

Energy Africa Access Campaign Policy Compact Sierra Leone

Final Report



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Report Summary

The Energy Africa Campaign is a DFID-led initiative to accelerate the household solar market in Africa, and help achieve universal energy access by 2030. Policy Compacts – voluntary bilateral agreements between the UK and over a dozen partner countries - are an essential part of the Campaign. Sierra Leone is the first such Compact to be completed.

Sierra Leone is a small country in West Africa, one of the poorest in the world (ranked 151 of 188 in GDP, 183 of 187 in Human Development Index), and was in the epicentre of the Ebola crisis. Energy access is limited largely to the capital city, Freetown, delivered by a small and unprofitable central utility grid. Access is ~12% in grid-served areas and <2% in rural areas. A nascent private sector market for off-grid solutions has thus far served under 5% of a million household market. Sierra Leone is an especially challenging country in which to develop a Compact and focus market building effort, but also represents an example of what is possible.

On May 10th, Sierra Leone President Koroma announced the initial commitments of the Compact at a major national Energy Revolution event, sending an important signal to the private sector and others that the country is serious about off-grid solar and is doing its part:

Ambitious Off-Grid Targets:

- Modern power to 1 million people by 2020
- Power for All by 2025 (5 years ahead of SDG7 and Energy Africa target 2030);
- 50,000 homes with solar power in 2016 (growing from <1% to 5% of households)
- At least 250,000 homes by 2017 (~20% market penetration of households)

Immediate Policy Action - Quality Standards, Importation and Tax Barriers:

- Permanent elimination of import duties on only those solar products meeting international quality standards to be adopted - Parliament ratified into law in March.
- Commitment to also eliminate by law sales taxes (GST) on quality certified products.

New Industry Association – The Renewable Energy Association of Sierra Leone was formed and is now operational, a first for the country, creating an important new partner to government.

Long Range Rural Electrification and Market Development Framework – This Compact is just a start, so we developed a longer term market development plan with stakeholders.

Implementation, Support and Accountability – The Power for All campaign team has been mandated to coordinate implementation of Compact policy reforms linked to VAT/tariffs, quality standards and importation, and to bring stakeholders together to develop a National Off-Grid “Energy Revolution” plan. An Energy Revolution Task Force has been established to support implementation of policy reforms and the development and delivery of the Energy Revolution plan. This task force comprises the Ministry of Energy, DFID, Power for All, McKinsey, Africa Governance Initiative, SOBA, REASL, and reports to the Presidential Delivery Unit. DFID has mobilized initial support and is recruiting additional partners. The Champions of this Compact (DFID Head of Office and Permanent Secretary, Ministry of Energy) have agreed to meet quarterly to take necessary actions. Compact implementation is also accountable to President Koroma: “I have tasked the Minister of Energy to bring together all the key stakeholders in 100 days to report to me the progress on this target.”



SECTION 1

Policy Compact Context

Energy Africa Access Campaign

The Energy Africa Access Campaign 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. Launched in October 2015, 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 a 100-day intervention in one of these 14 countries, Sierra Leone. It describes a voluntary agreement between the governments of Sierra Leone and the UK regarding the policy changes, co-ordinated support and other actions to accelerate the development of the household solar market.

Sierra Leone

Struggling to Develop – Decade Long Civil War -- Sierra Leone is a small, poor country in West Africa whose \$10 billion GDP ranks 151 out of 188 in IMF rankings,¹ and 183rd out of 187 on the UN Human Development Index². Half of government revenue comes from foreign aid³. Basic infrastructure is lacking throughout the country, making commerce, transit and transportation difficult, especially outside urban and peri-urban areas during the 6-month rainy season from May to November. Two-thirds of Sierra Leone's 7 million people are directly involved in subsistence agriculture⁴, which is also the largest employer (80% of the population⁵) and accounts for roughly half of GDP⁶. Mining is one of the primary industries, and mineral exports generate the majority of foreign exchange. Gem-quality diamonds represent roughly half of exports, and were a source of the country's decade-long civil war.⁷

Post-Civil War Recovery Decade – Then Ebola Hit - The civil war ended in 2002, and the economy made an uneven but continuous recovery, with GDP growth of 3-8% per annum through 2011, accelerating in 2012 (12% growth) and 2013 (20% growth).⁸ Then the Ebola crisis hit in May, 2014, causing trade and economic activity to plummet, an economic blow made worse by the worldwide drop in commodities prices. Addressing the Ebola crisis and post-crisis recovery was the country's central focus for most of 2014 and 2015. The World

¹ International Monetary Fund, "Report for Selected Country Groups and Subjects", 2015

² United Nations, Human Development Index Rankings, 2014

³ Trading Economics, Sierra Leone Country Data, May 2016

⁴ "Settling for a Future in Sierra Leone". New Agriculture. November 2007.

⁵ König, Dirk (2008). *Linking Agriculture to Tourism in Sierra Leone - a Preliminary Research*. GRIN Verlag. p. 67.

⁶ African Development Bank, OECD. *African Economic Outlook 2009: Country Notes: Volumes 1 and 2*. OECD Publishing, Jan 14, 2010. pp. 561–562.

⁷ Heritage Foundation, 2016 Index of Economic Freedom

⁸ Trading Economics, Sierra Leone Country Data, May 2016



Health Organization declared Sierra Leone “Ebola-free” on November 7, 2015, but cases were still surfacing and a period of strict monitoring was still underway when this Policy Compact assignment began in early February, 2016.

