



Sierra Leone Energy Africa Compact

Further to the Energy Africa Partnership document signed between the UK and the Government of Sierra Leone on 22 October, 2015, the following document represents an agreement to implement joint action further to the Energy Africa campaign in Sierra Leone. This document is signed between the following Energy Africa partners:

- The Government of the Republic of Sierra Leone, represented by the Ministry of Energy
- The Government of the United Kingdom, represented by the Department for International Development – as the lead Energy Africa donor in the context of Sierra Leone

1. Introduction

The Energy Africa Campaign seeks 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 achieve this by aligning supportive policy with co-ordinated donor support, to improve market conditions and increase investment. This document represents a voluntary agreement between Energy Africa partners regarding the policy actions and co-ordinated support needed to accelerate the development of the household solar market in Sierra Leone. The purpose of this document is to outline the 1) Policy commitments and status of each, 2) Implementation requirements to achieve a rapidly growing private sector market, and 3) Coordinated support - already committed and remaining to be developed.

2. Executive Summary

The off-grid solar market and Sierra Leone's policies and enabling mechanisms are at such an early stage of development that actions to accelerate the market must be prioritized and sequenced. This Compact represents action on the most fundamental, urgent market barriers and enablers in the areas of policy framework, fiscal barriers, quality assurance and consumer protection, and initial steps to create consumer awareness. It represents a major progress since the Energy Africa Partnership was agreed on 22 October 2015, and should be viewed as a critical next step in a long term plan to accelerate the development of a vibrant, rapidly growing off-grid solar market that can deliver universal access to modern energy before 2030. Highlights of progress represented in this Compact include:

1) Bold Targets - Agreement to set and announce aspirational off-grid goals: Power for All by 2025 (5 years ahead of SDG7 and Energy Africa Access Campaign target 2030); and modern power to 1 million people by 2020. This will send a powerful market signal to the private sector and all other stakeholders.

2) Immediate Policy Action – Immediate permanent elimination of import duties on qualified internationally certified products; and agreement to adopt international quality standards for solar products to receive import duty exemption – both adopted by Parliament into law in March. Commitment to also eliminate by law sales taxes (GST) on quality certified products, to be ratified by

Parliament by amendment to existing law as soon as practical, together with other important administrative implementation mechanisms. Agreement through Cabinet level to Sierra Leone's first-ever Renewable Energy Policy, to be ratified by Parliament as soon as practical. These actions will convey to the private sector and other stakeholders the Government of Sierra Leone's seriousness in backing goals with action, and its commitment to doing its part.

3) Immediate Mobilization of Core Support – Immediate support to the most critical near-term actions, together with a commitment and plan to develop deeper and broader support among donor partners. DFID has mobilized immediate initial support through a) Power for All (advocacy, communication and overall engagement and progress monitoring); b) SOBA (early market development support – market diagnostic, pilots with private sector distributors, support for the Energy Revolution conference); c) Technical Assistance to the Government to help implement the policy actions; d) “Finance Readiness” support to business and to increase the number of solar companies in Sierra Leone. DFID Sierra Leone is providing leadership to 1) engage other partners, including at least the US and EU; and 2) adapt centrally approved support programs (ACE, TEA) to Sierra Leone, once these are concluded in 2016.

4) Establishment of a Private Sector Partner to Government – Immediate formation of Sierra Leone's first-ever private sector trade and industry association – the Renewable Energy Association of Sierra Leone (REASL). This new group was formed in February as a result of Power for All leadership alongside the Compact process, establishing a critically important partner for Government and other stakeholders, without which implementation would be more difficult and progress toward goal achievement slower.

5) Development of a Longer Range Rural Electrification and Market Development Framework – Development of an initial draft of how Sierra Leone could take further steps to achieve Energy Africa Access campaign purpose to accelerate the expansion of the household solar market in Africa, and help achieve universal energy access sooner. This represents an initial “road map” for moving forward beyond this Compact, and has the early support of private sector stakeholders. More is required to develop this “road map” into an action plan, and develop the needed support, but provides an initial framework for post-Compact action.

Support and Review - This Compact has been developed under the leadership of the Ministry of Energy, through collaboration with the energy private sector and NGO's, important involvement by the Ministry of Finance and Economic Development and the Environmental Protection Agency, other Ministries, Departments and Agencies, and with the support of DFID. The Champions of this Compact (DFID Head of Office and Permanent Secretary, Ministry of Energy) have agreed to meet quarterly to review progress and take necessary actions. The signatories to this Compact agree to meet annually. The Power for All campaign team have agreed to monitor progress across the many stakeholders involved in follow-up implementation and to be a focal point for engagement and communication.

