

# Awareness Campaign Report



## Awareness Campaign Report on Residential Refrigerators and Distribution Transformers in Eswatini

30 October 2022



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## ABBREVIATIONS

CTCN	UN Climate Technology Centre and Network
EEC	Eswatini Electricity Company
ESERA	Eswatini Energy Regulatory Authority
GCF	Green Climate Fund
MEPS	Minimum Energy Performance Standard
MNRE	Ministry of Natural Resources and Energy
MV&E	Monitoring, verification and enforcement
PSC	Project Steering Committee
SADC	Southern African Development Community
S&L	Standard and Labelling
UN	United Nations
U4E	United for Efficiency

# 1 BACKGROUND AND INTRODUCTION

The “Leapfrogging to Energy Efficient Appliances and Equipment in Eswatini (Refrigerators and Distribution Transformers)” project is funded by the Green Climate Fund (GCF) and being implemented under the guidance of the government of the Kingdom of Eswatini (hereafter referred to as Eswatini). The project is also being implemented simultaneously within seven other countries of the Southern African Development Community (SADC) region, namely Botswana, Zimbabwe, Namibia, Malawi, Lesotho, Zambia and Tanzania. The UN Climate Technology Centre and Network (CTCN) is overseeing the project together with United for Efficiency (U4E) as a technical partner, while Pegasus was contracted to execute the project.

With the project focusing on distribution transformers and household refrigeration appliances, its aim is to establish a framework in order to improve the energy efficiency of these appliances. The more specific objectives of the project include, inter alia:

1. Develop mandatory Minimum Energy Performance Standards (MEPS) and labelling schemes
2. Assist in the development of national standards for refrigerators and distribution transformers
3. Enable the continued implementation of the policies, labels and standards through focused training
4. Develop an implementation plan and a full MV&E plan for the efficient and effective integration of the developed standards and any associated legislation labels
5. Develop a consumer awareness campaign to inform the public about the energy efficiency MEPS for refrigerators and distribution transformers and to introduce the Eswatini energy label
6. Propose appropriate financing mechanisms to accelerate deployment of energy efficient refrigerators and distribution transformers; and
7. Strengthen the national capacity to develop standards and labels for other appliances in future.

This report comprises of a set of documents developed to deliver on the above-mentioned objectives. Its purpose is to present a consumer awareness campaign. The report also covers a brief overview of other countries’ approaches to raising awareness about MEPS and an implementation plan for Eswatini.

## 2 INTERNATIONAL BEST PRACTICES ON CONSUMER AWARENESS

Globally, approximately 80 countries have already introduced MEPS for residential refrigerators and freezers (IEA, 2022). While the establishment of MEPS is a critical first step towards realising the potential for energy efficiency gains in a selected sector, they only focus on the supply-side. Successful strategies around energy efficiency programmes, however, require the implementation of both supply-side and demand-side interventions where the latter focus on educating a consumer and changing both purchase and energy usage behaviour. This is why the setting of MEPS is advised to be accompanied by, among others, the introduction of energy efficiency labels and broader educating campaigns (CTCN, n.d.).

The purpose of communication activities is usually to increase consumer awareness on the differences in energy consumption, costs, and benefits between appliances on the market; while education activities usually aim to educate consumers about the characteristics, costs, and benefits of the energy-efficient product (CTCN, n.d.). All of these pursue one purpose – to change the purchase behaviour of the consumer in favour of a more energy efficient appliance.

McGuire (1985) argued that in order to achieve behavioural change, a targeted group goes through several sequential steps from being first exposed to the communication, then processing the information and understanding the message, which then leads to the change in attitude and behaviour. The importance of initial exposure has also been iterated in the Rossiter-Percy six-step communication process (Donovan & Henley 2010). With initial exposure to communication playing a critical role in facilitating the change in behaviour, the importance of formulating a sound awareness-raising campaign becomes apparent.

