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This action is funded by the European Union

ANNEX

of the Commission Decision on Support to Reform in the Energy Sector in Lesotho (Phase I)

Action Document for Support to Reform in the Energy Sector (Phase I)

INFORMATION FOR POTENTIAL GRANT APPLICANTS

WORK PROGRAMME FOR GRANTS

This document constitutes the work programme for grants in the sense of Article 128(1) of the Financial Regulation (Regulation (EU, Euratom) No 966/2012), applicable to the EDF in accordance with Article 37 of Regulation (EU) 2015/323 in the following sections concerning calls for proposals: 5.4.1. "Grants – call for proposals (direct management)" has been used.

1. Title/basic act/ CRIS number	Support to Reform in the Energy Sector in Lesotho (Phase I); CRIS number: LS/FED/038-076 financed under European Development Fund (EDF)
2. Zone benefiting from the action/location	Southern Africa, Lesotho The action shall be carried out at the following location: Lesotho
3. Programming document	11th EDF National Indicative Programme (NIP) (2014-2020) for cooperation between the Kingdom of Lesotho and the European Union
4. Sector of concentration/ thematic area	Energy Sector
5. Amounts concerned	Total estimated cost: EUR 7 800 000 Total amount of EDF contribution: EUR 7 000 000 This action is co-financed by potential grant beneficiaries for an indicative amount of EUR 800 000.
6. Aid modality(ies) and implementation modality(ies)	Project Modality Indirect Management with the Kingdom of Lesotho Direct Management – grants - call for proposals, procurement of services

7. a) DAC code(s)	230 – Energy, , 100%; sub-code 1: 23210, 57%; sub-code 2: 23110, 37%			
b) Main Delivery Channel	Main delivery channels 60,000 and 20,000 (see DAC/CRS code list)			
8. Markers (from CRIS DAC form)	**General policy objective**	**Not targeted**	**Significant objective**	**Main objective**
	Participation development/good governance	☐	☒	☐
	Aid to environment	☐	☒	☐
	Gender equality (including Women In Development)	☐	☒	☐
	Trade Development	☒	☐	☐
	Reproductive, Maternal, New born and child health	☐	☒	☐
	RIO Convention markers	**Not targeted**	**Significant objective**	**Main objective**
	Biological diversity	☒	☐	☐
	Combat desertification	☐	☒	☐
	Climate change mitigation	☐	☒	☐
	Climate change adaptation	☒	☐	☐
9. Global Public Goods and Challenges (GPGC) thematic flagships	The action will contribute to creation of sustainable energy sources in Lesotho, to improving the environment and to adapting to climate change, building upon the nexus 'water-energy-food security' in Lesotho.			
10. SDGs	Main SDG Goal: Goal 7 Affordable and Clean Energy Secondary SDG Goals: Goal 13 and Goal 15			

SUMMARY

It is proposed that the support to the energy sector in Lesotho under the 11th EDF be in two phases: phase I with an emphasis on reinforcement of the policy environment and the institutional framework, complemented with selected pilot projects; and a phase II in which support will be provided to larger scale energy investments and up-scaled projects, along with further support for sector reform, where required.

The overall objective of phase I is improved access for the people of Lesotho and the private sector to modern, clean, affordable and reliable energy supply, including the possibilities for large up-scaling. The specific objectives of phase I will be the enabling conditions for improved sector governance, including adaption of sector reform by key stakeholders and conditions created for full-scale access to modern energy in rural areas.

Before being able to embark on a full scale energy programme in Lesotho, a number of conditions have therefore to be met. Most important is that 'energy' will be treated as a strategic issue, which implies that Government at the central level must demonstrate political commitment to restructuring of the sector. Endorsement of an updated National Energy Master Plan and the resolution of currently conflicting mandates of the main key stakeholder entities are an essential part.

For phase I the anticipated aid modality will be the project approach, through which technical cooperation will be provided, using one service contract and possibly additional framework

contracts. A Call for Proposals for the energy efficient household devices[1]and the mini-grids will be used to test innovative approaches in the sector. A programme estimate might be managed by the Government to facilitate the necessary conditions for effective and sustainable energy sector governance and adaptation to sector reform by key stakeholders. Visibility will be ensured where applicable, while a mid-term review will conclude phase I. In phase II, consideration will be given to targeted co-financing with Financing Institutions through blending operations, and / or sector budget support, but only once general eligibility is established. EDF contribution envisaged in 2018 for phase II is EUR 21 000 000, bringing the total EDF contribution for the Energy Sector to EUR 28 000 000. In the event that phase I falls short of the required political commitment to reform in the sector, it is proposed that phase II will limit its cooperation with government to continued capacity development where required, and further concentrate on supporting energy interventions in the sector which can be implemented without the necessary restructuring of the sector.

1 CONTEXT

1.1 Sector/Country/Regional context/Thematic area

Lesotho is a lower middle-income country with a population of around 2.1 million people and a small economy (GDP is about USD 2.181 billion, with a per capita GNI in US $ of 1,330[2]). The country is landlocked within the borders of South Africa. The political situation in Lesotho was unstable after an alleged attempted military coup on 30th August 2014. International mediation by the Southern African Development Community (SADC) led to early elections on 28 February 2015, held in a peaceful environment. On a technical level it has proven possible since then to make progress with ministries and institutions in the water, governance and energy sectors, through open communication channels at administrative level. While the new coalition government is in office for around one year, the policy decision-making has at best been very slow.

At the technical level, it has become clear that the erosion in the catchment areas of Lesotho is alarming to the level that the herding culture is threatened as a result of overgrazing and land degradation caused by poor agricultural practices, land right practices, unsustainable use of woody biomass and more erratic rainfall. With the majority of rural households depending on biomass for their energy needs, energy and catchment management projects in the largely unserved rural areas are urgently needed, while the nexus between water and energy in Lesotho is emphasised.

There are no indigenous sources of oil, coal or natural gas in Lesotho. The country's energy mix is dominated by traditional biomass (wood, crop waste and dung) with a share of 66%. Modern forms of energy, such as petroleum products, coal, electricity and liquefied petroleum gas (LPG), constitute the remaining 34%. It is noteworthy that electricity only constitutes 6% of the energy mix. At peak demand Lesotho can generate barely half of the electricity demand through its only hydropower station in Muela. The demand for petroleum products and electricity is on the rise. Lesotho has good renewable potential for energy resources in the form of hydropower, wind and solar. The right to access modern energy services is emphasised, but no projects have been carried out at a convincing scale.

