid power generation, both renewable (mainly geothermal and wind) and non-renewable (e.g. plans for a 1GW coal-fired power plant in Lamu). Around 12% of the country's power, both on-grid and isolated mini-grids, is diesel-fired. There are powerful interests in both of these carbon-intensive options.

The recently disbanded Independent Electoral Commission scheduled the next national elections for August 2017, which may impact Compact implementation in different ways:

- Delays in government action on the six Policy Actions due to distraction, risk aversion by government employees, uncertainty on budgetary or policy implications of either a new government or unrest during elections, etc. This could affect Policy Action 1 most prominently, if ratification of the (upcoming) National Electrification Strategy is held up;
- Inclination toward "populist" activities or declarations by candidates in a bid for votes, which might include pico / SHS giveaways, promises of grid extension or connections, or similar;
- Potential for protest-related and/or terrorist violence in the lead-up to elections, that may affect logistics to underserved counties, processing of imports in Mombasa, or other effects;
- Discrepancies between county-level and central government attitudes and pace on government actions – in particular in areas dominated by opposition supporters;
- Pre or post-election anti-Western (by government or other) or pro-transparency rhetoric (by development partners) that could influence donor funding, government willingness to implement the actions and/or general market confidence;
- Slowdown or reluctance to make commitments on the part of foreign and local investors.

These considerations aside, there is no major *policy* change anticipated for the energy sector regardless of who wins the election. It is not clear when passage of the draft National Energy Policy[2] will occur.

With respect to Policy Action 4 – the continuation of duty and VAT exemption on solar and component parts, as well as new exemption for appliances powered exclusively by solar – this requires engagement at national level with the East African Community (EAC) Customs Unit and as such deliberations within the Secretariat. EAC Partner State relations have not been entirely smooth, with some economic tensions in particular between Tanzania and Kenya. The impact of EAC relationships on duty decisions is not clear but will need to be managed carefully.

[2] The draft National Energy Policy (2016) establishes renewable energy and rural electrification targets and priorities, including to "promote installation of at least 100,000 units of solar PV home solar systems by 2017."

Key stakeholders

The Ministry of Energy and Petroleum (MoEP) is the lead institution for energy policy development and planning. It also provides guidance and policy on implementation of the national energy plan. MoEP is a traditional organisation, in which petroleum and electricity dominate the structure.

A list of the stakeholders included in this process is attached, but several key groups are the most pivotal to this Compact and its implementation:

Affiliation	Institution	Role
National government	Ministry of Energy and Petroleum	Formulate energy policies and drive sector planning
	Energy Regulatory Commission	Regulate energy sub-sector and protect the interest of stakeholders
	Kenya Revenue Authority	Tax collection on solar products
	Kenya Bureau of Standards	Provide minimum requirements for solar PV products. Testing and certification
	Ministry of Education, Science and Technology	Curriculum development
	Ministry of EAC, Labour and Social Protection	Lead Kenya's integration to EAC
	National Industrial Training Authority	Industrial training and certification
County government	County governments	Energy planning and development within their jurisdictions
	Council of Governors	Platform for consultation among leaders of the 47 counties
Private sector / industry association	Kenya Renewable Energy Association	Voluntary accreditation of solar products, services, engineers and technicians Training, marketing support to the sector
	Kenya Private Sector Association	Provide an enabling environment for investment in the Kenyan energy sector
	Global Off-grid Lighting Association (GOGLA)	Global industry association (not for profit)
Development partners	DFID, World Bank, IFC Lighting Africa, GIZ, AFD, USAID Power Africa. A list of relevant programmes is provided in Annex 2 of the Compact.	

