National Stakeholder Consultation

National Stakeholder Consultation Report on NPR- Lesotho

25 September 2022

UN environment programme | U4E United for Efficiency | GREEN CLIMATE FUND | CTCN UN Climate Technology Centre & Network UNFCCC Technology Mechanism

PEGASYS CHANGING LIVES CHANGING WORLDS

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ABBREVIATIONS

AfDB	African Development Bank
CAR	Conformity Assessment Report
DoE	Department of Energy
EU	European Union
GCF	Green Climate Fund
GWP	Global Warming Potential
HEPS	Higher Energy Performance Standard
IMF	International Monetary Fund
LEC	Lesotho Electricity Company
LED	Light emitting diode
LNDC	Lesotho National Development Corporation
LSI	Lesotho Standards Institute
LSL	Lesotho Loti
MDG	Millennium Development Goals
MEPS	Minimum Energy Performance Standard
MV&E	Monitoring, Verification and Enforcement
ODS	Ozone Depleting Substances
PWG	Policy Working Group
SADC	Southern African Development Community
TBD	To Be Determined
UA	Units of Account
U4E	United for Efficiency

1 INTRODUCTION

The 'Leapfrogging to Energy Efficient Appliances and Equipment in Lesotho (Refrigerators and Distribution Transformers)' project is delivered by the UN Climate Technology Centre and Network (CTCN) with funding from the Green Climate Fund (GCF) and under the guidance of the government of the Kingdom of Lesotho (Lesotho). The project is also being implemented simultaneously within 7 other countries of the Southern African Development Community (SADC) region, namely Botswana, Zimbabwe, Namibia, Malawi, eSwatini, Zambia and Tanzania. Lesotho is one of the few countries in the world that is completely encircled by another country. Lesotho is completely contained within the borders of South Africa. Thus, Lesotho has no access to the coast/sea. Therefore, it is heavily reliant on trade with South Africa be it for equipment or for commodities such as oil, petrol and even electricity. The electrification rate in Lesotho is currently under 45% [1] but it is on the increase. The government of Lesotho has embarked on an electrification campaign, which also targets rural areas. The electrification is also expected to drive economic growth in the country. Currently however, Lesotho imports over 60% of its electricity from South Africa [2]. For this reason, the average price of electricity (generation + import) in Lesotho is quite high and any losses are hence expensive. Refrigeration appliances (and distribution transformers), in particular household refrigerators, are appliances that are constantly operating. As such they always consume energy (24 hours per day, 365 days per year). Therefore, energy efficiency improvements in these appliances have a continuous impact on energy efficiency improvements for Lesotho.

The aim of the project was thus to focus on distribution transformers and household refrigeration appliances and attempt to establish a framework in order to improve the energy efficiency of these appliances. This was done through the establishment of national standards for both refrigerators and distribution transformers and development of Minimum Energy Performance Standards (MEPS) as well as an energy labelling scheme for refrigerators. During the project engagements were held with all of the key stakeholders within the country to create a system through which the necessary legislation can be developed related to the implementation of the MEPS and also to create a national implementation plan that will both enable the implementation of the MEPS but also create a framework within Lesotho for future development of related standards and legislation. Furthermore, the project investigated possible financing mechanisms available to assist the implementation of this project and the respective training programmes to enable transition into a self-sustained and managed implementation of the project in the future. Pegasys was contracted by the UNEP through the UN Climate Technology Centre and Network (CTCN) to implement this initiative in Lesotho. The CTCN is overseeing the project together with United for Efficiency (U4E) as a technical partner. This report focuses on the household refrigeration aspect of the project. As part of the project a number of tasks were completed as per the project plan. These include:

1. Development of the Lesotho National Standard on energy efficiency in refrigerators (including MEPS and HEPS)

2. Development of the Lesotho Energy Label (draft)

3. Development of the consumer awareness campaign
4. Development of the recommendations related to the financial supporting mechanisms
5. Development of the MV&E plan

One of the key deliverables of the project is the National Policy Roadmap (NPR). This is effectively the implementation guide for the Lesotho national stakeholders to use in order to implement the project. In order to complete the NPR the complete understanding of the project by the key Lesotho national stakeholders was required. The NPR was therefore drafted and presented to the national stakeholders in a series of workshops. This report outlines the workshops that were presented and the content that was delivered.

2 Background

The electrical energy layout of Lesotho is one in which, at the moment, there is a reliance on imports of power from South Africa and a general lack of energy efficiency within household appliances. The legal, regulatory and standardisation frameworks are generally inexperienced and untried with regard to energy efficiency matters. Additionally, the general population is largely unaware of the benefits of energy efficiency and much work will need to be undertaken on the public awareness campaigns related to this issue.