Planning for awareness raising campaign comprises six consecutive steps outlined in Figure 1.

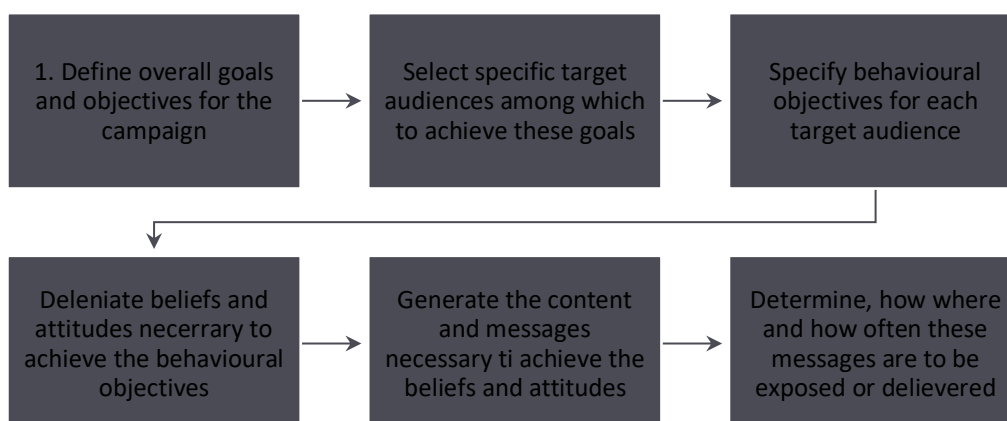


Figure 1: Awareness raising campaign planning process (adapted from Donovan & Henley 2010)

In order for the communication and education activities to be effective and deliver value for money, behaviour changes need to be adopted and become permanent (U4E, 2017). Achieving adoption, though, requires education and communication activities to be carried over a long period of time. It is also crucial that the right

messages are delivered to the right audience. All of the above highlights the importance of **correctly identifying the target audiences**.

United for Efficiency (U4E) Policy Guide Series for Energy-Efficiency Refrigerators (U4E, 2017) suggests splitting the target audiences into four major groups, namely: institutional and government, business, research & media, and end-users. Examples of stakeholders comprising these groups are depicted in Figure 2.

**Identifying the primary interests and areas of involvement** of each stakeholder should be conducted to inform the design of the communication campaign (U4E, 2017). U4E (2017) also recommends



Figure SEQ Figure \\* ARABIC 2: Target audiences and examples of stakeholders CITATION U4E17 \U2013 U4E (2017)

considering **cultural context and available resources**, when selecting the media and approaches to communication and education. Knowledge of the stakeholder groups, how they consume and process information, as well as the funding available and its sources, were also considered when designing the **awareness campaign in South Africa**.

The Standards and Labelling (S&L) Project was implemented by the South African government in collaboration with the United Nations Development Programme (UNDP) in 2014 with the first MEPS coming into effect in 2015. Since then, various revisions of the MEPS have been conducted. Following the review of MEPS for household and commercial appliances in 2019, the S&L project embarked on an awareness and communication campaign, which linked to the Department of Mineral Resources and Energy’s [www.savingenergy.org.za](http://www.savingenergy.org.za) website.

The awareness and communication campaign under S&L Project in South Africa focused only on residential appliances. Awareness and education campaign for distribution transformers was deemed to be unnecessary since their stakeholders are represented largely by utility companies, which are government entities. The awareness and communication campaign for refrigerators in South Africa took place over a period of 12 months and focused on households in different income groups. **The key lessons learnt** from this exercise are highlighted below:

- Determine funding sources and available funding upfront.** It is important to understand upfront what funding will be available and how it will be accessed. Making use of government funding can come with certain limitations and can restrict activities that can be implemented due to the procurement processes involved. Another issue is that the government has limited to no funds available to spend on awareness campaigns, which in turn limits the use of paid media and requires one to design activities that do not require monetary compensation.