4. Policy compact goals

Key considerations in the implementation of the Compact policy actions are:

- **Need for clear signals to the market.** The Kenyan regulatory framework has been widely supportive of market growth for household solar products. This is evidenced, in part, by the much larger market in Kenya than in most neighbouring countries. But government must set out how it sees the sector contributing to national objectives particularly on job creation, electricity access, climate change mitigation and economic growth.
- **Attention to gender impacts**. The household lighting sector has disproportionate impact on – and potential roles for – women. It is essential to set clear gender-disaggregated targets, consider the language of policy carefully, and make sure all stakeholders are educated on gender issues related to household lighting (and electricity more generally).
- **Recognition of cross-cutting issues.** Household solar overlaps a range of sectors, and Policy Actions should integrate important linkages. These include, for example: environmental issues (electronic waste, biomass and kerosene use, transport efficiency); job creation (within the supply chain and also through increased economic opportunity at the household level); climate change (mitigation and adaptation); education (children gaining access to night-time lighting for studies); health (reduced indoor air pollution from traditional lighting sources).

Policy framework

Policy Action (PA) 1 involves the explicit recognition of off-grid products in national energy access and rural electrification planning[2]. The logical avenue for high-level guidance on this would be the forthcoming National Electrification Strategy, being developed by the US National Rural Electric Cooperative Association (NRECA) with funding from the World Bank (WB). Alignment of the draft Rural Electrification Strategy will also be important, to harmonise the two strategic documents.

Early stage discussions have included the need to address the national definition of “energy access,” as it is now agreed that the term connotes more than just a grid connection. A “tiered” approach, aligned to the World Bank’s Multi-tier Framework (MTF), will draw on existing data from the Kenya National Bureau of Statistics (KNBS) and a new geospatial plan (also WB supported) that will enable granular-level mapping of the economic limits of grid extension and areas for mini-grid or smaller-scale solutions.

It is significant that the Government of Kenya recognises pico and SHS solutions as part of a tiered approach to achieving national energy access objectives. This is because the promise of grid connection remains available as a political tool – a grid connection is vastly preferred by consumers. The notion that not all people can have a grid connection (ever) has yet to be acknowledged. Pico and SHS could be portrayed to policy-makers and the public as an “interim” solution (until the grid arrives – or something equivalent, such as a community mini-grid) or as viable alternatives to the grid and this needs careful management. We assume that the upcoming mini-grid regulatory framework will be aligned to the tier-based electrification approach.

In addition, the practice of “layering” energy solutions within a household, with multiple lighting sources used simultaneously or in tandem to each other, and even grid-connected consumers opting for off-grid solar products to minimise grid power purchases, should be recognised. These consumers – the “under-electrified” – though not the neediest, comprise a portion of the current and potential market that shouldn’t be ignored.

All policy documents should be stakeholder reviewed for potential gender bias and should include clear gender-disaggregated targets. The National Electrification Strategy and other planning documents should overtly acknowledge – with targets if possible – the impact of SHS / pico-solar on job creation and environmental sustainability.

Expected impact: Remove policy uncertainty with clear signals to the market that government sees a growth in the market for small-scale solar, and an increased number of households with access to these products, as not only *aligned with* but fundamentally *contributing to* national energy access objectives. This will pave the way for supportive regulatory and investment actions by other actors.

PA 2 acknowledges the role county-level actors and planning can play in supporting markets for household solar as part of their objectives to increase Tier 1 and 2[3] energy access. The Kenyan Constitution devolves some energy planning to the County level, but to date little has been implemented due to lack of local capacity and budget allocation. The focus for county officials in energy planning remains generally focused on institutional electrification and land allocation issues.

Central government should set clear guidelines, accompanied by budgetary support and capacity building, for activities counties can take to support the private sector to build markets in these areas (especially in the 14 underserved counties, but also in urban areas existing strongholds for solar where a higher level of penetration may be possible).

County level activities may include:

- Inclusion of household solar in County Energy Plans (CEPs). Development of CEPs has begun, and GIZ is now funding preparation of a framework for the remaining ones. This framework should address household energy needs, awareness and potential solutions.
- Clarification of energy responsibilities and roles at the county level, such as who is responsible for energy issues (earmarked position, or within a broader professional role), and extent of their authority in terms of programme design and budget. Currently the responsibility for energy differs from county to county (e.g. Nyeri County: Energy Executive, Marsabit County: Executive Energy and Urban Development, and Tharaka Nithi: a Chief Officer of Physical Planning, Energy and Land).
- Measurement of electrification status and market development, to provide data both to government (for better planning) and commercial actors (as market information to guide their business strategy).
- Activation of Constituency Development Funds for energy access efforts that target household access as well as institutional objectives. This may include consumer awareness, technical training and solar curriculum. As outlined above regarding both county remit and the national approach to giveaways and market distortion, CDF funds should only be allocated for public-good support that benefits all players.