However, there are also a number of opportunities for a successful implementation of MEPS in the refrigeration and distribution transformer environment. These are:

- Successful implementation of MEPS in the refrigeration and distribution transformer sectors could open up a pathway to implement similar projects in other sectors and with other appliances (e.g. washing machines and dishwashers, stoves and ovens, air conditioners, etc.)
- Successful training of the customs officials of the Revenue Services Lesotho (RSL – previously known as the Lesotho Revenue Authority - LRA) in relation to energy efficiency compliance will make them more capable of enforcing other governmental initiatives related to energy efficiency and quality on a variety of products (e.g. air conditioners, power cables, etc.)
- Development of energy efficient appliances could lead to a green building revolution in Lesotho and align with the national energy policies
- Increasing public awareness related to energy efficiency would be beneficial to the general behaviour of the population towards energy use and could provide general energy saving benefits and an energy conscious behaviour beyond the confines of this project.

In order to start with the development of the MEPS and the national standards it is critical that the process is aligned with the national standards development processes in Lesotho and that there is sufficient engagement across the various levels and types of stakeholders within Lesotho in order to obtain buy in for the project. The buy-in greatly assists the adoption of the standards and their implementation. In order to achieve this a number of components are required. some of these have been completed as a part of this project. However, many others require implementation, the most important aspects of the project are listed below:

- Development of the national standard
- Development of the energy label
- Development of the regulatory framework
- Development of the implementation plan
- Development of the supporting aspects such as the consumer awareness campaign

- Obtaining financial backing for the implementation of the project

The national standard and the energy label have been developed. However, for the remaining aspects listed above research was conducted and recommendations made. These recommendations are detailed in the various reports and are gathered in the NPR document. This is effectively an implementation plan/guideline for the national stakeholders of Lesotho. This plan was developed through numerous interactions with the national stakeholders in Lesotho. The plan was also presented to the national stakeholders in workshops. The following section outlines the NPR and its contents briefly. There is an NPR report on the matter, which is more detailed. The section after that explains the workshops that were conducted in more detail.

3 NPR Workshops Contents

The NPR was developed during the course of the project. It was developed through the consultative process with the national stakeholders of Lesotho. Initially, the national stakeholders had been identified, informed about the project and invitations sent to them to participate in the PWG. The PWG was then formulated with the terms of reference and a membership. The PWG would represent the national stakeholders in the remainder of the project and would be presented with the national standards and the MEPS that were developed. The MEPS, the energy label and the national standards were developed though the LSI and the respective TC. The feedback of these developments was provided to the PWG. The PWG was also presented with other parts of the project as they were developed and drafted. These included the consumer awareness campaigns and the research on adequate financing mechanisms to support the project. Upon the finalisation of the activities and all of the drafts the various aspects of the project that were completed and those that would be required for implementation were combined into a workshop. This is the NPR workshop. The NPR workshop consisted of the following:

- Regional standards and context

Detailed explanation on the regional standards, their impact on Lesotho, the conditions in Lesotho and applicability of the regional standards for both distribution transformers and refrigerators. This include aspects such as the HEPS and whether the regional ones were adequate for Lesotho, the background into the suppliers of distribution transformers in South Africa as the main suppliers and their adaptation to the regional standard and the new South African National Standard (SANS 780).

- MEPS, HEPS and energy label

The MEPS and HEPS of the refrigerators were described in detail both in terms of the Lesotho and the regional context. Insight was also provided as to the decisions made by some of the other countries implementing the project, in particularly Eswatini. The MEPS for distribution transformers were also explained and the context of the MEPS and losses in various countries around the world and various standards around the word were described. The development of standards to include more stringent losses was explained and the status of the manufacturers and their capabilities explained. The various labels from around the world were outlined and the reason for the bar label, similar to the South African energy label was explained. The distribution transformer label was also presented and explained in detail. The proposed Lesotho Energy labels for both refrigerators and distribution transformers were presented and discussed.

- Implementation key points

The key implementation points for the project were identified and discussed in detail. These included:

- Regulation
- Enforcement of regulation
- Communication between relevant departments and entities
- Consumer awareness
- Financial support
- Training
- Continuous stakeholder engagement

Each of the points above was explained in more detail during the workshop and commented on by the stakeholders. One of the key aspects of the NPR workshops was the assigning of roles and responsibilities to the various institutions within Lesotho. This showed exceptional commitment to the project and an understanding of the detailed activities that are required for its successful implementation.