Post-Ebola Recovery - The Ebola crisis and post-Ebola recovery program is important to the context of this Policy Compact. Sierra Leone is highly motivated to advance its post-Ebola economy and the energy sector needed to support it, and to secure needed support from the international community. Minister of Energy Maccauley attended the October 22, 2015 Energy Africa Access Campaign launch in London, and was one of the first to sign a Partnership Agreement. Sierra Leone has also received substantial Ebola recovery support from international donors, much of which has been channeled into building and improving the country’s basic services in several key sectors, including energy.

Despite widespread and substantial support, Sierra Leone’s economic and political institutions remain fragile “works in progress.” With DFID support, McKinsey is leading a massive multi-sector “Post-Ebola Presidential Delivery Unit” program to set targets, develop action plans, and monitor progress.

Energy Sector

Low Access - Energy access in Sierra Leone is very low (~10%), limited almost exclusively to the capital city, Freetown, delivered by a small scale, fragile and unprofitable central utility 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.

No Articulated Off-Grid Vision, Targets or Market Signals - As part of its multi-sector post-Ebola recovery plans, the Government of Sierra Leone has set ambitious centralized grid power targets: to double grid-connected access, and to triple grid-tied generation. As part of the McKinsey-led Presidential Delivery Unit (PDU), all the on-grid improvements - goals, targets, programs and plans for the next 18-24 months - are managed intensively by this team. Several supportive country level policy initiatives were completed or close (National Energy Policy and Strategic Plan, Renewable Energy Policy). Regional policy initiatives were supportive (ECOWAS and EU). An SE4All Action Agenda had been developed, and a \$2 billion financing need identified (E120m/year, E40-60m for access), although this has not yet progressed to an Investment Prospectus.

Prior to this Compact, despite ambitious on-grid targets and plans, and broadly supportive country and regional policy, the government had said little publicly about its aspirations for energy access. The government had become increasingly aware of the role that off-grid solutions could potentially play in the country’s energy access mix, and Sierra Leone policy and strategy documents incorporated both renewables and off-grid solutions. But no long term off-grid vision had been articulated, no motivating targets had been established, and there was no off-grid equivalent counterpart to the massive grid-focused planning and implementation underway through the McKinsey-led PDU.

Against a market opportunity of a million households, near-term off-grid targets in January were under 10,000 units – what was conservatively felt could be achieved by the 2017/18 election on current trajectory. The SE4All estimate of \$2 billion in financing needed – E120/ year – E40-60/year for access, had not yet been communicated. As a result, no clear market signals had been sent to the private sector and other actors that there is a significant need and private



sector market opportunity to scale up energy access quickly in the country via off-grid household solar power systems. This Compact presented an opportunity to send a powerful signal now, through ambitious goals and policy changes.

Weak Private Sector – No Industry Association - There is a nascent private sector off-grid solar market in Sierra Leone, including small local distributors of three high quality international suppliers (Azuri, BBOX and d.light). There are also several local solar and renewable energy operators focused on commercial customers and large scale grid generation projects. However, these companies have collectively thus far served less than 5% of a market opportunity of nearly a million households. Until Power for All engaged in Sierra Leone in parallel with this Compact, there was no industry association. As a result, the private sector was not well organized or unified in its approach to government, and the government had no clear “private sector partner” with whom to collaborate or negotiate.

Significant Fiscal and Importation Market Barriers – The incumbent local companies face all same the market development challenges as in other countries, plus additional obstacles in Sierra Leone that most other countries have removed: import duties and sales taxes on solar, and slow and costly importation procedures. A temporary import duty waiver had been allowed to lapse; there was widespread confusion surrounding whether duty waivers were still available, and if so, how to qualify.

These barriers raise companies costs, absorb limited and precious capital, and raise the price of solar to poor customers who would most benefit and can least afford the additional cost. In addition to being a significant market barrier, these are a “hidden tax” on the poorest, encourage continued use of costly, dangerous and polluting kerosene, and put affordable, modern light further beyond reach.

Private sector suppliers have dozens of low-access countries to choose from in deciding where to invest their capital and manpower. All developing countries where a solar market has taken hold have eliminated import duties and VAT/GST taxes on sale. Removing these obstacles would be an essential first step toward creating a supportive and enabling market environment in Sierra Leone.

No Quality Standards – Prior to this Compact, Sierra Leone had not embraced or adopted recognized international standards for quality. Although the off-grid solar market is early in its development, there were already worrying signs of market spoilage risk: Kerosene had already largely been displaced by low cost, low quality, short-lived torches and other poor quality lights. Adopting international quality standards would be pivotal to establishing a high quality perception of solar, and protecting both consumers and private sector companies from damaging low-quality products. Tying import duty and sales tax reduction to these quality standards could make them even higher impact in driving solar adoption – by immediately and substantially reducing the cost for quality certified products, and narrowing the gap between these and low quality non-certified products.



SECTION 2

Political Environment & Key Stakeholders

2017/18 Elections - President Ernest Bai Koroma was elected president in 2007 in Sierra Leone's first peaceful transition of power since independence from Britain in 1961, and was re-elected in 2012. The next election cycle is in 2017/18, and he will face a challenge from a widely known opponent: Kandeh Yumkella, the former CEO of Sustainable Energy for All (SE4All). It has been suggested that in order to secure re-election, particularly against an energy-experienced opposition candidate, that Sierra Leone needs to make progress on energy access before the next election.

All the McKinsey-led PDU programs and targets are to be achieved by the next election. This has the political advantage of mobilizing large scale resources to improve the country in time for elections. It also creates a clear, near-term target date to drive program development and management. However this can also result in risk-aversion in goal setting, particularly in less well developed and resourced areas such as off-grid electrification – which this Policy Compact effort and Power for All encountered from important stakeholders when we initially tried to raise the off-grid targets.