- **Establish good relationships with all stakeholders, including manufacturers and retailers.** Creating a good working relationship with manufacturers, which products are being sold in the country, is highly advisable. Manufacturers who understand the reasoning behind the introduction of labels can make them more visible. They can also decide to embark on their own energy efficiency campaign, which could indirectly support the nationwide campaign and enhance its effectiveness.
- **Make information about efficient products easily accessible.** The average consumer is not very interested in learning about energy efficiency of an appliance or other products. However, in instances, when a person wants to learn more about it, such information needs to be easily accessible and readily available. This can be achieved by developing and maintaining an online platform where such information can be provided in a manner that is easy to the consumer. Importantly, finding such information should be easy; for example, it needs to appear on top of a list in a search engine.
- **Focus on permanently changing purchase behaviour rather than one-time decision changes.** To make the campaign effective, it needs to make use of a variety of media that facilitate a change in behaviour. Converting a person at a point of sale to become more energy efficient is challenging. Often, purchases are made in emergency situations and factors that influence the purchase decision at that point can be difficult to overcome if a consumer comes to the point of purchase with limited knowledge about the potential for energy savings using energy efficient appliances.
- **Identify and involve a champion.** It is important that the campaign has a consistent and easily identifiable champion, who is well-recognised by the targeted audiences.

On a more practical level, the following experiences from the South African consumer awareness campaigns can be drawn:

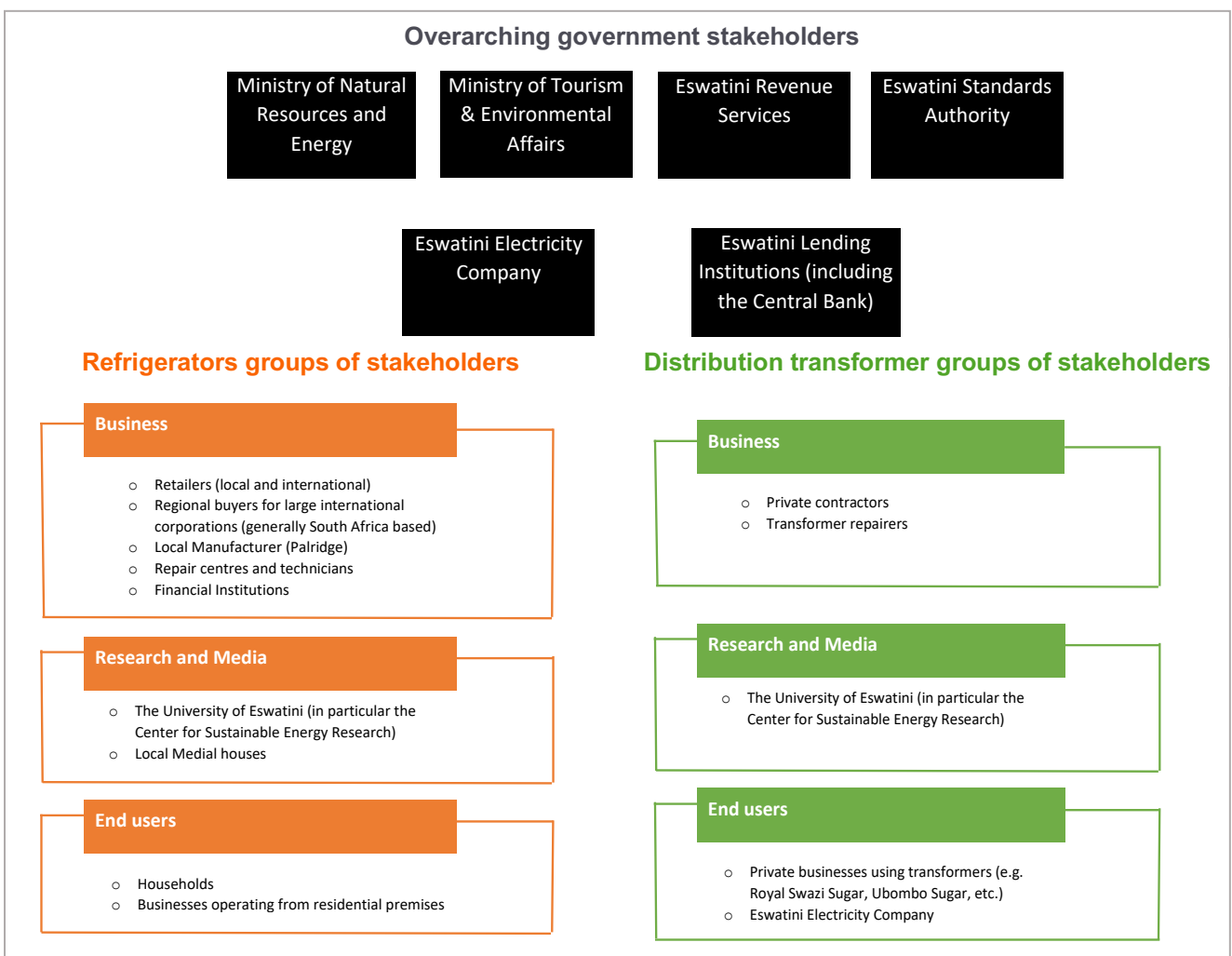
- **What worked well:**
  - **Partnering with a retailer** and offering a voucher for future purchases at the same retailer if a consumer chooses a more energy efficient appliance. Vouchers were bought by the team upfront, which means that the retailer benefited from the partnership before selling a single appliance.
  - **Advertising a campaign online on a news channel** using the entire “border”. Although relatively expensive, when compared to the money spent on a marketing agency versus purchasing advertisements on an online channel that receives a high volume of traffic, the latter led to a greater value for money.
  - Involving **well-known individuals from the government** (for example, a Minister of Energy) to participate in a one-day campaign at a retail store – does not require funds, while also attracting significant media attention.
  - Competitions where individuals could answer questions and receive airtime.
  - Hire a media company on a **retainer with limited monthly hours** to come up with regular campaign ideas.