It is very important to define the remit and boundaries of county government involvement in these markets (including that of the Governor and MPs representing the county). For example, most rural electrification is focused on institutional energy systems for schools, clinics, etc. County governments, in order to avoid market distortion, should not be involved in subsidy or "giveaways" of pico and SHS to households. Rather they should take other market-wide support roles (ideally on the demand side), such as awareness, technical training, consumer complaints or protection, and standards enforcement. This is a major consideration, particularly during an election cycle.

[3] World Bank (2015) Beyond Connections: Energy Access Redefined (ESMAP Technical Report 008/15)

Expected impact: Enable geographically targeted support to the market. This is particularly helpful in Kenya where the disparities in energy access, technical capacity and product awareness between centrally-located (Rift Valley and Mombasa) and remote populations are significant and can be difficult to remedy through centralised solutions. May enable impacts on end-of-life recycling, consumer awareness, enforcement of quality standards, supply chain financing, consumer financing or other.

Addressing fiscal barriers

PA 3 >> Designation of an independent mechanism for registering complaints around market conditions seeks to provide an avenue for market players to raise objections to the market distorting and/or contradictory actions (whether by government or other actors) that inadvertently disrupt growth of small-scale solar markets.

The Kenyan household solar market, though commercially viable, has not yet reached full "maturity" to meet demands of all potential consumers. It also represents the intersection of a public good (ensuring electricity access for the population) with a private good (building commercial markets for fast moving consumer products) where the balance between "soft" money and public support must be managed carefully, allowing market actors to compete fairly.

A topical issue is market distortion caused by uneven subsidies and product 'giveaways'. Subsidy comes in many forms, but perhaps the most imbalanced is the grant or concessional loan funding offered by donors or multilaterals. Access to such support typically involves onerous application and eligibility processes that smaller companies cannot afford or are not aware of. This is an unfortunate consequence of funds that are well-intentioned and meant to boost market competitiveness. Eliminating such funding may not be desirable; rather encouraging "declaration" of soft money by recipients, targeting funds through performance- or results-based initiatives, or more streamlined application procedures, or other "equalising" adjustments[1].

Related to the above, and perhaps more extreme, are cases of NGOs / companies / individuals giving away solar products for free. A particularly sensitive case of this arose with the announcement in 2015[1] by SkyPower that they would be distributing two million solar home kits to needy Kenyan homes. To this date the progress of that deal, to be apparently brokered through Plan International, is not clear.

Expected impact: Level playing field. This mechanism could (should) function alongside other Coordinated Support to the Market to mitigate any egregious imbalances in (official or de facto) subsidy. It remains to be determined what authority this new mechanism would have, and as such how much direct impact it would have versus serving more as an information tool for market players.

PA 4 >> Continue VAT and duty exemption on all solar PV products. Clarify and promote exemption for balance of system component parts and selected off-grid appropriate DC and high efficiency appliances. This action acknowledges the historically favourable taxation framework for small-scale solar in Kenya. It addresses challenges solar companies are facing from a lack of clarity and consistency at customs. This could cut delays and demurrage costs at point of import, by making clear which components of a "solar PV system" qualify for tax exemption.

The definition of a solar PV system should clearly include so-called "balance of system" (BoS) parts. This is equipment that, together with the solar PV modules, comprises a functioning energy delivery system. Direct current (DC) or high efficiency appliances should also be included as these are targeted to solar power users (who are likely to be off-grid). That some of the BoS parts are not "exclusively" designed for use with solar PV power generation equipment is at the heart of the

issue. KRA has interpreted the regulation conservatively, issuing exemption on BoS parts inconsistently, and usually only when they arrive into customs as a pre-assembled “kit” rather than as separate components. The import of solar-powered appliances such as TVs or refrigerators has remained difficult: solar companies point out the *de facto* exclusivity of these products for use with solar PV, as they cost more than grid-connect (AC) appliances so consumers would not rationally choose the solar-powered one unless actually using solar power. On this matter KRA has erred on the side of caution, arguably stifling markets for solar-powered appliances.