Key Stakeholders – In a nascent market environment, especially in a fragile, low-capacity situation like Sierra Leone, every stakeholder is potentially important. A list of the stakeholders included in this process is attached, but several key groups are the most pivotal to this Compact and continued progress in implementation:

Private Sector – The private sector will ultimately be the driver of Sierra Leone's market acceleration, and two key groups are most important: solar distributors and providers of financing. Moreover, because the market is at such an early stage, it is as important to *attract new distributors and financing providers*, as it is to *support and develop existing*. Potential approaches are outlined in the Draft Sierra Leone National Off-Grid Electrification Program (Please Annex C attached).

Energy Ministry - The Minister of Energy, Henry Maccauley, is the focal partner in the government. The Permanent Secretary is involved by the Minister and his staff. The Minister's Technical Advisor, Patrick Tarawalli, is a primary contact point.

Paramount Chiefs – Sierra Leone is locally governed by 149 provincial "Paramount Chiefs." Since the majority of the off-grid power need and market opportunity is among their constituents, this is a critically important group among which to gain support.

Finance Ministry – Finance and Economic Development is a pivotal ministry on fiscal and tax matters. Two especially important partners are Alfred Akibo-Betts, the Deputy Commissioner of the National Revenue Authority (NRA), focused on domestic tax matters who also chairs VAT administration, and Idrissa Kanu, Director, Revenue and Tax Policy, Ministry of Finance.

McKinsey - The McKinsey team had been playing a significant role in the country, driving targets, programs and plans across multiple sectors. They have been deeply involved in on-grid



plans, but as mentioned earlier, there was no real off-grid focus. Although the entire team is supportive, one especially helpful partner is Jasmin Roberts.

SOBA – The SOBA team (a DFID-supported unit of Adam Smith International), led locally by Kim Beevers, is a private-sector development NGO. SOBA have been supporting a range of private sector companies, as well as the Energy Ministry in planning a significant energy sector event, the Energy Revolution (discussed below). SOBA made a vital contribution in planning and supporting the Energy Revolution.

Power for All -- Power for All is an advocacy and market transformation initiative focused on achieving universal energy access by 2025 – five years ahead of SDG7 – through renewable, distributed energy solutions. It is global, and initially in four African countries and India, supported by DFID and other partners. By coincidence, Sierra Leone was chosen to be one of Power for All's four initial focus countries, and their work in-country began a few weeks before this Compact commenced. Charlie Miller, Power for All Director of Country Programs, brought extensive off-grid policy experience, and was a key partner in completing this Compact. Power for All also has an important implementation role.

Tactical Considerations – Limited Time, Running Start

March Energy Revolution Event – This Compact effort commenced on February 8, five weeks before a major Energy Sector event (“The Energy Revolution” on March 12-15) which the Energy Minister hoped could be used to jump-start the off-grid energy market. The President was scheduled to attend, along with the 149 Paramount Chiefs and all the key Ministries, Departments and Agencies (MDA's) and numerous private sector and civil society members. It was hoped that a Compact could be concluded and signed, and new programs announced at the Energy Revolution.

Stakeholder Workshops – In the run-up to the Energy Revolution, SOBA had organized two important stakeholder workshops – one with the Private Sector (February 18), and another with Government MDA's (February 25). These meetings represented an irreplaceable opportunity to accelerate the Compact and support a high-impact Energy Revolution conference, so usual background and planning done in sequence would have to be done in parallel with developing an agreement.



SECTION 3

Policy Compact Goals & Commitments To-Date

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 will be a multi-year effort, but it needed a strong push. Because of the importance, potential impact, and one-time nature of the Energy Revolution conference, we also had to keep focus on a limited, tightly focused and high-impact agenda. We chose to position this Compact not as a comprehensive or ideal set of solutions, but rather as immediate 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. We hoped that it would represent major progress since the Energy Africa Partnership was agreed on 22 October 2015, and would be viewed as a critical 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. A start, but by no means the end.

Due to Power for All's early engagement in Sierra Leone I was able to get up to speed quickly, together with early calls with DFID, SOBA, and McKinsey. Before we had arrived in country, Power for All's Charlie Miller and I preliminarily focused on what we judged were the three most important things that could accelerate the off-grid solar market. Whether we might have a chance to get them agreed in less than a month was another matter:

- **Set Ambitious Off-Grid Targets** - To Attract Private Sector Investment
- **Set Quality Standards** – To Incentivize Quality Products and Protect Consumers
- **Eliminate Importation and Tax Barriers** – To Make Solar More Affordable for the Poor

As the shortlist of potential policy actions was evaluated, their potential impact on women and men was analyzed and considered. We concluded that these early market enablers would benefit all low-income consumers in Sierra Leone, but that women and girls would likely see the most pronounced health benefits as modern off-grid power and light displaced kerosene and other low-quality lighting. The reasons for this are outlined below in “impacts of policy actions”.

Final Compact and Commitments To-Date - On May 10th, President Koroma announced the initial commitments of the Compact at the Energy Revolution:

1. **Ambitious Off-Grid Targets** - Agreement to set and announce aspirational off-grid goals, which will send a powerful market signal to the private sector and all other stakeholders:
 - Modern power to 1 million people by 2020
 - Power for All by 2025 (5 years ahead of SDG7 and Energy Africa target 2030);
 - 50,000 homes with solar power in 2016 (growing from <1% to 5% of households)
 - At least 250,000 homes by 2017 (~20% market penetration of households)



Setting the time frames of the most ambitious targets beyond the 2017/18 election cycle enabled the Compact to sidestep concerns about near-term accountability to the PDU process and fears of missing targets. It enabled more exciting and inspiring goals, which without the election date and PDU pressure were embraced by the Minister. Once embraced by the Minister, they became “givens” with other stakeholders.