- **What worked with limited success:**
  - **Social media** can offer good exposure, but they require consistent uploads of new content to remain relevant. There is however only a certain volume of new content that can be created around energy efficiency of appliances., especially if the focus is only on one appliance.
  - **Promo videos** on “saving energy” and “how to” (<https://www.savingenergy.org.za/landing-page/index.html>) can deliver a message in a simple way, but require a person to look for such information or be run as TV commercials. If it is not a national message, such commercials, though can be expensive and, therefore, prohibitive.
- **What did not work:**
  - A **cost saving calculator** was found to be not very useful. Firstly, a team needed to be trained on how to use it. When the team was sent to engage with consumers and educate them on how to use the calculator, the interest in the calculator was very limited.
  - **Use of radio** because of the need to select the most appropriate language, the need to purchase jingles and buy spots, as well as the range of radios that are operating in South Africa. However, a competition-based commercial using radio was not pursued.

### 3 STAKEHOLDER ANALYSIS

Like any programme, awareness raising campaign requires a champion and a team of stakeholders that would provide the support necessary for its successful execution. The latter in turn is reliant on the overall buy-in, cooperation, and involvement of these stakeholders in the proposed approach, which in turn requires a clear allocation of roles and responsibilities in relation to the campaign itself.

Figure 3 illustrates all stakeholders related to the implementation of MEPS for refrigerators and distribution transformers that have been identified during the market assessment. It shows that in line with the best practices discussed in Chapter 2, four groups of stakeholders have been identified, namely, government, businesses, research and media, and end-users. The government group of stakeholders represent entities and institutions that are cross-cutting the two products.