[1] An energy efficient household device could be an improved cooking stove, solar home system etc.
[2] http://data.worldbank.org/country/lesotho, figures for 2014.

Renewable energy resources have the potential to play an increased role in the country's energy mix and for export to the region. South Africa is forecasted to have a demand for additional installed electricity capacity of 20,000 Mega Watt (MW) by year 2030. Recent studies have indicated that there is potential in Lesotho for producing up to 12,000 MW from wind (6,000 MW), hydro-power (5,000 MW) and solar (1,000 MW) in the immediate future.

1.1.1 Public Policy Assessment and EU Policy Framework

There are several well-designed policy documents available for the energy sector, but most of these have not been endorsed by the Government. Only in June 2015, the long awaited Energy Policy was endorsed and subsequently enacted by Cabinet. This situation of incomplete guidance is acknowledged by the sector, but the political willingness has been lacking to improve this undesirable situation. Even with the Department of Energy (DoE) of the Ministry of Energy and Meteorology (MEM[3]) using these documents as a guide, the uncertainty around decision-making is high and private sector stakeholders in the energy sector cannot carry out the needed calculations to decide on investments. The DoE has undertaken efforts to integrate the energy sector in the overall policymaking process, while organising the first National Sector Coordination Forum meeting ever in June 2015. DoE is obtaining good participation in workshops with an enhanced ownership compared to some years ago, but the Government seems not to be ensuring the necessary momentum in further guiding the sector, a development which will need urgent attention in 2016.

The National Energy Master Plan (NEMP, 2006), which still needs to be enacted by Cabinet, is delivering a sound analysis of the energy challenges and the activities needed to meet them. The main objectives are: to increase clean energy production capacity to attain self-sufficiency and to enable export; to expand electricity access for industry, commercial centres, households and other institutions; and to increase energy conservation, security and distribution efficiency of alternative sources. Financial needs for these activities are however not specified and there is no timeframe in place. Indicators (at output, outcome and process level) are also missing. An update of the Master Plan is necessary, along with new insights and technology options, which have since become available.

The policy goals of Lesotho, as explained in the National Strategic Development Plan (NSDP), NEMP and Vision 2020, are still valid and are coherent with the EU energy policy defined in the NIP. The NIP emphasises the importance of access to modern and sustainable energy as a prerequisite for economic growth and poverty alleviation.

Major elements to be further detailed in energy sector documents are: the position of Lesotho's energy sector in the international context, which includes South Africa; the need for clean electricity generation; and the importance of the role of energy in Climate Change adaptation and mitigation.

The Global Climate Change Alliance (GCCA) programme under the DCI-Environment[4] is working in Lesotho to align all policies with the strategic Climate Change policy guidelines, resulting also in inputs for an updated NEMP to be produced. The nexus with water will be more pronounced than is the case in the current NEMP. Especially the Sustainable Energy for All (SE4All) initiative (but also the EU Africa Infrastructure Trust Fund – a blending instrument), is of importance in this respect as it will enhance the tapping of the Renewable Energy (RE) potential of Lesotho. South Africa needs Lesotho, not only for its water

[3] In the coalition government of 2015 the water and energy sectors have been assigned to separate Ministries.
[4] Support to Climate Change Response Strategy project (LS/DC-ENV/023-850), using Irish funding.

requirements, but also for reducing its greenhouse gases (GHGs) emissions. The discussion has to be led into that direction, exploring opportunities in water and energy diplomacy. While the direction of the energy policy in Lesotho has been consistent, unfortunately the results of the policy implementation have been less convincing.

In the Intended Nationally Determined Contributions (INDC) of 2015, Lesotho is committed to reduce unconditionally 10% of its GHG emissions by 2030 compared to a Business-As-Usual (BAU) scenario. The conditional target is 35% by 2030. Lesotho has also communicated an adaptation contribution.

The coalition Government, which came into power in early 2015, has engaged itself on Public Finance Management (PFM) Reform. The national PFM Reform is supported by the EU, African Development Bank and the World Bank (WB). The EU financed project on Support to PFM Reform started in June 2015. It can be expected that any impact can be observed only from 2016 on. Sound PFM is one of the key eligibility criteria for all Budget Support, which Lesotho is presently not meeting.

1.1.2 Stakeholder analysis

The main stakeholders in the energy sector are the Department of Energy (DoE) and the Government-owned utility Lesotho Electricity Corporation (LEC, since 1969), the regulatory body the Lesotho Electricity and Water Authority (LEWA, since 2008) and the Rural Electrification Unit (REU, since 2007). The mandates of these organisations need overhauling so as to divide more clearly between policy making and policy execution. The overlapping, and sometimes also conflicting, mandates result in sub-optimal governance in the energy sector.

LEC is regulated by LEWA, but this is done in such a way that the company cannot develop as a financially viable corporation. LEWA has a task interpretation which effectively surpasses the boundaries of the DoE mandate, whereas the DoE is responsible for the energy sector as a whole. LEWA has been allowed to set-up of a Universal Access Fund (UAF) for subsidising capital costs of electrification projects, with a focus on the rural areas. The resources are coming from an electrification levy charged by LEC and from international donations. In practice, the UAF is used for grid extensions carried out by LEC, but partially paid for by the REU.

While DoE is taking the lead role to manage the sector, it needs more human resources to do so effectively, and in some specific areas capacity development will be needed. Also, LEWA as an organisation is too small, though the annual reports show it as an effective control entity when it comes to consumer prices for electricity. More guidance from the DoE is, however, needed on how to balance the interests in the energy sector, including those of the private sector with those of consumers. REU does not have the financial and human resources to bring modern energy services to the rural areas.

LEC is becoming more effective as the sole distributor of electricity, though several areas are identified for further capacity development. The company is faced with a huge backlog in maintenance, which threatens supply security and the company's continuity. To remedy this, the LEC Board requested LEWA to approve an 18.3% increase in tariffs for operational year 2015/2016 and a 25.4% increase for operational year 2016/2017. LEWA only awarded an increase in tariffs of average 7% for 2015/2016, while the tariff increase for 2016/2017 is not yet known. Connections fees remained the same, at least for 2015/2016.

Another stakeholder is the Ministry of Local Government and Chieftainship (supported under the governance programme of the 10th EDF[5]), which plays a pivotal role in the decentralisation efforts of the Government. Other stakeholders include the Ministry of Forestry, Basotho Enterprises Development Cooperation, Appropriate Technologies Services, the Bureau of Statistics and some non-governmental organisations (NGOs). The private sector in energy has become more mature with several high quality industries and installers in, among others, the solar sub-sector.