3. The Sierra Leone Context

Sierra Leone has a population of approximately 7 million people, of which less than 10% have access to the electricity grid – access is ~12% in grid-served areas and <2% in rural areas. Secondary cities, towns and rural areas not served by the grid are essentially un-electrified and must resort to self-generation ranging from low quality individual torches and kerosene lanterns to diesel generators. While ambitious targets have been set and action is accelerating to boost grid generation capacity and extend the reach of the grid, there remains a significant need and opportunity to scale up energy access quickly in the country via off-grid household solar power systems. There is a nascent private sector off-grid solar market, including small local distributors of three high quality international suppliers (Azuri, BBOX and d.light). To date, market penetration of off-grid solutions is less than 1% of households.

4. Existing Policy, Strategies and Plans

The primary guiding policy, strategies and plans are:

- **Sierra Leone National Energy Policy (NEP, 2009)**, which includes a renewable energy framework;
- **Sierra Leone National Energy Strategic Plan (September, 2009)**, which:
 - Lays out a strategic plan for the implementation of the Energy Policy;
 - Sets as its second objective to increase access to modern energy supplies for poverty reduction in off-grid areas;
 - Prioritizes small-scale decentralized solar power supplies to meet the basic needs of lighting, refrigeration and media and information technology in rural areas;
 - Calls for the development of a strategy, plan and mechanisms for rural electrification.
- **National Renewable Energy Policy of Sierra Leone (NREP, in final Draft)**, which:
 - Clarifies and extends the 2009 National Energy Policy and Strategic Plan with goals, policies, and extensive measures for solar and other forms of renewable energy.

Other relevant policy frameworks and agreements include:

- **SE4ALL Action Agenda (2015)** – which:
 - Sets objectives and strategies on access, energy efficiency and generating capacity
 - Identifies \$2B financing requirement – E120m/year - E40-60m/year for access
- **Economic Community of West African States (ECOWAS)** initiatives (2012 onward), including:
 - The ECOWAS Renewable Energy Policy (EREP) and the ECOWAS Energy Efficiency Policy (EEEP) (2012-2013), which include minimum targets and scenarios for renewable energy (RE) and energy efficiency (EE);
 - Notably, the ECOWAS Renewable Energy Policy (EREP) has set a target of promoting 60,000 mini-grids and 2.6 million stand-alone systems across the region by 2020, at a total cost of €13.6 billion to serve 71.4 million people.
- **EU Joint Declaration with Sierra Leone (May 2015)**, which reinforces:
 - Political ownership for energy policy by the Government of Sierra Leone, and
 - EU commitment to strengthening cooperation and support in energy.
 - EU ElectriFI and other EU mechanisms for potential technical and financial assistance

5. Compact Policy Actions

Based on analysis commissioned for the Energy Africa campaign, market consultation and discussions with over two dozen energy sector stakeholders, the following are the policy actions which the Government of Sierra Leone volunteers to take to accelerate the country's household solar market.

Issue	Situation	Action
<p>1 Policy Framework</p>	<p>Government has set grid-connection targets but has not yet set long term goals for off-grid electricity access.</p> <p>A number of policy uncertainties exist in importing products and in quality standards.</p> <p>These policies had been enacted as <i>temporary waivers</i>, requiring action and leaving room for interpretation by ministries, departments and agencies (MDA's), rather than embodying them in law, which would remove ambiguity and mandate their implementation.</p> <p>No comprehensive policy framework or guidance has yet been established for renewables, solar, or household solar.</p>	<p>I. Establish and announce off-grid goals capable of sending a clear market growth opportunity signal:</p> <ol style="list-style-type: none"> 1. Power for All by 2025; 2. Modern Power to 1 Million People by 2020 <p>II. The 2016 Sierra Leone Finance Act made into law:</p> <ol style="list-style-type: none"> 1. Permanent elimination of import duties for <i>qualifying</i> solar equipment 2. Requirement that products to meet IEC global quality standards in order to qualify for tax-free status (harmonized with IFC/World Bank Lighting Africa/Lighting Global standards) <p>III. The Government of Sierra Leone intends to add to the 2016 Finance Act, and seek ratification by Parliament of the amended Act:</p> <ol style="list-style-type: none"> 1. Eliminate GST sales taxes on sale of quality certified solar products; 2. Mandate the Ministry of Energy to establish and maintain the list of qualifying products; 3. Implement tax-free status with customs and port officials to enable expedited "green lane" importation for qualifying products <p>IV. National Renewable Energy Policy of Sierra Leone (NREP) has been developed, approved by Cabinet and expected to be ratified by Parliament in 2016. NREP clarifies and extends the country's 2009 National Energy Policy, with goals, policies, and measures for solar and other forms of renewable energy. NREP fully incorporates the household solar sub-sector into the National Energy Policy, and commits the Government of Sierra Leone to support the solar sector and the household solar sector (Solar Section 6.3, pp 28-29).</p> <p>NREP addresses gender issues in "Gender, Children and Energy" (Section 5.16, pages 21-22).</p> <p>NREP will harmonise with ECOWAS/ECREEE and be implemented through a National Renewable Energy Action Plan (NREAP) of Sierra Leone.</p>