#### Overarching government stakeholders

#### Refrigerators groups of stakeholders

#### Distribution transformer groups of stakeholders

Figure 3: Groups of stakeholders

Table 1 further outlines the roles that the identified stakeholders have in relation to MEPS, as well as the responsibility that is assigned to them with respect to the campaigns for refrigerators and distribution transformers.

*Table 1: Entities and roles in development of MEPS for refrigerators and distribution transformers in Eswatini*

Entity	Role in relation to the MEPS project	Applicable technology		Responsibility in relation to the awareness raising
		R*	DT**	
<b>Champion and supporting functions</b>				
Ministry of Natural Resources and Energy	Driver of the MEPS development and implementation Formation of energy related initiatives Lead facilitator in the formulation and or updating of relevant Policies and regulations as required	✓	✓	Campaign champion (provision of vision and action plan, coordination of work of all entities involved)
Ministry of Tourism & Environmental Affairs	The support ministry to the Ministry of Energy in this project Can facilitate governmental support for legislation and implementation support	✓	✓	Develop and maintain printed materials for the campaign Develop radio and TV advertisements and infomercials
Eswatini Environmental Authority	Drive and enforce environmentally related policies (e.g. types of coolants in refrigerators) Assist in training of repairers on coolants and energy efficiency	✓	✓	Develop material for training of repairers and perform training Develop material for training of resellers and perform training
Eswatini Electricity Company	The main buyer and user of distribution transformers. The importer and seller of electricity and as such a key to the implementation of the project and one of the project's biggest beneficiaries	✓	✓	Electricity usage data source
Central Bank of Eswatini	Responsible for the governance of the financial sector and would be able to support initiatives that finance the implementation of the project from a regulatory perspective	✓	✓	Provision of funding for the campaign Provide support for funding mechanisms (e.g. guarantees for loans)
Eswatini Revenue Authority	Inspection/approval of imports of refrigerators and transformers into the country	✓	✓	Targeted audience for knowledge on refrigerator MEPS Targeted audience for knowledge on transformer MEPS
Eswatini Standards Authority	Information on standards of refrigerators and transformers	✓	✓	Provision of information and fact on MEPS for refrigerators and transformers Development of training material Conducting training workshops for sales personnel and repairers
The University of Eswatini (in particular the Center for Sustainable Energy Research)	Perform relevant research that informs national energy policy for sustainable development	✓	✓	Provision of technical support in Monitoring an Evaluation of the campaign Collecting data during and after campaign Analysis of key metrics to inform further changes required to the campaign Development of training material in partnership with Eswatini Standards Authority

Entity	Role in relation to the MEPS project	Applicable technology		Responsibility in relation to the awareness raising
		R*	DT**	
				Conducting training workshops for sales personnel and repairers in partnership with Eswatini Standards Authority
Private sector (Manufacturer – Palfridge)	Technical inputs from experience related to design and costing Input related to testing capabilities and cooperation (as one of only two laboratories for refrigerators in SADC)	ü		Provision of technical support in standard development and maintenance Provision of technical inputs in training material Conducting training workshops related to standard and testing
<b>Targeted audiences – transformers</b>				
Electrical contractors	Installers of transformers		✓	Targeted audience for transformer MEPS
Private businesses using transformers	Purchasers/end-users of transformers		✓	Targeted audience for changes in procurement and use behaviour of distribution transformers
Ubombo Sugar, Royal Swazi Sugar, etc.	Owner of distribution transformers		✓	Targeted audience for changes in procurement and use behaviour of distribution transformers
Eswatini Electricity Company	The main buyer and user of distribution transformers. The importer and seller of electricity and as such a key to the implementation of the project and one of the project's biggest beneficiaries		✓	Targeted audience for knowledge on transformer MEPS Targeted audience for changes in procurement and use behaviour of distribution transformers
Eswatini Revenue Authority	Inspection/approval of imports of transformers into the country		✓	Targeted audience for knowledge on transformer MEPS and customs approvals
<b>Targeted audiences – refrigerators</b>				
Households	Users of refrigerators	✓		Targeted audience for change in purchase and use behaviour of refrigerators
Businesses operating from residential premises, using residential refrigerators	Users of refrigerators	✓		Targeted audience for change in purchase and use behaviour of refrigerators
Retailers (local and large international)	Resellers of refrigerators	✓		Targeted audience for knowledge about refrigerator MEPS Means of communicating the information/educating end-users
Regional buyers for large international corporations (South Africa-based)	Procurement of refrigerators for international corporations operating in the country	✓		Targeted audience for MEPS requirements for refrigerators
Repair centres and technicians	Repairers and resellers of second-hand refrigerators	✓		Targeted audience for knowledge about refrigerator MEPS Means of communicating the information/educating end-users
Financial Institutions	Lenders supporting the implementing of energy efficient appliances	✓		Targeted audience for knowledge about refrigerator MEPS
Eswatini Revenue Authority	Inspection/approval of imports of refrigerators into the country	✓		Targeted audience for knowledge on refrigerator MEPS and customs approvals