1.1.3 Priority areas for support/problem analysis

Implementation of policy is sometimes overridden by political decisions. The political interferences, facilitated by the missing endorsement of the NEMP, the limited project development capacity, neglected energy access in rural areas, and the intertwined mandates of the main stakeholders in the energy sector, require adjustments of the current institutional structure in the sector. This involves a vigorous and systematic use of the principle to divide between tasks: i.e. energy policy making versus policy implementation, with DoE having exclusivity for the former task and the implementation agencies, with private sector where applicable, for the latter.

The main problem identified during the identification is the undesirable political interventions in the energy sector. This problem translates into interventions in financial project flows (mostly indirect); non-transparent decision-making in selection of project areas and developers; difficulties in provision of legal arrangements Independent Power Producers (IPPs), producers); a non-approved NEMP; overruling of DoE decisions on projects and inertness when institutional inadequacies are at stake (PPA's, REU/LEC).

Interference in policy making and project implementation results in an energy sector without reliable guidance, which in turn causes hesitance within the donor community to pledge resources. The private sector is also confronted with more uncertainties than is desirable. The fact that the NEMP is not endorsed by Government is deepening the risk for the private sector.

Local project developers have limited experience with large electrification projects. The lack of business in a small economy and limited technical skills are hurdles for the preparation of bankable projects. The banks in Lesotho have almost no experience with energy projects, which results in unknown risk profiles and the difficulty to do own due diligence on project proposals coming in.

The neglect of the rural areas needs to be reversed. Even though there is a UAF in place, resources have been mainly used for extension of the national grid in the lowlands (areas next to the grid) and thus more for urban areas and less in remote rural areas. There is good reason to focus on off-grid energy services in rural areas where 70% of the population lives. Off-grid energy options can provide the services for a fraction of the assumed national grid related electricity costs (over EUR 1 billion for a complete coverage).

The intertwined mandates can be unravelled with the right energy policy guidance from the national Government, for which the political willingness needs to be present.

Hence, a Programme for Change has to be established with the following objectives:

- Create a strict institutional division between policy making and implementation;
- Update and approve the NEMP;

[5] Deepening Decentralisation Programme (project number LS/EDF 283-774)

- Transform REU or create a dedicated Rural Energy Implementation Office in DoE;
- Provide DoE with mechanisms for control and sanctioning of implementing agencies;
- Strengthen DoE through e.g. capacity development in selected competence areas.

For energy to be a strategic issue it needs to be regularly taken up in the Cabinet of Ministers to assure progress. With the approach laid out, the objectives of the SE4ALL and the NIP can be met in the foreseeable future. Moreover, the Climate Change dimension and the quality of life in the rural areas, especially for women and children, will be improved.

The updating of the NEMP and its subsequent endorsement by Government would be a clear sign of Government's willingness to provide the conditions for EU support on a more substantial scale as from mid-2018 onwards. The implementation of the Programme for Change may take time, but the endorsement should still be possible before end of 2016. Its full implementation will then have to be completed at the end of Phase I in 2019. It will contribute to sustainable energy, environment and climate change, themes that are also all relevant for the Global Public Goods and Challenges (GPGC) flagships.

It is expected that, by the mid-point of the NIP period, the Government would – possibly with the participation of the EU – conduct an assessment of progress made in the several areas of sector reform. A positive outcome of this assessment would trigger larger scale investments and a transfer of energy sector support from the classic project modality to modalities like blending (for which the Electrification Financing Initiative – ElectriFI will be considered) and, once eligible, sector budget support.

1.2 Other areas of assessment

N/A.

2 RISKS AND ASSUMPTIONS

The following risks can be identified:

Risks	Risk level (H/M/L)	Mitigating measures
Political instability as a result of breakdown of coalition Government	***Medium to High*** Instability can make sector policy dialogue impossible	• Continued emphasis on political dialogue and diplomacy, underlining the potential negative repercussions of instability on development cooperation
Government Effectiveness – unreported extra-budgetary expenditures	***Medium*** Non-adherence to budget rules can erode discipline of e.g. Local Councils	• Support to PFM reform, including provision of TA by EU (ongoing) • Strengthening national authorising officer (NAO) capacities (ongoing) • Support to Bureau of Statistics to improve data production (provided under EDF 10)
PFM – Budget comprehensiveness falling short, insufficient budget discipline, procurement flaws	***Medium to High*** Non-adherence to budget rules can erode discipline of e.g. Local Councils	• Support to PFM reform covering procurement compliance, including provision of technical assistance (TA) by EU (ongoing) • Support to Civil Service reforms (also supported by World Bank) • Scrutiny of public sector wage bill
Sectorial Risks	**Risk Level (H/M/L)**	**Mitigation Measures**
Government not prioritising energy as a strategic issue, including necessary sector reform	***Medium*** Non-prioritisation will severely impact on investments	• Sector dialogue, also on political level • Attention in media on the necessity of reform • Explanation and persuasive communication • Regional energy diplomacy
LEWA's mandate, being based on a law, can / will not be changed	***Low to Medium*** Changing law is time consuming and can be complicated	• Sensitisation of stakeholders • Prioritisation of revising mandates • Provision of TA support for redrafting of legislation
Weaknesses in tariff policies energy sector not resolved	***Medium to High*** Adverse financial environment will limit grid expansion and room for energy conservation	• Balance the interests of whole energy sector • LEC to request for timely tariff revisions when due • LEWA to take broader view of need for tariff adjustments • Continued awareness raising on benefits at high level of a healthy energy sector able to expand
Government not prioritising capacity development and coherent planning in sector	***Low to Medium*** Impact on cost effectiveness of investments	• Continued awareness raising on benefits at high level combined with performance targets for staffing • Raise profile of sector through communication of results
Environment for investment by private sector not conducive	***Medium*** Access to modern forms of energy, including renewables, severely restrained	• Provision of TA support for the updating of the NEMP • Timely endorsement of an updated NEMP • Increase transparency in decision-making processes • Continued policy dialogue on supporting policies and conduct toward investment climate

Assumptions for Sector
• Coalition Government shows genuine commitment during 2016 and beyond to reform in the energy sector. • Decisive action taken to reform institutional arrangements, through adoption of an Programme for Change. • Mechanism of monitoring consultations established for discussing progress towards the required changes for full scale cooperation under phase II of energy support under the 11th EDF. • Capacity needs are given priority by Government over short-term immediate needs. • Attracting and retaining professional staff in the Government will improve.