In terms of regulations, the issue has two facets:

- Revised language in the 2016 amendment to the EAC Customs Management Act that changes the original duty exemption from “specialised solar equipment and accessories including deep cycle batteries which exclusively use and/or store solar power“ to “specialised equipment for development and generation of solar and wind energy, including accessories and deep cycle batteries which use and/or store solar power.” In this latest revision, which further removes “spare parts” from the exempted items, the emphasis is on eligibility only of equipment involved with development and generation of solar power. An April 2016 clarification from the EAC Customs Director reaffirms this interpretation, leaving all distribution, transmission and end use products presumably not eligible for exemption. The EAC decisions technically affects duty only, but if VAT status is set in alignment to duty status, these changes will pose a significant new cost to solar companies and end users.
- The current wording of the Kenyan VAT Act regarding solar VAT exemption is not clear regarding what equipment is eligible, and as a result its implementation has been inconsistent at customs. This results in very costly delays and serves as a deterrent to these companies’ importing unfamiliar or new equipment.

The KRA and KEPSA / KEREA have engaged productively on this issue. This is because the revenue authority seeks to maintain revenues and enforce tax rules, while solar importers are concerned with unpredictable or uneven enforcement that causes costly delays (from demurrage charges) or even complete avoidance of importing “unfamiliar” new solar-related equipment that companies fear may hold up shipments from coming through customs.

One avenue will be to create a “fast-track” importation and customs-clearing process for approved products that allows importers to avoid demurrage charges and moral hazard situations. More important in the near term is to ensure VAT and import duty exemption for all solar power generation, distribution and end-use equipment. The VAT Act Amendment is before Parliament; action on this is a high priority.

Expected impact: Affordability for the poorest, and, when tax benefits are linked to quality compliance, this could also impact the quality of solar products available to the consumer (enhancing consumer protection, mitigating market spoilage).

Note: duty exemption is primarily a supranational issue, as per the commitments of Kenya to the East African Community (EAC). The specific course of action for Kenya in pursuing duty exemption for a wider range of products must be discussed with Treasury, KRA and the Ministry of Labour & EAC Affairs. So lobbying and awareness efforts must include the Kenyan government to obtain buy-in (which cannot be assumed) and then within the EAC Customs Unit, the latter engagement to be led, of course, by the Kenyan government.

Consumer protection & awareness

PA 5, to allocate budget to empower the Kenya Bureau of Standards (KEBS) and Kenya Revenue Authority (KRA) on standards monitoring. This acknowledges that standards for small-scale solar products are in place in Kenya, but sub-standard or counterfeit products and installations persist, risking consumer harm and negative perceptions of solar.

Nationwide enforcement is expensive and manpower-intensive. But if funded in conjunction with positive incentives for compliant companies and discerning (solar-educated) consumers, it will help mitigate the most damaging quality issues facing the market.

Current quality control points are prior to export from the originating country and at Kenyan customs. Ideas include: training customs officials to better recognise counterfeits or low-quality imports, better tracking software, random checks by county-level officials, dialogue between KEBS, KRA and importers and retailers, and others. Engagement from the Kenya Private Sector Association (KEPSA) and Kenya Renewable Energy Association (KEREA) would be valuable.

Expected impact: Consumer protection and market protection. Recent discussions with KEPSA and KEREA have helped pinpoint import bottlenecks and some support needs may already be identified within KRA and KEBS. Positive (consumer demand) must be balanced with negative (command and control) incentives to avoid heavy-handedness and minimise the burden on already stretched parastatal agencies. Coordinated Support on consumer awareness is an essential counterpart, being equally important and less demanding of valuable government resources.

Capacity building

PA 6 addresses the relevance of **institutionalising training and capacity building for solar PV technicians** within the Kenyan technical educational system. Currently there are training programmes available, including through KEREA and some technical colleges. But the off-grid solar sub-sector in Kenya and the region requires a pool of skilled labour that is not yet widely available. This will become more important as markets grow. There has not been a comprehensive evaluation of the state of solar technical skills in the country and there is evidence of consumer dissatisfaction on the quality of solar installations. A long-term view on creating national capacity to build and maintain energy services will create jobs and make Kenya a regional leader.