<p>Protection of Environment and Rights</p>	<p>While broadly good for the environment there is ambiguity around Solar investment and ownership of environmental attributes</p>	<p>V. The Government of Sierra Leone intends to take further action in the future to further clarify, simplify and streamline policies and regulations for other forms of on-grid and off-grid renewable energy, and to clarify roles of responsible units of government. These will include such steps as standardization and simplification of utility-scale on-grid Power Purchase Agreements (PPAs), mini-grid concession terms for mini-grids, and other enabling actions. These actions will be taken in a way that acknowledges and seeks to avoid uncertainty for early market participants.</p> <p>The parties shall insure that investment activity to grow the household solar market complies with the environmental laws of Sierra Leone and is undertaken in a manner sensitive to environmental concerns. This could include the establishment of end-of-life and recycling policies and/or programs with clearly established roles and responsibilities between the private sector and Government.</p> <p>The parties agree that all environmental attributes – rights, credits, benefits, emissions reduction offsets and allowances resulting from this program to accelerate the household solar sector shall remain the property of the Government of Sierra Leone.</p>
<p>2. Fiscal Barriers</p>	<p>High and inconsistently applied import duties and sales taxes on solar products drive up costs, complexity and uncertainty for distributors and raise prices for very price-sensitive end-users</p>	<p>The Government of Sierra Leone has by law eliminated fiscal barriers to importing <i>quality certified</i> solar products through measures incorporated in the 2016 Finance Bill (described above) ratified by Parliament in March. The government intends to also eliminate sales taxes (GST) by law on sale of <i>quality certified</i> solar products and mandate clear implementation responsibilities to the Ministry of Energy.</p>
<p>3 Consumer Protection and Quality Assurance</p>	<p>Standards for household PV products are not well clarified and guidelines on how they should be interpreted are absent. The quality reputation of solar is mixed. The influx of low quality products and counterfeits is</p>	<p>The Government of Sierra Leone will use International Electrotechnical Commission (IEC) global quality standards (which incorporate Lighting Africa/Lighting Global standards) as the basis for duty-free/tax-free status. The Sierra Leone Bureau of Standards will officially adopt these standards.</p> <p>The Ministry of Energy will work with the newly formed Renewable Energy Association of Sierra Leone (REASL) as the representative of the private sector to:</p>

	<p>putting consumer protection and sustainable market development at risk.</p>	<p>Establish a list of products, equipment and appliances that meet IEC global quality standards, including simplified registration and reporting procedures for solar companies to receive tax-free status.</p> <p>Determine what additional steps can be taken to further reduce low quality imports and reduce or eliminate counterfeit products from being imported.</p> <p>Determine what else REASL can do to support quality and distinguish their members from low quality products and counterfeits. This could include REASL adopting additional membership requirements, such as distributing and promoting only products that meet IEC standards, adopting minimum warranty periods and consumer-friendly warranty policies (free repair or replacement).</p>
4 Consumer Awareness	<p>Awareness for solar products and home systems is low. Quality perception is mixed. Retailers and consumers have no way to judge quality or differentiate high quality products from low quality products.</p>	<p>MoE and REASL will work with relevant partners to develop a consumer education and awareness campaign to help develop the household solar category as a superior, affordable alternative.</p> <p>This will be coordinated with and ultimately part of a plan for Coordinated Support to the Market as outlined below.</p>

6. Coordinated Support

The support which is necessary to accelerate the household solar market in Sierra Leone is in two halves, the support needed to implement the policy actions, as well as the support which the market players need in order to expand their activities and reach more consumers. Listed below are the immediate support by DFID to core near-term action. DFID also commits to 1) adapting pending ACE and TEA programs to support this initiative and 2) leading development of deeper and broader donor support.

A. Support to Policy Actions

Issue	Action	Support (Programme - Donor)
1 Policy Framework	<p>I. Establish and announce off-grid goals which send a clear market growth signal:</p> <ol style="list-style-type: none"> 1. Power for All by 2025; 2. Modern Power to 1 Million People by 2020 	<p>Assist the GoSL with communicating the goals and message to internal and external market actors</p> <p>Power for All – activated with DFID support</p>

II. The 2016 Sierra Leone Finance Act made into law:

3. Permanent elimination of import duties for *qualifying* solar equipment
4. Requirement that products to meet IEC global quality standards in order to qualify for tax-free status (harmonized with IFC/World Bank Lighting Africa/Lighting Global standards)

III. The Government of Sierra Leone intends to add to the 2016 Finance Act, and seek ratification by Parliament of the amended Act:

4. Eliminate GST sales taxes on sale of *quality certified* solar products;
5. Mandate the Ministry of Energy to establish and maintain the list of qualifying products;
6. Implement tax-free status with customs and port officials to enable expedited “green lane” importation for qualifying products

Establish a National Renewable Energy Policy of Sierra Leone

DFID to provide Technical Assistance to the Government of Sierra Leone to help implement the Policy Actions

DFID to provide Technical Assistance to the Government of Sierra Leone to help implement the Policy Actions

Approved by Cabinet, ratification by Parliament expected in 2016 – no immediate support needed

The Government of Sierra Leone intends to take further action in the future to further clarify, simplify and streamline policies and regulations for other forms of on-grid and off-grid renewable energy, and to clarify roles of responsible units of government. These will include such steps as standardization and simplification of utility-scale on-grid Power Purchase Agreements (PPAs), mini-grid concession terms for mini-grids, and other enabling actions. These actions will be taken in a way that acknowledges and seeks to avoid uncertainty for early market participants.