3 LESSONS LEARNT, COMPLEMENTARITY AND CROSS-CUTTING ISSUES

3.1 Lessons learnt

The main lessons learnt during the past 10 years of institutional and policy development are the following:

- Access to modern energy services in Lesotho has been slow to improve, both in rural and the urban areas. Only during the last few years have political goals been formulated (e.g. 8 000 new connections per year) and reached, showing that LEC can implement agreed upon policies;
- The limited financial resources are almost exclusively used for urban areas, deepening the divide with the rural areas. Rural energy supply is largely a neglected area;
- Pilot projects initiated by REU did not have proper needs analysis; there was no explicit service delivery model, no after-sales organisation, and no sustainability analysis. There is no written evaluation of the major pilot projects;
- At governance level there is no clear responsibility structure (or not always respected), unclear or conflicting mandates, no indicator for policy efficacy, ineffective policy frameworks, no approved NEMP and an inert reaction on sector problems;
- EU has decided not to pay the General Budget Support and Sector Budget Support tranches (water), due to non-compliance with the general eligibility criteria.

3.2 Complementarity, synergy and donor coordination

There are few other donors working in the sector, with mainly Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), United Nations Development Programme (UNDP) and the African Development Bank (AfDB) remaining active. UNDP has designed the Lesotho Energy Alternative Project (LEAP) and the Lesotho Renewable Energy Based Rural Electrification Project (LREBRE), both projects working with the energy sector in rural areas, and in close cooperation with the Ministry of Local Government and Chieftainship. UNDP recently received funding for its Sustainable Energy for All (SE4A) project '*Development of Cornerstone Public Policies and Institutional Capacity to accelerate Sustainable Energy for All Progress*', a project with much emphasis on an active role of the private sector in bringing renewable energy to the rural areas (Global Environment Facility (GEF) funded - USD 3 832 500 with co-financing of Government of up to USD 8 200 000). GIZ has, along with experience of improved cooking stoves, much experience gained in the SADC region with mini-grid energy projects, also through managing the EU Energy Initiative Partnership Dialogue Facility (EUEI-PDF)[6]. Both organisations, UNDP and GIZ, have indicated their

[6] http://euei-pdf.org/regional-studies/supportive-framework-conditions-for-green-mini-grids

interest to cooperate and collaborate with the EU in the energy sector. The Government received in 2015 an AfDB loan of USD 17 500 000 for the long overdue refurbishment of the electricity distribution network, to which the European Investment Bank (EIB) has shown interest to complement with an additional loan to finance the remaining 50%. BADEA[7] provided recently a loan / grant of USD 20 000 000 to the Government for the extension of the grid to serve mainly peri-urban electrification.

A regional ACP-EU Cooperation Programme in Higher Education (EDULINK), financed programme for inter-university cooperation on energy has the National University of Lesotho (NUL) as a partner. This cooperation results in an improved curriculum and research on renewable energy sources. Some of these results will enable energy sector projects to be more successful.

The Global Climate Change Alliance (GCCA) programme under the Development Cooperation Instrument (DCI)-Environment is working in Lesotho to align all policies with the strategic Climate Change policy guidelines. The potential for RE technologies is largely untapped yet.

Transferring the positive experience with sector coordination to also cover the energy sector is an important objective of sector policy. Regular meetings, formal as well as informal, can lead to improved sector coordination.

The national PFM Reform is supported by the EU, AfDB and WB and a Public Sector Modernisation project, funded by the WB with USD 10 000 000, has been approved by the Board in March 2016.

The EU support under the 10th EDF to the Bureau of Statistics, implemented through UNDP, will consider the energy sector in its pilot ministries' selection.

3.3 Cross-cutting issues

Gender

The position of women and children in rural areas will be improved if cleaner energy sources are introduced. Energy efficient household devices and mini-grids in rural areas will liberate time and improve the indoor air quality. It can have the effect of improved learning by children.

Environment and climate change

Energy projects, as identified, will contribute to conservation of the vegetation cover in fragile mountainous areas, which is expected to have a positive effect on reducing erosion, while maintaining biodiversity. Renewable energy projects are contributing positively to the mitigation of climate change.

Governance

As projects need to be prepared with local governments and the chiefs, local ownership will be enhanced and the governance structures will be reinforced. Where possible, synergies will be sought with interventions in the governance sector once these have been identified.

HIV/AIDS

The project is not expected to have direct effects on the fight against HIV/AIDS.

[7] BADEA: Arab Development Fund for Economic Cooperation

4 DESCRIPTION OF THE ACTION

4.1 Objectives/results

This programme is relevant for the Agenda 2030. It contributes primarily to the progressive achievement of SDG Goal 7 (Affordable and Clean Energy: ensure access to affordable, reliable, sustainable and modern energy for all), but also promotes progress towards Goal 13 (Climate Action) and Goal 15 (Life on Land - combat desertification). This does not imply a commitment by the Government of Lesotho benefiting from this programme.

The set-up of the sector only allows for selective support based on the project approach. The environment is not conducive for large-scale investments in electricity generation. However, a base for these interventions can be created through a demonstration of strong Government commitment to the strategic energy sector. The institutional set-up in the sector needs to be adjusted and the National Energy Master Plan (NEMP) has to be updated. It should be endorsed subsequently by Cabinet to guide the sector in the forthcoming years. The need for adequate energy action is also critically important to stop erosion and with consideration to the herding culture in Lesotho. The neglected rural areas in the highlands and lowlands are urgently in need of access to modern energy services, which fortunately enough can be delivered in the form of technologies developed in Lesotho.

The Minister of Energy and Meteorology agreed during a meeting in November 2015 to the reform actions and interventions proposed. The EU Delegation received on 9th June 2016 a letter from the Minister, formally confirming the Ministry's support for phase I.

Overall Objective:

The overall objective of phase I is (albeit modest in scale) improved access for the people of Lesotho and the private sector to modern, clean, affordable and reliable energy supply, including better enabling environment for large up-scaling under a follow-up phase II, which will be focusing on energy access for the rural areas and energy efficiency improvement in various economic sectors[8].

Specific objectives:

The project's impact relate to the following objectives as defined in the National Strategic Development Plan (NSDP) for the energy sector:

- Increase energy generation to attain self-sufficiency, with the possibility of also exporting clean energy;
- Expand access to electricity for industry, commercial centres and urban households and
- Promote energy conservation and efficiency.

Therefore the specific objectives of this project intervention are:

1. Contribute to the creation of conditions which lead to effective and sustainable energy sector governance, including adaptation to sector reform by key stakeholders;
2. Updated National Energy Master Plan, endorsed by Cabinet and being implemented;

[8] In the event that phase I falls short in gaining the required political commitment to reform, then phase II will limit its cooperation with government to continued capacity development, where required, and further concentrate on supporting energy interventions in the sector which can be implemented without the proposed reforms. Possibilities are a countrywide roll-out of a programme introducing improved cooking stoves, and support to alternative energy projects under private initiative.