Ambitious enthusiasm may have been contagious, as President Koroma himself “raised the stakes” beyond what was initially agreed in the Compact, making himself and his Energy Minister accountable to 50,000 homes with solar power in 2016, 250,000 by 2017. Neither of these were in the Compact; both appeared for the first time in his public announcement at the Energy Revolution – which we understand produced immediate attention on implementation by those responsible:

“With these innovative approaches, we are on the threshold of an energy revolution and in keeping with the urgency to electrify the country; my Government has set concrete goals for 2017. As part of our recovery priorities, we have committed to double access to electricity from 125,000 to 250,000 households and before I leave office, all 149 chiefdoms will enjoy access to energy. In the medium and long terms, we envisage ambitious goals of providing modern power to one million people by 2020 and Power for All by 2025. This will be my Government’s legacy in the energy sector.

Distinguished ladies and gentlemen, Sierra Leone is in a hurry and the people’s interest is for their Government to deliver the results. This is why I have given the Ministry of Energy a target to provide more than 50,000 homes with solar units this year, and a minimum of 200,000 next year.”

2. Immediate Policy Action - Quality Standards, Importation and Tax Barriers:

- Immediate permanent elimination of import duties on qualified internationally certified products; and agreement to adopt international quality standards to receive import duty exemption – both ratified 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 implementation mechanisms.
- Cabinet-level agreement 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.

Expected Impact of Policy Actions

Market and Consumer Protection – Adopting quality standards, once consumers are made aware of the standards, will provide a new basis for differentiating high quality from low quality products. In other markets, such policy changes have appeared to have the effect of raising the minimum performance level among competitors. All of these outcomes, given strong implementation in Sierra Leone, support a healthy and sustainable market.

Affordability Gains – Eliminating import duties and sales taxes will reduce the cost for quality certified products by 30-40%, making quality solar far more accessible. At the household level,



1-2 days' income will be saved on a \$10 lantern; this grows to a month's income saved on an entry-level solar home system financed over two years.⁹ A village of 1,000 people may save \$30-40,000 collectively¹⁰. At the country level, at 10% solar penetration and the same simplistic solar product mix, the savings – realized by the poorest in Sierra Leone - grow to \$3 million. Lower retail prices will also likely grow the market to an extent that is impossible to measure. Because the off-grid solar market is at such a low level of penetration, the immediate cost in lost revenues estimated by the government was judged by the government to be less consequential than the potential economic and social benefits of improving access. The long term loss in potential future revenue was considered in contrast to leaving in place duties and taxes that would be ultimately paid and felt most strongly by low income households.

Lower Distributor Costs and Working Capital - Streamlined “fast track” importation procedures will make it faster and lower cost to manage importation. More importantly, precious working capital and interest expense will be saved by small, undercapitalized local distribution companies whose largest capital investment is in their stock. For perspective, a 4-week reduction in customs clearance time would yield a 10% reduction in working capital – a non-trivial sum to a small distributor.

Quality-Based Market Barriers - Requiring international quality standards to qualify for import duty and sales tax reduction will narrow the retail price gap between quality certified products and low quality non-certified products. By lowering the retail price for more expensive quality certified products, while the retail price for low quality non-certified products remains the same, a “quality based market barrier” is erected. This will not eliminate low quality products, but will narrow their price advantage. Implementation and enforcement will be key to realizing the impact. In addition to strong overall implementation management, technical support to the Bureau of Standards will likely be needed.

Disproportionate Beneficial Impact on Women – all these policy changes will benefit both men and women, and children of both genders. However, indoor air pollution from kerosene and other poor quality lighting kills more people every year than malaria and HIV combined. This has been shown to fall much more heavily on women and girls than on men and boys, because they tend to spend more time indoors. To the extent these market enabling changes accelerate the full displacement of kerosene for lighting, women and girls are likely to see greater health benefits.

President Koroma's May 10 Comments:

“Through the Finance Act 2016 and the Compact between my Government and the government of the United Kingdom, we have identified important regulatory measures to widen access to high-quality solar equipment and ensure it is affordable for low-income households across Sierra Leone. We have implemented several reforms that have made the business environment attractive; we would again look at the procedures relating to accessing duty waivers and other privileges to ensure that this and other businesses will benefit.”

⁹ Assumes 30-40% savings on retail price - \$10 assumed for solar lantern; \$200 total financed retail cost on solar home system. Income assumes \$2-3/day.

¹⁰ Simplistically assumes 50% purchase solar, half buying the example \$10 lantern, half the entry level solar home system.



3. New Industry Association

A new trade group was formed in February as a result of Power for All leadership alongside the Compact process, establishing a needed partner for Government and other stakeholders. This will likely improve implementation and accelerate target achievement.

At the end of the first day in-country, after the SOBA-led February 18th Private Sector workshop, Charlie Miller of Power for All convened a group of private sector operators and proposed they form Sierra Leone's first-ever trade and industry association, to forge a collective private sector voice, partner to government, and vehicle for market growth and good governance. The next evening, over dinner with an expanded group, Charlie shared lessons from his experience with other African energy associations, and facilitated discussion. By the end of dinner, the Renewable Energy Association of Sierra Leone (REASL) was born, its first interim Director chosen, and its initial agenda set.

This was welcomed by President Koroma in his Energy Revolution remarks:

“While Government is committed to this energy revolution, we must work together to structure renewable energy market systems to serve the greater public good. The private sector has a key role to play in ensuring that renewable energy solutions fit the needs and pockets of rural, peri-urban and urban households and businesses. I welcome the formation of the Renewable Energy Association of Sierra Leone and hope you will partner with Government to realize our collective aspiration of widening access to affordable power.”