This action proposes to:

- Allocate budget for incorporation of solar PV into the curriculum for electrical courses in public institutions, and following on this funding, to
- Build capacity of the 46 public Technical and Vocational Education and Training Institutions to offer this training, e.g. through training of trainer programmes and provision of demonstration equipment on-site.

It also recognises the specific opportunities and obstacles to women in this field, including with lack of access to training courses, social stigma, lack of funds for school fees – and seeks to build these in to educational programmes.

Expected impact: Consumer protection, mitigation of market spoilage, creation of a qualified workforce. Depending on its implementation, this Policy Action of course impacts more than the immediate pico / SHS technologies. It can address market capacity needs for larger solar systems, remote markets, local manufacture or assembly, business model understanding, other energy or associated (e.g. PAYG) technologies, local innovation, and more.

5. Support and accountability

Mobilisation of core support

The Compact development process has involved close engagement with approximately 20 stakeholders across government, industry, commercial players, donors and NGOs. During this time there was support for DFID's interest in having a leadership role in the household solar sub-sector.

At the Validation meeting DFID raised the possibility with participants that they co-sign the Compact or otherwise indicate their endorsement of its key messages. This idea was well received, with the caveat that signatures be accompanied by clear language stating that support for DFID and the Compact objectives represents an endorsement in spirit and is not a promise of any financing or other mobilisation[4].

At several points during the Compact development we requested from donors more detail regarding the alignment of their existing and planned programming with actions outlined in the Compact. The idea was initially to provide a "match-making" table outlining specific programmes that would take up specific activities. This was not taken up and indeed even at the Validation meeting it was very clear that obtaining commitment to undertake the Coordinated Support actions is a much longer process of negotiation and cannot be accomplished in the Compact timeframe. The designation of a "Donor Lead" to provide leadership on key areas for support was also left as a placeholder, in so much as this was designated by the Consultant and nominally acknowledged by donor representatives but not formalised (such as to outline what specific tasks this Donor Lead would have responsibility for) in any way.

It is our assessment that because the Kenyan market is much more mature than others in the Energy Africa initiative, and as such the range of donor activities planned or already underway is varied, the issue of donor coordination can be described but not fully designated without further discussion. A list of existing and planned donor programmes is included in the Compact Annex 2. As part of their signed endorsement of the Compact, key development partners have indicated their commitment to coordinating support and will delineate in more detail an implementation plan that minimises duplication and maximises resources over the coming months.

Annex 2 of the Compact identifies the core stakeholders on whose shoulders it will fall to implement the Compact, and also lists (and categorises) the major donor initiatives under which specific support might be achieved (e.g. GIZ's EnDev, or USAID's Power Africa Beyond the Grid).

Accountability for progress

This Compact has been developed under the leadership of the Ministry of Energy and Petroleum, through collaboration with the private sector, core energy sector donors and NGOs, and with the support of DFID. The Champions of this Compact (DFID Head of Office and Permanent Secretary, Ministry of Energy and Petroleum) have agreed to meet quarterly to review progress and take necessary actions. The signatories to this Compact agree to meet annually.

[4] The language of this commitment proposed by Power Africa is "While we recognise this Compact is not legally binding, our endorsement and those supporting it creates no legal obligations on us or them, and that any participation in this Compact by us or our supporters does not create or indicate any future financial commitment, we hope that by working together, we can move the household solar sector forward for the benefit of all Kenyans."

Whereby DFID will act as Compact Champion, the core donors listed in Annex 2 will also have some role to play in monitoring and accounting for progress – the more exact nature of this contribution is to be determined as implementation modalities are fleshed out. It may be that setting indicators for each category (i.e. policy, supply chain financing) and having a Task Lead of sorts, reporting in to DFID, could work. Further discussion is needed.

6. Lessons learned

Seek early stage and high level buy-in from Government. The Permanent Secretary did attend the Inception Meeting, but the Compact process has been managed by the Director of Renewable Energy, who was out of the country for much of the process and could unfortunately not attend the final “validation” meeting.