3. Creation of conditions for full-scale access to modern energy in rural areas, demonstrating also the nexus between the water and energy sectors through pilot projects.

To achieve the above, three interventions in line with the NSDP have been identified:

Result 1: Sector Governance: Institutional adaptation – Programme for Change

Under the first specific objective, it is envisaged that the commitment of the Government is reflected in the institutional redistribution of various responsibilities within the sector, which are currently confusing. Institutions (such as the Bureau of Statistics) will also need technical assistance (TA) support. The need for TA to the banking sector should be ascertained, as banks in Lesotho have very limited experience with energy projects and micro finance mechanisms, which are possibly needed to facilitate the introduction of energy efficient household devices and improved energy efficiency in the transport sector. Producers of Renewable Energy technology might also be in need of support to help them to scale up production.

Result indicators (outcomes and impacts) can be selected from the monitoring framework of the NSDP. The latter has been adopted, but it still has to prove its usefulness in delivering quality data.

Result 2: Policies: Updating of National Energy & Electrification Master Plans

Support the upgrading of the National Energy Master Plan and Electrification Master Plan and bring these in line with the Climate Change policy to be developed. New governance principles should be integrated in the updated NEMP. The dialogue approach, started during the identification process, is to be continued to broaden the support for the new NEMP. The RE development plan should be brought in line with the new NEMP after its endorsement by Government.

Result 3: Provision of cleaner and energy efficient cooking facilities and access to renewable energy sources to poor households

This result will be piloted through two approaches: (a) Mini-grids; (b) energy efficient household device in selected villages. These are no-regret[9] projects, which can be developed as soon as progress towards energy sector commitment and institutional change is sufficiently proven.

A. In conjunction with the identification in the water sector it was concluded that two mini-grid pilot projects could be piloted to show that mini-grid projects in rural areas are possible. Intervention areas are to be selected based on their economic growth potential. Combatting erosion and support to food security are other main objectives, emphasising also the nexus energy – water.

B. Energy efficient household device, including innovative solutions such as improved cooking stoves equipped with an integrated solar panel producing sufficient electricity for light-emitting diode (LED) lamps and battery charging of cell phones, are a modern and economic solution to needs of the rural people. High quality products of Lesotho origin exist, but their distribution, including after-sales service to remote areas, is currently a challenge. The stove producers need to scale up, but before doing

[9] No-regret options are actually options which are good under all circumstances, with or without changes in the institutional set-up.

so, a pilot project has to show what distribution and after-sales imply in terms of organisation and costs in Lesotho.

A mid-term review (MTR) at the end of phase I on progress made will be commissioned before a decision will be taken on larger scale interventions during phase II. If the outcome of the MTR would be negative on commitment and progress towards energy sector reform, phase II will limit its cooperation with the Government to continued capacity development where required, and further concentrate on supporting energy interventions in the sector which can be implemented without the institutional set-up reforms. Possibilities are a countrywide roll-out of a programme introducing energy efficient household devices (via private sector and/or civil society/non-governmental organisations), and support to alternative energy projects under private initiative and through civil society.

Phase I will contribute to sustainable energy, environment, climate change, agriculture and food security, themes relevant for Global Public Goods and Challenges (GPGC), with a particular opportunity for innovation through exploitation of Lesotho's renewable energy sources.

4.2 Main activities

For result 1: Sector Governance: Institutional adaptation – Programme for Change, the following indicative activities could be conducted:

- Provide TA support to the Government in addressing the required institutional redistribution and adaptation and resolution of overlapping - conflicting mandates etc.
- Organise workshops, seminars etc. supporting the institutional adaptation process
- Review and assess at the end of Phase I progress on institutional adaptation

For result 2: Policies: Updating of National Energy & Electrification Master Plans, the following indicative activities could be conducted:

- Provide technical assistance to the updating of National Energy Master Plan / Electrification Master Plan
- Organise workshops, seminars etc. supporting the update of the masterplan
- Review progress on quality of updated plans at end of Phase I

For result 3: Provision of cleaner and energy efficient cooking facilities and access to renewable energy sources to poor households, the following indicative activities could be conducted:

- Launch a call for proposal covering efficient cooking facilities and access to renewable energy sources
- Implement the selected grant projects
- Develop and execute communication and visibility activities
- Evaluate impact of projects and their replicability, with the aim of upscaling under a possible phase II of the programme.

Policy dialogue will be an integral part for all relevant activities, making sure that the institutional adaptation and updating of the relevant master plans to suit the changing environment in the sector, have been properly integrated in order to ensure that the enabling conditions for improved sector governance and for full-scale access to modern energy in rural areas have been created and the end of phase I.

4.3 Intervention logic

The intervention logic can be found in Appendix 1. Problems identified during the identification concern ad-hoc interventions in the sector; non-transparent decision-making in selection of projects, project areas and developers; difficulties in provision of legal arrangements Independent power Producers (IPPs), producers); the overruling of Department of Energy (DoE) project decisions and inertness when institutional inadequacies are at stake. While the Government wants the private sector to step in, the fact that the NEMP of 2007 is not endorsed is only deepening the risk for the private sector. Policy making and policy implementation in the energy sector need stricter division. Restructuring of the sector allowing for better sector governance, updating and implementation of Master Plans; creation of enabling environment, especially also for the private sector and the testing of energy pilot projects, will have to lead to the outcomes, which in turn can contribute to improved access to modern, clean, affordable and reliable energy supply, including the possibilities for a large up-scaling. Assumptions along the results chain from outputs up concern e.g. a Government remaining successful in enabling the environment for renewable energy, driving electricity export projects; that quality producers and distributors keep working together; that Government subsidises the distribution of cooking stoves at start up; that commercial banks become increasingly instrumental in providing micro loans, and that institutions within energy sector remain committed to the programme for change, all enabling the achievement of desired outcomes. A Government, continuing to exercise political willingness and leadership, and an energy sector remaining to cooperate on required changes, are conditional for outcomes to contribute to the expected impact. At the end of phase I it is expected to have an energy sector ready for large scale investments.

5 IMPLEMENTATION DESCRIPTION OF THE ACTION

5.1 Financing agreement

In order to implement this action, it is foreseen to conclude a financing agreement with the partner country, referred to in Article 17 of Annex IV to the ACP-EU Partnership Agreement.