- MV&E

The details of the MV&E plan were outlined. A lengthy discussion followed related to the various options regarding the implementation of the standards and the labels. For refrigerators it was decided to utilise the PRS and the activities of this process were explained in detail with responsibilities being assigned to each organisation. For distribution transformers the decision was made to focus on the procurement processes as these purchases are governed by a few large buyers (LEC, LNDC and several mines). The procurement process was explained in detail to the stakeholders and training on the methodologies of TCO were repeated for the stakeholders.

- Consumer Awareness

The consumer awareness campaign plans were discussed in detail and aligned with the conditions in Lesotho. Additionally, prices for certain activities, such as TV, radio and billboard advertising were gathered through the process of the workshops and discussions, which thus proved very useful.

- Financial mechanisms

The financial mechanisms were discussed in more detail. There were separate training and workshops on financing mechanisms but it was also important to discuss them during the NPR as some of the organisations with certain responsibilities could understand the budget they require for project implementation. The pure financing mechanisms workshops focused more on the mechanisms to support the purchase of more efficient refrigerators and distribution transformers, whereas the discussions in these workshops focused on the finances required to implement the project/NPR.

The following section outlined the workshops that were delivered to the national stakeholders.

4 Consultation Process

The various aspects of the project and in particular the implementation of the project were discussed at various PWG meetings throughout the project. As the PWG consisted of the major national stakeholders the majority of the content and the planning of the implementation of the project was known to the major organsations relevant to the project in Lesotho.

Upon the completion of the NRP planning and the completion of the planning of the various segments of the project (standards, MEPS, HEPS, energy label development, as well as the development of the consumer awareness campaign and the financing mechanisms) a workshop was organised for the national stakeholders. The workshop was held on the 15th of September 2022. During this workshop the content described above was presented and discussed in detail. The one workshop was held online and following that the international consultants travelled to Lesotho for physical meetings. The one was the question and answer open session on the NPR on the 20th of September and then the policy working group session on the 21st of September where the NPR was discussed in detail again. The two physical sessions were extremely useful. It allowed the national stakeholders to ask questions in person of the international consultants and to get a detailed explanation that might have been difficult over the online system. It also allowed for open discussions on issues between the organisations. This was especially useful during the discussions related to responsibilities of the various organisations related to project implementation. The various organisations offered to assist with numerous aspects of the project. For example the LSI would assist with the verification of proof of conformity (validity of test reports), the RSL would assist LEWA with the market surveillance by providing inspectors, etc. This type of discussion also helped in estimating the budget required for project implementation. The national stakeholders also discussed the process of regulation development. During these meetings the DoE undertook to drive the process and provided information on another regulation that had been passed within 6 months related to rural electrification as it was aligned with the National Energy Policy. There had thus been a precedent set and the DoE understood the process to follow to implement this.

The physical meetings thus greatly assisted the process and at the end of the workshops there was a clear understanding of the process. Based on the discussions the national stakeholders decided that in the beginning of the implementation of the project they would forma Project Steering Committee (PSC), which would drive the various implementation aspects as decided upon in the NPR.

5 Conclusion

As has been shown in this report the Lesotho National Project related to energy efficiency of distribution transformers and refrigerators has resulted in a number of key developments. Amongst these the most important is the development of the Lesotho National Standards on energy efficiency of distribution transformers and refrigerators. The importance of the development of the national standards, the MEPS and the energy labels is only realized once the implementation of these developments takes place. In order to do this the NPR was developed for Lesotho. The NPR was developed through a colaboratirve approach with the international and local consultants as well as the national stakeholders of Lesotho. This report outlines the workshops that were held to discuss the key implementation points of the NPR and the decisions that were made by the national stakeholders. Some of the key decisions have been to develop a regulation that will ensure that the MEPS and the energy label are mandatory for refrigerators. Additionally, the implementation of the MEPS and the energy label for distribution transformers would be done through the updated procurement policies of the major buyers, using the TCO model. The NPR workshops also enabled the national stakeholders to assign responsibilities related t project implementation to each other. A decision was made to formulate the PSC to drive the implementation along the guidelines developed in the NPR.

6 References

[1] UNDP, Kingdom of Lesotho, “Sustainable Energy for All Investment Prospectus”, June 2016

[2] US AID, Lesotho Power Africa Fact Sheet, https://www.usaid.gov/powerafrica/lesotho, last accessed 24 September 2022.