Provide technical assistance for a comprehensive, multi-year program to assist the Ministry of Energy to develop a cohesive, streamlined set of policies and regulations, and provide implementation support to insure changes and transitions successfully attract new market participants and do not disrupt early entrants.

The parties shall insure that investment activity to grow the household solar market complies with the environmental laws of Sierra Leone and is undertaken in a manner sensitive to environmental concerns.

DFID to provide Technical Assistance to the Government of Sierra Leone to help implement the Policy Actions

The parties agree that all environmental attributes – rights, credits, benefits, emissions reduction offsets and allowances resulting from this program to accelerate the household solar sector shall remain the property of the Government of Sierra Leone.

Same

2 Fiscal Barriers

II. The 2016 Sierra Leone Finance Act made into law:

1. Permanent elimination of import duties for *qualifying* solar equipment

Power for All to assist the GoSL with communicating the new duty and GST laws to all sector stakeholders

2. Requirement that products to meet IEC global quality standards in order to qualify for tax-free status (harmonized with IFC/World Bank Lighting Africa/Lighting Global standards)

See Consumer Protection and Quality Assurance below for further support

III. The Government of Sierra Leone intends to add to the 2016 Finance Act, and seek ratification by Parliament of the amended Act:

1. Eliminate GST sales taxes on sale of *quality certified* solar products;
2. Mandate the Ministry of Energy to establish and maintain the list of qualifying products;
3. Implement tax-free status with customs and port officials to enable expedited “green lane” importation for qualifying products

Power for All to assist the GoSL with communicating the new duty and GST laws to all sector stakeholders

Convene a sector Implementation Task Group led by REASL & Ministry of Energy, including energy, finance, customs, and port representatives to install and train on new procedures to insure expedited “green lane” status

DFID to provide Technical Assistance to support REASL and Ministry of Energy, if needed, with above

3 Consumer Protection and Quality Assurance

The Government of Sierra Leone will use International Electrotechnical Commission (IEC) global quality standards (which incorporate Lighting Africa/Lighting Global standards) as the basis for duty-free/tax-free status. The Sierra Leone Bureau of Standards will officially adopt these standards.

Implementation of import duty/GST laws does not require action by Sierra Leone Bureau of Standards.

Implementation Task Group to keep Bureau of Standards informed, and work with them to determine what steps are needed to “officially adopt” the new standards and define an appropriate role

The Ministry of Energy will work with the newly formed Renewable Energy Association of Sierra Leone (REASL) as the

REASL and Ministry of Energy to set up new registration and reporting procedures required of companies to qualify for “approved list” status

representative of the private sector to:

Establish a list of products, equipment and appliances that meet IEC global quality standards, including simplified registration and reporting procedures for solar companies to receive tax-free status.

Determine what additional steps can be taken to further reduce low quality imports and reduce or eliminate counterfeit products from being imported.

Determine what else REASL can do to support quality and distinguish their members from low quality products and counterfeits. This could include REASL adopting additional membership requirements, such as distributing and promoting only products that meet IEC standards, adopting minimum warranty periods and consumer-friendly warranty policies (free repair or replacement).

REASL and cross-cutting ministries, departments and agencies to determine what actions can be taken to close loopholes and scope to implement

REASL and Ministry of Energy to agree what else might be appropriate

DFID to provide Technical Assistance to support REASL and Ministry of Energy, if needed, with above

4 Consumer Awareness

MoE and REASL will work with relevant partners to develop a consumer education and awareness campaign to help develop the household solar category and accelerate adoption and energy access.

This will be coordinated with and ultimately part of a plan for Coordinated Support to the Market as outlined below.

Power for All will provide the Ministry of Energy, REASL and other relevant local partners with brand assets, support materials, training and support for the awareness campaign

Power for All staff in Sierra Leone will support the Ministry of Energy in convening REASL and other local partners to implement a Market Building Plan such as described below

B. Support to the Market

Listed below are the immediate support by DFID to core near-term action. DFID also commits to 1) adapting pending ACE and TEA programs to support this initiative and 2) leading development of deeper and broader donor support.