5.2 Indicative implementation period

The indicative operational implementation period of this action, during which the activities described in section 4.2 will be carried out and the corresponding contracts and agreements implemented, is **48** months from the date of entry into force of the financing agreement.

Extensions of the implementation period may be agreed by the Commission's authorising officer responsible by amending this decision and the relevant contracts and agreements; such amendments to this decision constitute non-substantial amendment in the sense of Article 9(4) of Regulation (EU) 2015/322.

5.3 Implementation of the budget support component

N/A.

5.4 Implementation modalities

5.4.1 Grants: call for proposals (Direct Management)

The Call for Proposals for the energy efficient household devices and the mini-grids (nexus with water sector) will be implemented through direct management. The call will be used to test innovative approaches in the sector, accruing first-hand best practices with regards to maintenance and after-sales strategies which would enhance long-term sustainability. Applicants in the Call for Proposals will be encouraged to partner with organisations and institutions which can bring in twinning, south - south cooperation, peer to peer technical dialogue and sector experience in renewable energy among EU Member States.

(a) *Objectives of the grants, fields of intervention, priorities and expected results*

The objective of the lot **Energy efficient household devices, distribution and after-sales structures for rural areas in Lesotho** call will be to introduce and test in pilot areas devices like solar home systems and improved cooking stoves, including innovative solutions such as stoves equipped with an integrated solar panel producing sufficient electricity for LED lamps and battery charging of cell phones, as a modern and economic solution to needs of the rural people, including after-sales structures. The design of this call will be critical as it should enhance the capacity of the private sector to deliver and service energy solutions at household level, without disturbing the regular market for such energy options. Expected results will include accruing best practices for guaranteeing sustainability of energy solutions at rural household level in Lesotho without market distortion.

The objective of the lot **Mini-grids for exploring economic growth potential in rural areas in Lesotho** call will be to pilot, in conjunction with identification in the water sector, a maximum of two mini-grid pilot projects to show that mini-grid projects in rural areas are possible. Intervention areas are to be selected based on their economic growth potential. Combatting erosion and support to food security are other main objectives, emphasising also the nexus energy–water.

Preferably, both Lots will be undertaken within the same Call for Proposals. The total budget for this call will be maximum EUR 4 000 000, with in principle for each lot EUR 2 000 000, with a flexibility to adjust the budget between the lots depending on the quality of proposals submitted.

(b) Eligibility conditions

In order to be eligible for a grant or contract under phase I, the applicant must be a legal person and belong to one of the following categories:

- Civil Society Organisations (CSOs)
- Non-governmental organisations (NGOs);
- Private sector organisations;
- Parastatal bodies;
- International agencies;
- Local authorities and consortia thereof or associations representing them.

In addition, applicants should be nationals of Lesotho, African, Caribbean and Pacific (ACP) countries or be established in a Member State of the European Union. Applicants must be directly responsible for the preparation and management of the action with the co-applicant(s) and affiliated entity(ies), not acting as an intermediary and be able to demonstrate to have carried out activities in, or related to, the field of energy.

Subject to information to be published in the call for proposals, the indicative amount of the EU contribution per grant is maximum EUR 2 000 000 and the grants may be awarded to sole beneficiaries and to consortia of beneficiaries (coordinator and co-beneficiaries). The indicative duration of the grant (its implementation period) is between 36 and 48 months.

(c) Essential selection and award criteria

The essential selection criteria are financial and operational capacity of the applicant.

The essential award criteria are relevance of the proposed action to the objectives of the call; design, effectiveness, feasibility, sustainability and cost-effectiveness of the action.

(d) Maximum rate of co-financing

The maximum possible rate of co-financing for grants under this call is up to 80%, depending on the financial capacity of targeted beneficiaries.

In accordance with Articles 192 of Regulation (EU, Euratom) No 966/2012, if full funding is essential for the action to be carried out, the maximum possible rate of co-financing may be increased up to 100 %. The essentiality of full funding will be justified by the Commission's authorising officer responsible in the award decision, in respect of the principles of equal treatment and sound financial management.

(e) Indicative timing to launch the call

This call will be launched in the second trimester of 2017.

5.4.2 Procurement (direct management)

Subject in generic terms, if possible	Type (works, supplies, services)	Indicative number of contracts	Indicative trimester launch of procedure
Short Term Technical Assistance to cover specific issues in energy sector	Services	4 -5	Second trimester 2017

5.4.3 Indirect management with the partner country

In order to support the Department of Energy in its tasks on policy refurbishment, institutional refinement and the regulatory framework, it is proposed to procure services through one service contract covering a period of 3 - 4 years.

A part of this action with the objective of:

(1) supporting the Department of Energy through a Service Contract for technical assistance;

(2) Facilitating -by means of e.g. workshops, seminars and study tours- the necessary conditions for effective and sustainable energy sector governance, the creation of conditions for increased access to modern energy in rural areas and adaptation to sector reform by key stakeholders,

may be implemented in indirect management with the Kingdom of Lesotho in accordance with Article 58(1)(c) of the Regulation (EU, Euratom) No 966/2012 applicable in accordance with Article 17 of the Regulation (EU) 2015/323 according to the following modalities.

The Kingdom of Lesotho, through the NAO, who is the Minister of Finance, will act as the contracting authority for the procurement and grant procedures. The Commission will control

ex ante all the procurement procedures except in cases where programme estimates are applied, under which the Commission applies ex ante control for procurement contracts above EUR 100 000 (or lower, based on a risk assessment) and may apply ex post control for procurement contracts up to that threshold. The Commission will control ex ante the grant procedures for all grant contracts.

Payments are executed by the Commission except in cases where programmes estimates are applied, under which payments are executed by the Government of the Kingdom of Lesotho for ordinary operating costs, direct labour and contracts below EUR 300 000 for procurement and up to EUR 100 000 for grants.

The financial contribution does not cover the ordinary operating costs incurred under the programme estimates.

In accordance with Article 190(2)(b) of Regulation (EU, Euratom) No 966/2012 and Article 262(3) of Delegated Regulation (EU) No 1268/2012 applicable by virtue of Article 36 of the Regulation (EU) 2015/323 and Article 19c(1) of Annex IV to the ACP-EU Partnership Agreement, the Government of the Kingdom of Lesotho shall apply procurement rules of Chapter 3 of Title IV of Part Two of Regulation (EU, Euratom) No 966/2012. These rules, as well as rules on grant procedures in accordance with Article 193 of Regulation (EU, Euratom) No 966/2012 applicable in accordance with Article 17 of the Regulation (EU) 2015/323, will be laid down in the financing agreement concluded with the Government of the Kingdom of Lesotho.