4. Draft National Off-Grid Electrification Program

The market in Sierra Leone is at a very early state of development, and this Compact really takes “fundamental first steps” – important, but by no means comprehensive or sufficient to fully develop a vibrant, high penetration off-grid market. So it was important to provide leadership to how Sierra Leone could continue to take further steps to achieve the Energy Africa Access campaign purpose after the Compact was fully implemented. Through collaboration with private sector stakeholders, an initial “road map” was developed for moving forward beyond this Compact. More is required to develop this into an action plan, and to develop the needed support, but it provides an initial framework for post-Compact action. Power for All agreed to coordinate this effort across stakeholder groups. The current draft is attached as Annex C.



SECTION 4

Support and Accountability

Compact and Energy Revolution Implementation - The Power for All campaign team has been mandated to coordinate implementation of Compact policy reforms linked to VAT/tariffs, quality standards and importation, and to bring stakeholders together to develop a National Off-Grid “Energy Revolution” plan, which will include further development of the draft National Off-Grid Electrification Plan in Annex C. Activities have been divided into three work streams:

1. Stakeholder Coordination, Management Information & Reporting
2. Policy Reform Implementation
3. Energy Revolution Plan Development

An Energy Revolution Task Force has been established to support implementation of policy reforms and the development and delivery of the Energy Revolution plan. This task force comprises the Ministry of Energy, DFID, Power for All, McKinsey, Africa Governance Initiative, SOBA, REASL, and reports to the Presidential Delivery Unit.

The Compact and Energy Revolution Implementation Plan, developed by Power for All in collaboration with Energy Revolution Task Force members and DFID, is attached as Annex D.

Mobilization of Core Support – DFID has mobilized initial support through a) Power for All – coordinating implementation, and the newly formed Energy Revolution Task Force; b) SOBA-market development support, 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 World Bank, US and EU; and 2) adapt central support programs (ACE, TEA) to Sierra Leone, once these are concluded in 2016. DFID Sierra Leone is looking for ways that new donor support could be used to drive agreement on “next phase” changes such as eliminating GST on solar.

Accountability for Progress - 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. As described above, the Power for All campaign team have been mandated to lead implementation in certain areas, while supporting and coordinating progress across the many stakeholders involved in follow-up implementation. 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.

Compact implementation is now also accountable to the president, as President Koroma said on May 10th – another post-Compact addition by the President, in another indication of his support:

“I have tasked the Minister of Energy to bring together all the key stakeholders in 100 days to report to me the progress on this target.”



SECTION 5

Lessons Learned

The five lessons from this experience that might apply in other Compact situations are:

- **Focus on What Can Be Agreed in the Time Frame** – In virtually every African country, even those with the most advanced off-grid/rural electrification, there is a need for substantial change on several fronts to fully develop the market and create a supportive enabling environment. This is a multi-year effort beyond the scope of a few months of intensive Compact effort. This Compact is not a comprehensive or ideal set of solutions, but represents immediate action on the most fundamental, urgent market barriers and enablers. We hope that it will help jump-start the market and attract other partners, and be viewed as a catalytic 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 energy by 2025, five years earlier than SDG7 and Energy Africa Campaign targets.
- **Set Ambitious Targets** – There is no substitute for a target big enough to be inspiring to reach. However difficult, it is more likely to motivate action and the kind of creativity needed to accomplish bold goals. Rwanda is a good example (and although more developed, is also another small, poor country): When overall access was 16% of households, President Kagame pushed his ministers to aim for 100% access by 2018 (later reduced to “only” 70% access). This was to be achieved by tripling grid-connected access from 16% to 48%, and more than 10x off-grid access, from <2% to 22%. This 70% access target – and the resulting growth rates required – have attracted numerous private sector companies and investors, all of whom want a share of the market they believe will be created. This has been helped by several other changes to create a more supportive and enabling market environment, which Sierra Leone will also have to continue to do, but bold targets were a critical starting point still driving market growth.
- **Have a Deadline – Or Create One** – As we had less than a month to reach agreement, “normal process” wouldn’t work. Through early collaboration by phone with Power for All and local stakeholders, we were able to develop an early list of potential targets before background research was complete, and the lens of possible solutions focused research on potential action. Charlie Miller and I “market-tested” solutions from our first meetings in country. As a result of the deadline and a non-standard work plan, this effort started on February 8, I was in-country by February 16, and we had a Compact agreed in principle 10 days later on February 25.
- **Begin With the End in Mind** – In reality, it was the deadline that forced earlier-than-normal decisions on what changes to go after. But with the benefit of hindsight, it was more effective to go in with a working hypothesis. Having an idea of possible outcomes focused everything from research to stakeholder conversations.
- **Take Advantage of Political Circumstances Where Possible** – Sierra Leone has an election cycle approaching in 2017, and President Koroma has promised to 149



Paramount Chief provincial governors that they would all have some power before he left office. Everyone in the process all went to great lengths to involve President Koroma in the Energy Revolution, and to use the Compact and the Revolution as evidence of progress against his promise. In the end, he not only provided the weight of his office in support, but set even more ambitious near-term targets to be achieved before the next election. This is driving more urgent action. Every Compact country will have a different set of potential political “levers”, but finding and engaging them could be valuable.

- **Find Ways to Make it Stick** – We fully expected this Compact to be signed by ministers of both the UK and Sierra Leone governments. But everyone we spoke to in Sierra Leone told us “agreements don’t matter here unless they’re implemented.” We also heard that “administrative” mechanisms leave room for interpretation, ambiguity and corruption. Meaning changes to laws would be much more effective (but challenging).