	Issue	Issue	Support (Programme - Donor)
5	Overall National Plan for Off-Grid Rural Electrification	Off-grid solar markets have proven to be slow to develop organically in the early stages. Without an overall National Plan and initiative to bring focus and attract resources, market is likely to grow unnecessarily slowly	<p>Support development and implementation of a government sponsored, private sector led National Off-Grid Electrification Program in Sierra Leone – latest draft attached as Annex</p> <p>Power for All to coordinate stakeholder engagement and coordination to develop National Off-Grid Electrification Program, with DFID support</p> <p>DFID to support the Paramount Chiefs workshop (April 2) and Energy Revolution Event (May 10) as the “kickoff” events for this Program and target private sector participation in both events</p> <p>Power for All and SOBA to set up matchmaking at April 2 and May 10 Energy Revolution events to develop 2016 pilots</p> <p>Follow up these events with trade missions between national and international firms and investors, encouraging co-operation.</p> <p>Implement through relevant partners as part of a private sector working group to deliver Sierra Leone’s off-grid electrification targets</p> <p>DFID to provide Technical Assistance to support above, if needed</p>
6	Number and Capacity of Private Sector Market Participants	Three global, high quality products are present in Sierra Leone (d.light, Azuri and BBOX) but are distributed by small companies with limited distribution and financing capabilities	<p>Includes as a top priority in National Off-Grid Electrification Program attracting 2-3 targeted new companies in key market segments</p> <p>Power for All to support REASL and Ministry of Energy in attracting private sector companies</p>

	Improved technical and business capacity within Sierra Leone firms will be essential to expand the market and ensure local jobs and benefits are created	SOBA to provide Technical Assistance for capacity building support to firms and developers, and support local skills development and training initiatives.
7	Availability of Financing	<p>Access to finance is critical but very limited; currency fluctuations pose a high risk for companies; high interest rates at commercial banks prohibit access to local finance</p> <p>Provide increased access to financing to firms participating in the National Off-Grid Electrification Program via a focused pilot program in Sierra Leone to support consumer lending and company working capital needs, including support on currency issues, as illustrated in National Off-Grid Electrification Program</p> <p>SOBA to support pilot development, and general company-level “finance readiness”</p> <p>DFID to provide support for above if needed</p> <p>DFID to also provide dedicated new Technical Assistance focused on developing solutions by finance providers and intermediaries to address access to financings</p>

7. Implementation

The following table indicates the expected implementation plan for the above actions and corresponding supports for the first 18 months of the agreement. Policy Actions are shown in dark green and donor support in light green:

	Action	Q1 '16	Q2 '16	Q3 '16	Q4 '16	Q1 '17	Q2 '17
1, 2	Eliminate fiscal barriers – enact laws via 2016 Finance Act and Amendment Implement beginning Q3 2016						

	Announce National Off-Grid Goals and Intention to develop National Off-Grid Electrification Program Begin development in Q3 2016						
1	Support development of a multi-year policy and regulatory development program to continue to improve enabling environment						
3	Adopt IEC/Lighting Global standards in Q3 2016 Support implementation of standards beginning Q4 2016						
4	Support delivery of market awareness campaign beginning Q3 2016						
5	Support Development and Implementation of National Off-Grid Electrification Program beginning Q3 2016						
6	Support attracting and building capacity of Private Sector Market Participants beginning Q3 2016						
7	Support Development of Target Solution for Availability of Financing to support National Off-Grid Electrification Program beginning Q3 2016						

8. Monitoring and Follow-Up

The Power for All team have agreed, in addition to their direct implementation responsibilities outlined above, to monitor overall progress across the stakeholders involved in implementation, and to be a focal point for engagement and communication.

The champions of this agreement in support of the signatories are:

- Sally Taylor, DFID Head of Office, Sierra Leone

- Zainab Buya-Kamara, Permanent Secretary, Ministry of Energy

The champions will receive monthly progress reports from the Power for All coordinator, and hold a quarterly meeting to discuss progress on this Compact.

The signatories or their representatives will meet annually beginning in May 2017 to assess progress, take necessary action and update this Compact if appropriate.

Signed

Date	Date
Amb. Henry O. Macauley Minister of Energy Government of the Republic of Sierra Leone	Nick Hurd Parliamentary Undersecretary of State for International Development UK Department for International Development (DFID)

Attachment I

Energy Africa Campaign Partnership Agreement



Henry Macauley
Minister of Energy
Government of Sierra Leone
Freetown, Sierra Leone

Grant Shapps MP
Minister of State
Department. for International Development
London, UK

22nd October 2015

Partnership in the Energy Africa Campaign

Two out of three people living in Africa do not have electricity in their homes. On the current trajectory it will take until 2080 to achieve universal electricity access on the continent – a whole lifetime for today's young Africans. The Global Goal 7 calls for action, to connect everyone by 2030.