5.5 Scope of geographical eligibility for procurement and grants

The geographical eligibility in terms of place of establishment for participating in procurement and grant award procedures and in terms of origin of supplies purchased as established in the basic act and set out in the relevant contractual documents shall apply, subject to the following provisions:

- In accordance with Article 20(6) of Annex IV to the ACP-EU Partnership Agreement and with regard to the regional nature of this action, the Commission decides that natural and legal persons from the following countries, territories or regions shall be eligible for participating in procurement and grant award procedures: ACP countries, South Africa and EU member states. The supplies originating there shall also be eligible.
- The Commission’s authorising officer responsible may extend the geographical eligibility in accordance with Article 22(1)(b) of Annex IV to the ACP-EU Partnership Agreement on the basis of urgency or of unavailability of products and services in the markets of the countries concerned, or in other duly substantiated cases where the eligibility rules would make the realisation of this action impossible or exceedingly difficult.

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5.6 Indicative budget

Acitivities	EU contribution (amount in EUR)	Indicative third party contribution (amount in EUR)
Error! Reference source not found. – Grants: call for proposals (Direct Management) for pilot projects on mini-grids and energy efficient household devices (direct management)	4 000 000	800 000
Error! Reference source not found. – Procurement (direct management)	600 000	0
5.4.3. – Indirect management with the Kingdom of Lesotho	1 800 000	0
Service contract to support Department of Energy as leader in the sector, addressing *- Component I: Institutional redistribution, resolution overlapping - conflicting mandates* *- Component II: Updating of National Energy Master Plan / Electrification Master Plan*	*1 500 000*	0
Programme Estimate	*300 000*	0
Error! Reference source not found. – Evaluation, 5.10 - Audit	200 000	0
Error! Reference source not found. – Communication and visibility	200 000	0
Contingencies	200 000	0
Totals	**7 000 000**	**800 000**

5.7 Organisational set-up and responsibilities

A Task Team Energy, formed by the NAO, to support the formulation of EU funded sector interventions under the 11th EDF, already steered the preparation of the scoping study Energy 11th EDF, which has been prepared with assistance from the Technical Assistance Facility of the Sustainable Energy for All instrument. A similar Task Team Water has been steering the scoping study Water executed under a Framework Contract. Through this organisational set-up, the Government has built up valuable experience in guiding and facilitating identification of donor funded sector interventions under EU procedures in key sectors, and contributed to the formulation of the respective interventions. This task team, chaired by the Department of Energy will be maintained as the Project Steering Committee during the implementation phase of the project cycle, whereas the EU Delegation is also member.

5.8 Performance monitoring and reporting

The Task Team Energy will be responsible for monitoring, steering and backstopping the implementation of activities to be undertaken under phase I of "Support to Reform in the Energy Sector in Lesotho". Ownership of this process is secured through representation in the task team of the major sector stakeholders, representing government institutions as well as private entities in the sector. The current EU support under the 10th EDF to the Bureau of Statistics, will have to contribute to improving the data collection in the energy sector.

The day-to-day technical and financial monitoring of the implementation of projects resulting from a call for proposals will be a continuous process and part of the implementing partner's responsibilities. To this aim, the implementing partner shall establish a permanent internal, technical and financial monitoring system for the action and elaborate regular progress reports (not less than annual) and final reports. Every report shall provide an accurate account of implementation of the action, difficulties encountered, changes introduced, as well as the degree of achievement of its results (outputs and direct outcomes) as measured by corresponding indicators, using as reference the logframe matrix. The report shall be laid out in such a way as to allow monitoring of the means envisaged and employed and of the budget details for the action. The final report, narrative and financial, will cover the entire period of the action implementation.

The Commission may undertake additional project monitoring visits both through its own staff and through independent consultants recruited directly by the Commission for independent monitoring reviews (or recruited by the responsible agent contracted by the Commission for implementing such reviews).

5.9 Evaluation

Having regard to the nature of the action, a mid-term evaluation will be carried out for this action or its components via independent consultants contracted by the Commission.

It will be carried out upon completion of the sector reform in phase I for learning purposes, in particular with respect to progress made in preparing the sector for blending operations (e.g. ElectriFI), before a decision can be taken on larger-scale financing of interventions during phase II.

Targeted co-financing with Financing Institutions through blending operations, but also budget support to the sector through a Sector Reform Contract in case Lesotho would regain eligibility could then be considered.

The Commission shall inform the implementing partner at least 3 months in advance of the dates foreseen for the evaluation missions. The implementing partner shall collaborate efficiently and effectively with the evaluation experts, and inter alia provide them with all necessary information and documentation, as well as access to the project premises and activities.

The evaluation reports shall be shared with the partner country and other key stakeholders. The implementing partner and the Commission shall analyse the conclusions and recommendations of the evaluations and, where appropriate, in agreement with the partner country, jointly decide on the follow-up actions to be taken and any adjustments necessary, including, if indicated, the reorientation of the project.

Indicatively, one contract for evaluation services shall be concluded under a framework contract, latest early 2019.

5.10 Audit

Without prejudice to the obligations applicable to contracts concluded for the implementation of this action, the Commission may, on the basis of a risk assessment, contract independent audits or expenditure verification assignments for one or several contracts or agreements.

Indicatively, one contract or more for audit services shall be concluded under a framework contract in 2020, or latest early 2021, when all grant contracts will have been operationally concluded.

5.11 Communication and visibility

Communication and visibility of the EU is a legal obligation for all external actions funded by the EU.

This action shall contain communication and visibility measures which shall be based on a specific Communication and Visibility Plan of the Action, to be elaborated at the start of implementation and supported with the budget indicated in section 5.6 above.

In terms of legal obligations on communication and visibility, the measures shall be implemented by the Commission, the partner country, contractors, grant beneficiaries and/or entrusted entities. Appropriate contractual obligations shall be included in, respectively, the financing agreement, procurement and grant contracts, and delegation agreements.

The Communication and Visibility Manual for European Union External Action shall be used to establish the Communication and Visibility Plan of the Action and the appropriate contractual obligations.

6 PRE-CONDITIONS

N/A

APPENDIX - INDICATIVE LOGFRAME MATRIX[10]

The activities, the expected outputs and all the indicators, targets and baselines included in the logframe matrix are indicative and may be updated during the implementation of the action without an amendment to the financing decision. The indicative logframe matrix will evolve during the lifetime of the action: new lines will be added for listing the activities as well as new columns for intermediary targets (milestones) when it is relevant and for reporting purpose on the achievement of results as measured by indicators. Indicators will be gender disaggregated whenever relevant and information can be made available.