Bypassing normal process with an SMS exchange, Deputy NRA Commissioner Mr. Akibo-Betts agreed to an early morning before-hours meeting (because of their meeting schedules, before or after hours being the best time – sometimes the only time – officials can be found). After some discussion, Mr. Akibo-Betts supported making elimination of import duties permanent, supported elimination of taxes on sales, and immediately introduced us by phone to his policy counterpart, Mr. Idrissa Kanu. It still being before hours, Mr. Kanu agreed to see us right then, and we were surprised to discover that Mr. Kanu actually wrote key sections of the 2016 Finance Bill. We were even more surprised to learn it was still pending (but would reach Parliament within days). This was an opening not to be missed, and after some discussion, Mr. Kanu agreed to amend the pending 2016 Finance Bill, accepted our offer of support to write the language, and to work with the Finance Ministry and other key MDA’s to develop support.

Similarly, everyone we spoke to told us how important it was to have the support of the Paramount Chiefs (PC’s), so we focused on connecting with one early on. Discussion led to a commitment for his “chiefdom” to be the location of an early pilot. When we later were convincing new companies to come to Sierra Leone, we were able to connect them to a local Chief. This led to a pilot now being planned with the full support and involvement of the local Chief.

- **Where Possible, Partner with a Local Organization Who Can Drive Implementation** – Compact scope doesn’t include in-country implementation management, so it was important to quickly identify a local partner with a longer term mandate and the expertise and capacity to support implementation. Power for All has a longer term mandate for market development and has local leadership in Sierra Leone, so it was very helpful to partner with them from the beginning. The Power for All team has developed and is now overseeing the Implementation Plan, including coordinating implementation of policy reforms, and bringing stakeholders together to develop and deliver an Energy Revolution Plan. In Sierra Leone, the REASL would not have been created, at least not as fast or effectively, had Charlie Miller not provided leadership from the first day. Charlie also wrote the Finance Bill Amendment with the key Compact provisions, including the correct IEC standards and carefully crafted legal language. When President Koroma added the 2016 and 2017 targets, the Energy Minister immediately engaged the Power for All Country Director to help him deliver 50,000 units in 2016 and 250,000 by 2017.



ANNEXES

Annex A - Stakeholders Involved

Annex A – Stakeholders Involved in Sierra Leone Policy Compact (Partial List)

NGO's

1. IBIS (education for development) - Kevin Johnstone
2. SOBA (an NGO-like part of Adams Smith Intl) - Kim Beevers, Claudio Morales-Oyarce, Said Bijary, Angela Betancourt and Kristofer Gravening
3. COOPI (running a mini-grid project) - Maria Carr

Donors

4. Power Africa - Tiago Reeves
5. World Bank - Zhihong Zhang (CIF/SREP)
6. African Development Bank - Komal Hassamal (SREP)

Private Sector

7. WAO - Sam Zoker - interim head of the newly formed Renewable Energy Assn of Sierra Leone, formed as a result of this Compact initiative and Power for All
8. Technoland (d.light distributor) - Jonathan Jonah
9. Teleficient - (Azuri distributor) - Al and Ishmail Turay
10. BBOX - Wordsworth Cole
11. Supreme Ventures (institutional rooftop solar) - Alie Lamin
12. Solar Era (utility scale power projects) - Sophie Johnson
13. Eleqtra (utility scale power projects) - David Anson and Michael Seargeant
14. Up Africa (local private sector guy) - Chukwu-Emeka Chikezie

In addition, others who came to the Ministry of Energy Private Sector Off-Grid workshop, a number of Adam Smith people, and the McKinsey team

Government

15. Minister Henry Macauley - MoE
16. Patrick Tarawalli - Technical Advisor to MoE
17. Alfred Akio-Betts, Deputy Commissioner, Domestic Tax NRA (National Revenue Authority)
18. Idrissa Kanu, Director, Revenue and Tax Policy, Ministry of Finance
19. Saa Jumu, Deputy Secretary, Revenue and Tax Policy, Ministry of Finance
20. A. Santos Kamara, Officer in Charge, Customs Service NRA
21. Henry Serry, Office of the President, Renewable Energy, Science & Technology Advisor
22. Robin Fola Mansaray, Head, Renewable Energy & Energy Efficiency, Ministry of Energy
23. Chriticles Mwansa, Special Advisor to the Commissioner General, NRA
24. Kelcise Sesay, Head of Electricity, Sierra Leone Electricity & Water Commission
25. Victor Bangura, Officer in Charge, Dir. of Investment Promotion, Sierra Leone Investment and Export
26. Philip Kargbo, Economic Analyst, Ministry of Finance

Annex B – Final Compact



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 goals and strategies on access, efficiency and generating capacity
 - Identifies \$2B financing needed – 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.
 - The ECOWAS Program on Access to Sustainable Electricity Services (EPASES) is part of the Access to Improved Energy Services (EAIES) initiative. The Overall Objective of EPASES is to contribute to the achievement of the targets of the ECOWAS Renewable Energy Policy, and universal access to electricity across the region by 2030.
- **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
1	Policy Framework	<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,</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>



<p>Protection of Environment and Rights</p>	<p>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>While broadly good for the environment there is ambiguity around Solar investment and ownership of environmental attributes</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>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</p>
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			<p>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>
	2. Fiscal Barriers	<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>
3	Consumer Protection and Quality Assurance	<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 putting consumer protection and sustainable market development at risk.</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>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</p>



			consumer-friendly warranty policies (free repair or replacement).
4	Consumer Awareness	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>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	<p>Policy Framework</p> <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>II. The 2016 Sierra Leone Finance Act made into law:</p> <ol style="list-style-type: none"> 3. Permanent elimination of import duties for <i>qualifying</i> solar equipment 4. Requirement that products to meet IEC global quality standards in order to qualify for tax- 	<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> <p>DFID to provide Technical Assistance to the Government of Sierra Leone to help implement the Policy Actions</p>