A recent series of technological and market shifts in the household solar industry means it is now quicker and cheaper to bring electricity to homes right across Africa. We will work to encourage a booming solar industry in Africa, the foundations of which depend upon an enabling policy and regulatory environment. An expanded household solar market will complement efforts to expand large-scale, energy infrastructure – connecting people now while they wait for the grid to reach them.

With this letter the Government of Sierra Leone, represented by the Ministry of Energy, and the Government of the UK, represented by Department for International Development (DFID), commit to partnering in the Energy Africa campaign, as described in Annex 1.

Specifically, both parties agree to:

- Act as **champions** of action towards Global Goal 7 at home and internationally, providing attention and support to facilitate progress on unleashing the solar market.
- Develop an **Energy Africa Compact** between the Government of Sierra Leone and the donor partners in the campaign
- As part of the Compact, agree the **Policy Actions** needed to accelerate the household solar market, considering and adapting the policy options in Annex 2. These actions will recognise that national sovereignty is absolute and any and all policy decisions are ultimately the decision of the parliament and people of that country
- As part of the Compact, agree the **Co-ordinated Support** needed to deliver the Policy Actions, as well as support the market to expand and reach more people with quality electricity

services. Both parties will be responsible for encouraging other donors to join. The UK's commitments to the toolkit of support will depend on the relevant parliamentary processes.

- To commit to ministerial engagement throughout the implementation phase.

The senior officials on each side tasked with leading on the implementation of this partnership document are:

- Marshall Elliot, Head of Office, DFID Sierra Leone
- Zainab Buya-Kamara, Permanent Secretary of the Ministry of Energy of Sierra Leone/Director of Rural Electrification (Official Level Champion)

Achievement of the Global Goal 7 in Sierra Leone, and Africa more broadly, is essential to eliminating poverty and fostering sustainable and inclusive growth. The UK and Sierra Leone through partnership in Energy Africa, commit to work together towards this goal.

HENRY MACAULEY

GRANT SHAPPS

Annex 1

Energy Africa: *A campaign to accelerate the expansion of the household solar market in Africa, helping bring universal energy access in the continent forward from 2080 to 2030*

The problem

Two out of three people in sub-Saharan Africa (600 million) have no access to electricity at home, despite it being 150 years since Edison invented the lightbulb. On the current trajectory universal electricity access in Africa will not be achieved until 2080; the Global Goal 7 is for this goal to be met by 2030.

Without affordable and reliable electricity, social and economic development is dramatically stifled.

The opportunity

The decreasing cost of solar photovoltaic panels, improvements in battery technology and appliance efficiency, and the spread of mobile payment systems – have together created a new opportunity. While work must continue to expand and improve Africa's energy infrastructure, firms across Africa are proving that it is possible to provide instant essential electricity to homes via household solar systems, at less than the cost of kerosene.

The barriers to acceleration

The key question is how to transform a few hundred thousand installations so far into tens of millions. The key barriers are around the financing of companies which provide the systems and are paid back over time in micro-payments, ensuring that the policy and regulatory conditions are conducive to market expansion, and building the distribution systems which can reach the poorest with quality solar products.

The Approach

Together with African governments, donor partners, Power Africa, the African Development Bank, the African Union, private sector firms, NGOs and others, Energy Africa will generate the policy and market shifts necessary to overcome the barriers and rapidly accelerate growth in the African household solar industry.

The campaign will work towards **Energy Africa Compacts** in partner countries between governments and donor partners. The Compacts will include the Policy Actions required to foster development of the household solar sector, although they may be embedded in wider sector documents. The draft model list of **Policy Actions (Annex 2)** are based on industry consultation with the Global Off-Grid Lighting Association and on evidence from countries like Kenya and Tanzania, where solar has significantly taken off. The Compact will also include a commitment to **Co-ordinated Support (Annex 3)** from partner funders to assist in implementation. Support will also be available to help firms to expand and to encourage the development of new, innovative solar solutions.

Annex 2

Policy Options

Based on evidence from countries that have demonstrated success in scaling household solar, like Kenya and Bangladesh, and through consultation with the industry through the Global Off-Grid Lighting Association (GOGLA), Energy Africa has identified the following **DRAFT** list of key policy measures which can assist with creating a supportive enabling environment for solar solutions.

This list is not intended to be comprehensive and provides options to consider in the process towards the Energy Africa Compact. Each country will consider the most appropriate set of policy measures that can unlock the household solar market in that country.