\* Refrigerator; \*\*Distribution transformer

# 4 AWARENESS RAISING CAMPAIGN FOR REFRIGERATORS

Successful implementation of the MEPS and the national standard for refrigeration requires a change in the purchase and use behaviour of the end-users, which as outlined in the market assessment comprised of households and small businesses operating from residential premises. This section outlines the plan to raise awareness among the end-users of refrigerators and influence their behaviour to achieve the desired objectives.

## 4.1 STATUS QUO

The market assessment research undertaken by Pegasys and its local and international consultants revealed the following information regarding the baseline use and purchase behaviour of households and small business in relation to refrigerators:

- **Electricity consumption and access:**
  - Eswatini is reliant on imports of electricity from Mozambique and South Africa - imported electricity that is generally more expensive than electricity generated by itself.
  - About 84% of the population had access to electricity in 2020, according to the ESERA annual report.
  - 90% of the population living in the urban areas of Eswatini have access to electricity (ESERA 2019/2020) while 69% of the rural population have access to electricity.
  - Universal access to electricity in Eswatini is expected by the end of 2022.
- **Sales of refrigerators:**
  - The majority of refrigerators used in the country are imported, with one local manufacturer, Palfridge.
  - The vast majority of all refrigerators are imported from South Africa with a South African energy label on them.
  - About 96% of households purchase refrigerators from local small chain retailers or South Africa-headquartered retail corporations that have presence in Eswatini; 4% of households purchase refrigerators on their trips to South Africa.
  - Local resellers purchase refrigerators from wholesalers based in South Africa; while South Africa-headquartered retail corporations rely on regional buyers that purchase appliances in bulk from domestic or foreign manufacturers and then distribute these to the respective countries in the region.
  - None of the retailers in Eswatini promote more energy efficient refrigerators, and none of the sales persons in retail stores have tried to communicate information about the benefits of more energy efficient refrigerators.
- **Households' knowledge and behaviour:**
  - The majority of households purchase refrigerator for cash and in stores (i.e. not online);
  - While the majority of refrigerators purchased by households are new, Eswatini has a vibrant second-hand refrigerator market with one out of five refrigerators purchased being used refrigerators.
  - Eswatini households are price-sensitive and make the decision primarily on the warranty, functionality, the look and initial capital outlay for an appliance.
  - Due to the vast majority of refrigerators being sold in Eswatini being imported from South Africa that has an energy label standard, consumers in Eswatini have been exposed to energy labels. None of the respondents, though, indicated they have ever heard about an energy efficiency scheme; thus, they generally do not consult energy labels when making a decision.
  - While energy efficiency is not the primary factor that influences a purchase decision of a household in Eswatini; almost two thirds of the respondents interviewed indicated that they would not be willing to pay more for a more energy efficient refrigerator.