This is not very unusual in such joint initiatives within the sector; somewhat less so when major private sector operators are involved – but offers an indication of the relative importance government attitudes to off-grid solar markets in the larger scheme of rural electrification.

It is our recommendation that a critical part of the carry-on / interim activities post-Compact be presentation of the document at highest levels, and solicitation of practical “buy-in” (a Champion within government at the very least) such that bureaucrats within MoEP, ERC and other agencies can feel comfortable moving forward on the actions.

Clearly define the Compact mandate. It became clear during the course of our stakeholder consultations that further explanation was needed regarding the intended mandate and scope of the Compact.

The Consultants were asked to clarify the legal weight of the document (non-binding); the degree to which it was meant to be “high level” or “operational” (somewhere between the two); the timeframe and resources allocated for implementation (not known); the justification for focus on stand-alone systems (not addressed); and whether it would seek to address the “enabling environment” or directly finance any investments (potentially both).

At the validation meeting, stakeholders questioned the utility of listing potential actions to support the market – such that what began as a “longlist” within the Compact itself was moved to the Annex, with the agreement that it is beyond the scope of the document to expressly designate the market support actions for each donor or identify which exact funding programmes or mechanisms could be used. This is quite sensible in the context of the Compact development process but is a deviation from how it was structured at the outset.

ANNEX A: Stakeholders consulted

N^{O}	ORGANISATION	CONTACT NAME	Inception Meeting	Validation Meeting	Interview / document input
1	KEPSA	Bernard Osawa	Attended	Attended	Requested
2	KEREA	Charles Muchunku	Attended	Attended	Yes
3	IFC	Arthur Itotia Njagi	Attended	Attended	Yes
4	IFC	Nana Nuamoah Asamoah	Attended	Invited	Yes
5	GIZ	Jasmin Fraatz	Invited	Attended	Yes
6	GIZ	Pierre Telep	Attended		
7	USAID/Power Africa	Caroline Barreto		Attended	Yes
8	USAID/Power Africa	Tchouate Pepin		Attended	
9	DFID-BHC	Tony Gardner	Attended		
10	DFID-BHC	Sabita Thapa	Attended	Attended	Yes
11	DFID-BHC	Elizabeth Mwihaki	Attended	Attended	
12	MOEP	Mungai Kihara	Attended		
13	REA	Eng. James Murithi			
14	ERC	Pavel Oimeke			
15	MOEP	Eng. Isaac Kiva	*	Invited	Yes
16	MOEP	Samson Kasanga	Attended	Attended	
17	MOEP	Esther Wang'ombe	Attended		
18	MOEP	Simon Kariuki		Attended	
19	STARK +TA	Deborah Murphy	Attended		
20	DAI/STARK+TA	Noelle O'Brien	Attended		
21	AFD	Arthur Honore	Attended	Invited	Yes
22	KPLC	Henry Kapsowe	Attended		
23	GVEP International	Juliette Page	Attended		
24	GVEP International	James Maillu	Attended		
25	UKTI-BHC	Caroline Gesami	Attended		
26	KAM	Jeff Murage		Invited	
27	KAM	Andrew Njoba		Attended	

N°	ORGANISATION	CONTACT NAME	Inception Meeting	Validation Meeting	Interview / document input
28	GOGLA	Johanna Diecker			Yes
29	GSMA	Brian Muthiora			Yes
30	Practical Action	Lydia Muchiri			Yes
31	SCODE	John Maina			Yes
32	WWF / SEAF	Philip Odhiambo			Yes
33	M-KOPA	Pauline Githugu			Yes
34	Angaza	Lindsay Caldwell			Yes
35	Sollatek	Natalie Balck			Yes
36	Solinc	Haijo Kuper			Yes
37	New Light Africa	Steve Andrews			Yes
38	Climate Care	Tom Morton			Yes
39 +	KEPSA / KRA workshop on taxation of solar equipment – spoke with or noted plenary comments from Chloride Exide, Harmonics, Solinc, Davis & Shirtliff, KenInvest, SunTransfer, Strathmore/CIC and various others.				