1. **Remove policy uncertainty** by including market-based off-grid electrification as an integral part in any national electrification strategy, policy, regulation, or action plan
2. **Help to mobilize access to finance** across the supply chain in cooperation with financial institutions and other relevant funding bodies
3. **Facilitate the import of household solar related equipment** by removing fiscal and import barriers as appropriate to ease product introduction
4. **Protect consumers and hold solar system providers accountable** by adopting legal provisions setting out household solar consumer rights and protections
5. **Keep sub-standard products out and prevent market spoilage** by adopting, raising awareness about, and enforcing internationally harmonized quality standards
6. **Promote consumer awareness** for clean and high-quality energy access through educational campaigns, working constructively with NGOs, firms and campaigns
7. **Provide a level playing field** for the household solar sector to reduce market distorting policies, such as kerosene and diesel subsidies, as solar alternatives become available in the market
8. **Ease access to mobile payment mechanisms** as end-user financing tools and remove any obstacles to such transactions
9. **Create a qualified workforce for the sector** by co-operating with trade associations to develop vocational training and promote local business and technical skills

Annex 3

Co-ordinated Support

The following **DRAFT** list of support types and tools is available from existing or upcoming programmes, and is again based on industry consultation and review of the markets which have moved furthest fastest to date. This list is not intended to be comprehensive, but provides a framework to consult and build on in preparation of the Energy Africa Compacts:

1. **Legal and Technical Advice** - supporting governments on Policy reform and implementation
2. **Market information and data** – helping investors and firms understand and meet the need and opportunity
3. **Quality Assurance and standards** – creating a firm basis for market expansion and consumer protection
4. **Matchmaking and trade missions between national and international firms and investors** – both among African countries, as well as with donor countries, encouraging joint ventures, pooling of capabilities and resources, and building of capacity
5. **Transaction and Technical Advice to firms and developers** – helping firms refine technology and business models to meet market needs
6. **Startup and Feasibility/Innovation grants/loans** – to new businesses seeding innovation and helping overcome startup costs in early stage markets
7. **Working Capital Loan Facilities** – helping established and emerging firms to access the capital they need to grow and create the track record needed to attract commercial debt
8. **Guarantee Facilities** – able to support local banks lending to this sector in the absence of sufficient collateral
9. **Results-Based Financing (RBF) and Incentives** – temporary per customer incentives can help scale the market up without picking winners, and promote reach to the poorest consumer groups

As with the Policy Actions, the toolkit of support will be tailored to appropriately reflect the status of the market in each country, the regulatory environment and the players within it. Energy Africa seeks to draw together a coordinated set of market supports offered by the leading funders in this sector, which will vary from country to country.

Annex 2

Draft Sierra Leone National Off-Grid Electrification Program

Sierra Leone Goals: Power for All (100% population) by 2025; 1 million (15% population) by 2020

Challenge: How get global leading companies to bring top quality, affordable products to a small, difficult, poor West African country -- instead of larger, easier countries closer to where they currently do business? Make it easier, reduce the up-front cost and risk.

Solution: Build a small working group of private sector actors with aligned interests, to be part of a program to electrify off-grid Sierra Leone with global-standard high quality, affordable products:

Product Range – expand consumer choice of leading global companies in Sierra Leone that match off-grid customer needs and ability to pay in two key segments, by building capacity of existing companies and attracting new entrants:

- **Low Cost Lanterns** – support expansion of local d.light* distributor; attract at least one other high quality global company, such as Greenlight Planet.
- **Entry-Level Home Systems** – support expansion of local distributors of BBOX* and Azuri*; attract at least one other high quality company providing “turnkey” product, financing and distribution, such as M-Kopa, Off-Grid Electric, or Ignite Power

*Already present in limited areas through small independent distributors

Pay-As-You-Go Consumer Financing – make consumer loan financing an integral part of the market building program, to make the products affordable, without costly and market-undermining subsidy:

- **Attract and Engage Microfinance Company(ies)** – to provide loans to households for the purchase of lanterns – build on SOBA’s work to with microfinance providers to get at least one to partner with lantern distribution companies in Sierra Leone. Microfinance partner(s) may be able to provide own financing, or may need low cost, locally available financing in local currency.
- **Attract Turnkey entry level home solar power systems** – attract a company that already provides loans to households for the purchase of systems, and finances this as part of their “turnkey” business model. Leading companies include M-Kopa, Off-Grid Electric and Ignite Power. Of these three, M-Kopa and Off-Grid Electric are focused on East Africa; Ignite may be more practical to attract to Sierra Leone. Low cost financing, made locally available in local currency would enable much faster expansion in Sierra Leone
- **Build Local Company Capacity - BBOX, Azuri** – these high quality providers of entry level home solar power systems are already in limited areas of Sierra Leone through small local distributors. These local distributors provide consumer financing but capacity and finance are limited – engage SOBA to assist them with capacity building; additional low cost financing, made locally available in local currency will be needed to expand their customer base.