	Results Chain	Indicators	Baselines (reference year 2015)	Targets (reference year mid 2019)	Sources and means of verification	Assumptions
Overall objective: Impact	Improved access for the people of Lesotho and the private sector to modern, clean, affordable and reliable energy supply, including better enabling environment for large up-scaling	Energy has been adopted as strategic issue	No clear responsibility structure - unclear mandates	Clear responsibilities, structure & mandates in sector	Minutes of consultations, discussing and monitoring progress towards required changes for full scale energy cooperation under 11th EDF, reports DoE	
			No indicator for policy efficacy	Indicator for policy efficacy established		
		Effectiveness of policy frameworks	Ineffective policy frameworks	Upgraded & endorsed NEMP in full implementation		
		Responsiveness based on clear institutional mandates	Inert reaction on sector problems by key stakeholders	Pro-active response structure applied by key stakeholders for sector challenges		
		Electricity sub-sector becoming increasingly financially viable	Sector is loss-making and is accumulating maintenance backlogs	Electricity sub-sector increasingly becoming viable for financing maintenance and contribution to	Annual financial statements of LEC, reports DoE	

[10] Indicators which are aligned with NIP Sector Intervention Framework – Sector Energy are marked with '*', with numerical reference to appropriate section; indicators aligned to EU Results Framework are marked with '**', with reference to the number of the indicator in the EU Results Framework – Annex 1.

	Results Chain	Indicators	Baselines (reference year 2015)	Targets (reference year mid 2019)	Sources and means of verification	Assumptions
				service expansion		
Specific objectives: Outcomes	1 Contribute to the creation of conditions which lead to effective and sustainable energy sector governance, including adaptation to sector reform by key stakeholders	Process in place for restructuring of energy sector	Unclear mandates (DoE, LEC, REU, LEWA)	Strict adherence to mandates of key institutions	Minutes of consultations; Annual reports of LEWA, LEC, DoE	Continued political willingness demonstrated by Government
		IPPs & PPAs[11] procedures attract interest private sector (*,1.1.2)	IPPs and PPAs have unclear procedures, leading to no interest of private sector	Up to 5 companies show interest in investing in (RE) sector	Reports from LEWA, DoE	Government continues to be leading the sector reform
		DoE is guiding sector based on exclusive role of policy maker (*,1.1.2)	Unclear mandates of key institutions (DoE, LEC, REU, LEWA) leading to blurred roles, overlaps and inefficiency	Strict adherence to mandates among key institutions is leading to increasingly efficient service delivery in sector	Minutes of Consultations (as above), DoE reports	Government continues to have clear energy vision and being receptive toward restructuring energy sector
		LEWA, LEC are exclusively policy implementers (*,1.1.2)				
	2. National Energy Master Plan is guiding the sector development	Enacted NEMP is guiding sector development (*,1.1.1)	NEMP 2007 not guiding sector development	Enacted NEMP used by Government for sector development	Annual reports of LEWA, LEC, DoE	Energy sector continues willing to cooperate on the required changes

[11] Independent Power Producers and Public Private Partnerships.

	Results Chain	Indicators	Baselines (reference year 2015)	Targets (reference year mid 2019)	Sources and means of verification	Assumptions
	3. Enabling conditions created for full scale access in rural areas to basic energy options	Application of lessons learnt allow for upscaling of integrated energy and cooking solutions	Use 100% biomass for cooking; candles, batteries, paraffin are used for lighting	70 % reduction in use of biomass for cooking; 50 % less candles, batteries, paraffin used for lighting	Reports by partners, DoE, REU etc.	Increasingly reliable data on energy sector collected and produced by Bureau of Statistics (BoS) etc.
		Distribution and after-sales network is well established	Low % of people using sustainable energy sources	Increased number of people with access to sustainable energy through EU support[12]		
		Areas develop their economic potential with mini-grids	No electricity available locally	Increased number of businesses with access to sustainable energy through EU support[13]		
Outputs	1. Proposals for restructuring the energy sector	Number of recommendations adopted by Government (*,1.1.1)	Energy institutions need restructuring of mandates, governance and accountability	Mandates of at least 4 key institutions restructured (DoE, LEC, LEWA, REU)	Monitoring reports of consultations Annual report DoE	Government continues to be receptive toward restructuring energy sector
	2. National Energy Master Plan updated and endorsed by the	Enacted NEMP can be used for implementation (**,57 - *,1.1.1)	Current NEMP 2007 needs updating	Updated NEMP, including governance principles, has been	Reports by Cabinet, DoE	

[12] Baseline and target to be established at start of action; **,22
[13] Ibid

	Results Chain	Indicators	Baselines (reference year 2015)	Targets (reference year mid 2019)	Sources and means of verification	Assumptions
	Government			endorsed and enacted		
	3a. Pilot energy efficient household devices in rural areas	Number of households supplied with energy efficient household devices through efficient distribution system (**,22 - *,2.1.4)	Roll out of improved cooking stove limited, energy services unavailable in rural areas	15,000 to 20,000 households (h.h.) having energy efficient household devices	Reports partners, DoE	Producers and distributors continue to work together; Government subsidises distribution of cooking stoves, but only as start - up; Banks become increasingly instrumental in providing micro loans for affordable financing and payment mechanism
		% reduction in use of biomass (**,22 - *,2.1.4)	Unsustainable use of biomass	Up to 70 % reduction in use of biomass for h.h. consumption	Reports partners, DoE	
	3b. Pilot mini-grids - progressively responding to electricity demand and economic potential of selected areas	Number of households connected to electricity (off-grid) (**,20 - *, 2.1.3)	No electricity available locally	Up to 1,000 households connected to electricity (off-grid)	Reports partners, DoE	
		Number of rural businesses connected to electricity (off-grid) (**,20 - *,2.1.1 & 2.1.2 & 2.1.3)	No electricity available locally	Up to 100[14] rural businesses connected to electricity (off-grid) for increased economic activities	Reports partners, DoE	

[14] Figure will much depend on how many rural economic activities in the served areas can benefit.

	Results Chain	Indicators	Baselines (reference year 2015)	Targets (reference year mid 2019)	Sources and means of verification	Assumptions
	4. Studies carried out as inputs for enhancing policy instruments	Number of relevant studies completed, with support from TA, where needed	Studies produced are often not used	100 % of studies used for improving sector policy and organisations	Consultancy reports, reports DoE, LEWA, LEC, private sector	Institutions within energy sector or closely associated remain committed to Programme for Change