		<p>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.</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>DFID to provide Technical Assistance to the Government of Sierra Leone to help implement the Policy Actions</p> <p>Same</p>
2	<p>Fiscal Barriers</p>	<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 <i>quality certified</i> solar products; 	<p>Power for All to assist the GoSL with communicating the new duty and GST laws to all sector stakeholders</p> <p>See Consumer Protection and Quality Assurance below for further support</p> <p>Power for All to assist the GoSL with communicating the new duty and GST laws to all sector stakeholders</p>



		<p>2. Mandate the Ministry of Energy to establish and maintain the list of qualifying products;</p> <p>3. Implement tax-free status with customs and port officials to enable expedited “green lane” importation for qualifying products</p>	<p>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</p> <p>DFID to provide Technical Assistance to support REASL and Ministry of Energy, if needed, with above</p>
3	<p>Consumer Protection and Quality Assurance</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>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</p>	<p>Implementation of import duty/GST laws does not require action by Sierra Leone Bureau of Standards.</p> <p>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</p> <p>REASL and Ministry of Energy to set up new registration and reporting procedures required of companies to qualify for “approved list” status</p> <p>REASL and cross-cutting ministries, departments and agencies to determine what actions can be taken to close loopholes and scope to implement</p> <p>REASL and Ministry of Energy to agree what else might be appropriate</p>



		<p>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>	<p>DFID to provide Technical Assistance to support REASL and Ministry of Energy, if needed, with above</p>
4	<p>Consumer Awareness</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 and accelerate adoption and energy access.</p> <p>This will be coordinated with and ultimately part of a plan for Coordinated Support to the Market as outlined below.</p>	<p>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</p> <p>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</p>

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	<p>Overall National Plan for Off-Grid Rural Electrification</p>	<p>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> <p>Support development and implementation of a government sponsored, private sector led National Off-Grid Electrification Program in Sierra Leone – attached as Annex C</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</p>



			<p>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	<p>Number and Capacity of Private Sector Market Participants</p>	<p>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> <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</p>	<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> <p>SOBA to provide Technical Assistance for capacity building support to firms and developers, and support local skills development and training initiatives.</p>
7	<p>Availability of Financing</p>	<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>



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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)



Annex C – Draft National Off-Grid Electrification Program

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 – in addition to 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 and exchange rate risk management 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. May also need technical assistance to develop the right level of product-sales capability and enter a new market, and first-loss or other risk-mitigation in financing.
- **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

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- 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**



Annex D – Policy Compact & Energy Revolution Implementation Plan & Timetable

Energy Revolution Plan and Timetable

The Government of Sierra Leone has set ambitious off-grid energy access goals as part of the Energy Revolution initiative and the Energy Africa Policy Compact. The aim is to sell 50,000 solar home systems by the end of 2016 and 250,000 by the end of 2017, with a view to achieving universal access to basic modern energy by 2025. Power for All, a global campaign to promote distributed renewable energy as the key to achieving universal energy access, is mandated to support Compact implementation. Power for All will support effective implementation of recently announced policy reforms linked to VAT/tariffs, quality standards and importation, whilst bringing stakeholders together to develop a National Off-Grid “Energy Revolution” plan to deliver on ambitious targets.

This note proposes a series of actions and a timeline for meeting Policy Compact commitments. Activities can be split into three work streams:

1. Stakeholder Coordination, Management Information & Reporting
2. Policy Reform Implementation
3. Energy Revolution Plan Development

1. Stakeholder Coordination, Management Information & Reporting

Target: Coordination Mechanism & Management Information System in place by end of July.

a. Establishment of Energy Revolution Taskforce to ensure Stakeholder Coordination (Power for All - June 17th, then weekly)

The taskforce will oversee implementation of recent policy reforms as well as development and delivery of the Energy Revolution plan. It will consist of the Ministry of Energy, DFID, Power for All, McKinsey, Africa Governance Initiative, SOBA, REASL and other stakeholders as required, with clear roles and responsibilities for all stakeholders agreed at the outset. Taskforce decision-making will be informed by sector performance reporting (outlined in more detail below). The taskforce will report back to the Presidential Delivery Unit.

b. DRE Sector Performance Tracking (Power for All to conduct initial market diagnostic, then SOBA to manage monthly sector performance reporting from July onwards)

The publication and dissemination of aggregate sector performance data will enable the Energy Revolution taskforce to understand whether it is on track to meet targets, and help to establish a common understanding of progress, challenges and opportunities amongst stakeholders. Power for All will lead on initial market diagnostic work. In the longer term, SOBA will work with REASL to collect sales performance data, expected future sales, as well as details of any



challenges/barriers faced, and publish sector performance information in aggregate form. It is likely that a third-party company or consulting firm with no links or interest in the DRE sector will be used for the collection of commercially sensitive information and publication of aggregate sector performance data, to ensure strict confidentiality. Published sector performance data will inform Energy Revolution taskforce strategy and be widely disseminated amongst stakeholders.

c. Solar Home System Importation Tracking (Power for All - end of June, then ongoing)

Power for All will work with REASL to create and maintain a log of all efforts to import solar home systems under the new VAT/tariff, quality standard and importation process. This will enable the taskforce to track implementation of GST and other tax waivers, as well as the speed/efficiency of the clearing process. Experience of importation will be included in DRE sector performance reports, helping to build transparency, accountability and a shared understanding of progress in compact implementation.