The above has the following implications on the design of awareness campaigns:

- Due to the majority of refrigerators being imported into Eswatini, **customs authorities** at the border posts will play an integral role in exercising control over the refrigerators that are imported into the country that are compliant with MEPS.
- Since the majority of refrigerators are purchased by households from local **retailers** - whether small domestic chain or South Africa-headquartered corporations - these parties will also play a role in ensuring that the refrigerators sold by them are compliant with MEPS. From a public awareness campaign perspective, though, the retailers will have to play a prominent role in educating the consumers regarding MEPS and long-term benefits that a household could derive from purchasing a more energy efficient appliance.
- There is a low level of awareness among **households and small businesses** operating from residential premises about energy efficiency schemes and energy labels. Furthermore, the long-term benefits that can be derived from more energy efficient appliances is lacking among the households and small businesses operating from residential premises. This coupled with the high price-sensitivity has resulted in low level of initiative taken by the consumer to change their purchase behaviour in favour of more energy efficient refrigerators.

## 4.2 GOALS AND OBJECTIVES

The goals of public awareness campaign for refrigerators is to:

Raise awareness among all stakeholders involved in the refrigerator supply chain in relation to the energy efficiency scheme to be introduced in Eswatini to change the purchase behaviour of households and businesses operating from residential premises towards more energy efficient refrigerators to reduce these households' electricity consumption and, subsequently, the demand for electricity.

Considering the above goal, the table below outlines the **targeted audiences** and the key **objectives** of the public awareness campaign that reflect the change desired to be achieved through it.

*Table 2: Targeted audiences and objectives of refrigerator awareness campaign*

Targeted audience	Key objectives and desired changes
Households	<ul style="list-style-type: none"> <li>• Change the attitude towards energy saving among all households</li> <li>• Achieve a high level (&gt;66%) of awareness regarding new energy efficient standard for refrigerators among electrified households</li> <li>• Achieve a high level (&gt;66%) of knowledge and understanding of energy label for refrigerators among electrified households</li> <li>• Achieve a high level (&gt;66%) of initiative when purchasing refrigerators in favour of more energy efficient appliances</li> </ul>
Small businesses operating from residential premises	<ul style="list-style-type: none"> <li>• Change the attitude towards energy saving among all households</li> <li>• Achieve a high level (&gt;66%) of awareness regarding new energy efficient standard for refrigerators among electrified households</li> <li>• Achieve a high level (&gt;66%) of knowledge and understanding of energy label for refrigerators among electrified households</li> <li>• Achieve a high level (&gt;66%) of initiative when purchasing refrigerators in favour of more energy efficient appliances</li> </ul>
Retailers: sales personnel	<ul style="list-style-type: none"> <li>• Change the attitude towards energy saving</li> <li>• Impart knowledge regarding new energy efficient standard for refrigerators on consumers</li> <li>• Educate consumers on energy label for refrigerators</li> <li>• Educate consumers on long-term benefits of purchasing more energy efficient refrigerators</li> </ul>
Repair services/second-hand shops	<ul style="list-style-type: none"> <li>• Change the attitude towards energy saving</li> <li>• Impart knowledge regarding new energy efficient standard for refrigerators on consumers</li> <li>• Educate consumers on energy label for refrigerators</li> </ul>

Targeted audience	Key objectives and desired changes
	<ul style="list-style-type: none"> <li>Educate consumers on long-term benefits of purchasing more energy efficient refrigerators</li> </ul>

### 4.3 MESSAGES AND COMMUNICATION CHANNELS

Given the different objectives outlined in the previous section, the following table lists the **messages** that should be promoted to achieve the desired change in knowledge and behaviour among various groups of stakeholders:

*Table 3: Key objectives and associated messages for a refrigerator awareness campaign*