Mobile Money Payment Platform – to make payments easier for consumers and companies:

- Support SOBA’s initiative to engage local mobile network operators Africell and Airtel to implement their mobile payment platforms for pay-as-you-go home solar power systems
- Use current “agent-based” top up system until mobile payment available (scratch cards for mobile top-ups are not present in Sierra Leone)

Step 1: Design the Overall Market Building Program – Working Draft Below

A. Products, Consumer Financing and Distribution: Private Sector Companies

- **Lanterns** – plan to offer consumers a selection of 3-4 products from top quality global providers (such as Greenlight Planet and d.light), financed through a microfinance company, jointly sold and distributed by product companies (and/or their distributors) and the microfinance company. Leverage Barefoot College for talent development and training (recognizing need to separate their commercial and non-commercial functions)
- **Solar Home Systems** – Engage SOBA to support existing BBOX and Azuri distributors expand capacity for distribution; Leverage Barefoot College for talent development and training where practical; Ministry of Energy attract global company, such as M-Kopa, Off-Grid Electric or Ignite Power to bring turnkey integrated product, distribution and financing solution – to expand program household reach and mitigate risk

B. Logistics and Coordination Support: SLIEPA and REASL make it easier for companies

- **One Stop Service** – Handle government agencies, banking setup for companies (“cut and paste” Rwanda’s one-stop setup, and provide more downstream support)
- **Importation and Warehousing** – “Green Lane” importation to one program warehouse
- **Last Mile Delivery Logistics** – work with companies to find reliable, affordable delivery

C. Program Financing: Public Transitioning to Private from the Beginning

- Public financing during Year I – II – low cost loans, guarantees and grants to companies
- Commercial capital provider joins at outset to design what they would finance Year III onward
- Provide guarantees or other risk-mitigation to commercial lender from Year III to Year V

D. Manpower and Talent Development: Leverage Barefoot College for talent development and training where practical; engage SOBA to help companies build skilled, productive teams – in distribution, customer service

E. Program Rollout: Design coordinated rollout to achieve Power for All in every new rollout area

- **Demand Creation** – Coordinated three-part plan in every new rollout area:
 - **Consumer Awareness** – “Power for All” campaign branding and execution support
 - to consortium product and microfinance companies, and
 - through government and private rural communications channels
 - **Customer Education & Purchase** – coordinated by Product and Microfinance companies, executed 1:1 with customers in each rollout area – done in a way that
 - all customers can choose among the full range of product options in the program;

- operating cost and time of duplicated distribution systems are avoided;

Consider a Schools Program – to bring ultra-low cost study lights to rural students – currently being piloted by IBIS in Sierra Leone

- Limited Time Market-Wide Incentive – non-subsidy reason to trigger purchase during rollout period in each expansion area – a limited time added product/service value offer “Power for All Value Bundle” as part of “national GoSL-sponsored Power for All program”
- **Consumer Payment Collections** – managed by microfinance company, turnkey home solar systems providers, BBOX/Azuri distributors using their existing business models and systems
- **Product Supply Logistics** – managed area-by-area using a shared cost last mile delivery system
- **Utility Grid Coordination** – close coordination with grid expansion plans to achieve “Power for All” in grid rollout areas - insure maximum access, and off-grid solutions fill gaps where needed
- F. **Monitoring Results, Sharing Learnings and Success**: mechanisms for monitoring results, sharing learnings, and promoting Sierra Leone as 1st country to achieve “Power for All” in rollout areas

Step 2: Attract Private Sector and Public/DFI Financing Participation

- **Attract Two New Leading Product Companies – via Power for All - such as:**
 - Greenlight Planet – low cost lanterns
 - M-Kopa, Off-Grid Electric or Ignite Power – low cost entry level solar home systems
- **Attract One Microfinance Company – via SOBA:**
 - To provide consumer loans on lanterns
- **Attract Local Mobile Network Operator(s) Africell and Airtel – via SOBA:**
 - To adapt and install their mobile payment system in Sierra Leone
- **Attract Financing for the Program – via Technical Assistance Program:**
 - Low cost loans in local currency to microfinance, turnkey home solar power system providers, and existing BBOX/Azuri distributors – to enable affordable consumer financing, profitable to companies;
 - Offer guarantees in lieu of low cost loans where companies can provide capital but need risk mitigation to secure it;
 - Insist on consumer payment data during Year I-II as a condition of low cost loans – held confidentially - to enable early credit risk assessment and set stage for standardized credit decision and portfolio rating metrics by Year III
 - Create a small working group at outset consisting of commercial expansion lender, Year I-II public finance provider and company (Lendable) or expert in credit risk – to learn from early rollout areas and plan for private capital in Year III
 - Low cost working capital loans to product companies – to finance inventory;

- Grants to product and microfinance companies to help cover Year I operating expenses or other 1-time expenses needed to come to Sierra Leone
- **Ask Power for All to Provide Market-Wide Program Convening and Support – and Deliver on Awareness Campaign**
 - Identify and Recruit Local Program Manager
- **Ask SLIEPA and REASL to Organize Logistical and Coordination Support to Companies:**
 - Simplify product importation and logistics: one program warehouse and delivery
 - Coordinate as needed with government agencies and officials
 - Help with local manpower development and training program(s)
- **Work with SOBA, Power for All, REASL, SLIEPA and Private Sector to Identify Other Gaps to Fill**