2. Policy Reform Implementation

Target: Effective implementation of streamlined importation process by end of August.

a. Stakeholder Mapping (Power for All, mid-June 2016)

Power for All will undertake a stakeholder mapping exercise to identify key players in policy reform implementation, their current knowledge of distributed renewable energy, understanding of the compact and actions in relation to compact implementation. This will inform joint Power for All and SOBA engagement efforts with key decision-makers as well as development of the arguments, statistics, stories and case studies which will be used to make the case for compact implementation.

b. Compact Ratification by Parliament (Power for All & SOBA – June-July)

Power for All and SOBA will engage members of the Energy Oversight Committee to brief them on the compact, its contents and rationale. A briefing note will be prepared for the relevant committee meetings. Queries will be responded to in a timely manner.

c. Agreeing compact Implementation mechanisms (Power for All & SOBA – June-July)

The Ministry of Energy will be encouraged to set a deadline for full implementation of the policy compact reforms which will help to create a sense of urgency amongst stakeholders. A series of meetings will be held to brief all key stakeholders (Ministry of Energy, Ministry of Finance, National Revenue Authority, Customs, SLIEPA and others) on the thinking behind the compact, the contents of the compact and the implementation options available.

It will be important to secure buy-in for the compact itself before discussing implementation. This will involve briefing stakeholders on the business models and technologies that exist, the emergence of the market and its social impact in East Africa, and examples of VAT/tariff reform implementation from Ghana, Kenya and elsewhere.

Most engagement and discussion will take place through meetings between Power for all, SOBA and other Energy Revolution taskforce members with relevant government officials. Workshops will be used to validate and publicize agreements in principle reached beforehand through one-to-one meetings.



Key implementation mechanisms to be considered include:

- Company Registration - ensuring companies are credible, and committed to only selling quality products.
- Product Registration - enabling customs officials to quickly determine whether products meet relevant IEC quality standards and are eligible.
- Importation Process – transitioning from a waiver on each consignment, each authorized by multiple government departments, to a blanket VAT exemption for eligible companies/products overseen by a lead contact person within the Ministry of Energy.
- Feedback Mechanism – the Ministry of Energy will establish a hotline for companies to directly feedback their experiences of reform implementation.

d. Compact Communication (Power for All – June-July)

Supporting efforts to agree compact implementation mechanisms, Power for All will work with the Ministry of Energy to set up an Energy Revolution website which provides easy access to information regarding agreed reforms to importation procedures, VAT/tariffs and quality standards. The website will be a resource for government officials involved in implementation of policy reforms, and for companies seeking to import products.

Information about policy compact commitments will also be disseminated using flyers and a brochure to be sent out to line Ministry staff and other stakeholders. Power for All will build an Energy Revolution mailing list and produce a regular newsletter to keep stakeholders informed of Energy Revolution progress and plans.

e. Energy Revolution Plan Development

Target: Energy Revolution Plan developed by end of August.

Target: Energy Revolution Plan funded and launched by October 2016.

a. Market Diagnostic (all 15 REASL members interviewed by end of June)

Power for All will interview companies to understand: previous and current sales performance; stock levels; major barriers faced to accelerated sales; status of any discussions with potential investors; current availability of finance and distribution capacity. This information will be reported back to the taskforce and used to inform development of the Energy Revolution Plan.

b. Programme Design (all Energy Revolution taskforce members, facilitated by Power for All, July-August)

Building on market diagnostic work undertaken, and sector performance reporting data collected, the Energy Revolution taskforce will establish sub-groups to design programmatic activity and anticipated outcomes in four key areas. Likely activities in each area are outlined below:

- **Building Demand**
 - Public awareness campaigns to enhance credibility and promote choice
 - Seeding the market with entry-level lights through School Campaigns, working with PRESSD
 - Regional workshops & marketplace events with companies, Chiefs and NGOs.
- **Strengthening Supply**
 - Technical support to companies to develop business model innovations

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- Reform of Barefoot College to ensure private sector participation in design of courses, selection of trainers and overall governance
 - Engaging universities & colleges to ensure private sector participation in development of training courses & curriculums
 - **Policy Reform**
 - Continued monitoring of implementation of existing policy commitments
 - Exploring further policy reform options needed to scale up investment in off-grid renewables
 - Ensuring continued private sector participation in policymaking process through REASL.
 - Integration of Energy Revolution into broader Energy policy & planning led by Presidential Delivery Unit and UNOPS.
 - **Access to Finance**
 - Possible challenge funds or de-risking mechanisms such as credit guarantee schemes made available to businesses
 - Possible off-grid PPA with Ignite Power & NASSIT
 - Engaging local banks and MFIs to encourage them to provide third-party finance and/or become solar light distributors offering consumer finance



100 Day Draft Compact Implementation Plan

	Week 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	20 th June	27 th June	4 th July	11 th July	18 th July	25 th July	1 st Aug	8 th Aug	15 th Aug	22 nd Aug	29 th Aug	5 th Sept	12 th Sept	19 th Sept	26 th Sept
Energy Revolution Taskforce															
DRE Sector Performance Tracking															
Importation Log															
Policy Reform Implementation															
Compact Ratification by Parliament															
Agreeing Compact Implementation Mechanisms															
Compact Communication															
Energy Revolution Plan Development															
Initial Market Diagnostics															
-Sub Group Initial meeting															
-Sub Group 1 st Draft review meeting															
-Sub Group final review meeting															
Design Finalisation															



Power for All and SOBA roles in Compact Implementation and Energy Revolution Plan Development