Key objectives and desired changes	Messages
Change the attitude towards energy efficiency among all households	<ul style="list-style-type: none"> <li>Energy is scarce resource that needs to be conserved</li> <li>Eswatini consumers are under pressure – lets reduce our energy costs by becoming more energy efficient</li> <li>Saving energy today will ensure it is available to future generations</li> <li>Being energy efficient is easy – just make a right choice</li> </ul>
Achieve a high level (>66%) of awareness regarding new energy efficient standard for refrigerators among electrified households	<ul style="list-style-type: none"> <li>The new energy efficient standard protects against energy waste</li> </ul>
Achieve a high level (>66%) of knowledge and understanding of energy label for refrigerators among electrified households	<ul style="list-style-type: none"> <li>The energy label makes choosing the more energy efficient refrigerator easy</li> <li>Look for an energy label on a refrigerator and empower yourself to manage the costs associated with refrigerator usage</li> </ul>
Achieve a high level (>66%) of initiative when purchasing refrigerators in favour of more energy efficient appliances	<ul style="list-style-type: none"> <li>Save money in short and long-term by buying a more energy efficient refrigerator</li> <li>Reduce your electricity bill by buying a more energy efficient refrigerator</li> </ul>
Impart knowledge regarding new energy efficient standard on consumers	<ul style="list-style-type: none"> <li>“Can I help save you more money on a refrigerator today?”</li> <li>“Can I give you advice on saving energy?”</li> </ul>
Educate consumers on energy label	<ul style="list-style-type: none"> <li>“Have you seen the new energy labels that refrigerators come with?”</li> <li>“Do you know the higher the rating means the greater savings on electricity bill?”</li> </ul>
Educate consumers on long-term benefits of purchasing more energy efficient refrigerators	<ul style="list-style-type: none"> <li>“Do you know how to reduce your monthly electricity bill by buying a more energy efficient refrigerator?”</li> </ul>

Various **communication tools** can be used to deliver messages to influence the level of knowledge and behaviour of the targeted audiences. The following table outlines the key means by which the messaging to various targeted audiences could be delivered. The selection of the specific tools to be used in the campaign needs to be decided upon to determine the budget available for the awareness campaign.

Table 4: Targeted audiences and communication tools for refrigerators awareness campaign

Targeted audience	Communication tools
Households	<ul style="list-style-type: none"> <li>• Radio broadcasting (through Eswatini Television Authority)</li> <li>• TV infomercials (through Eswatini Television Authority)</li> <li>• Posters (distributed by Department of Information and at various retailers, Postal Services)</li> <li>• Article and infomercials in the national newspaper (through Department of Information)</li> <li>• Website page</li> <li>• Social media</li> </ul>
Small businesses operating from residential premises	<ul style="list-style-type: none"> <li>• Radio broadcasting (through Eswatini Television Authority)</li> <li>• TV infomercials (through Eswatini Television Authority)</li> <li>• Posters (distributed by Department of Information and at various retailers, Postal Services)</li> <li>• Article and infomercials in the national newspaper (through Department of Information)</li> <li>• Website page</li> <li>• Social media</li> </ul>
Retailers: sales personnel	<ul style="list-style-type: none"> <li>• Training on energy labels and standards for refrigerators</li> <li>• Posters</li> </ul>
Repair services/second-hand shops	<ul style="list-style-type: none"> <li>• Training on energy labels and standards for refrigerators</li> <li>• Posters</li> </ul>

In addition to the above general communication channels and means, the efficiency of the public awareness campaign could be enhanced by introducing a competition with an award programme that can encourage and motivate households and small businesses operating from residential premises to accelerate their knowledge uptake and change in purchase behaviour. Some of the ideas for such competitions include:

- Lottery/roadshows with a monetary reward or a voucher for those who have purchased an energy efficient refrigerator during a specific period;
- Lottery among those who have registered on a mobile app and provided their information on the current usage (has to run for a specific period of time);
- Competition among schools on topics of energy efficiency and cost savings with monetary or voucher rewards.

## 4.4 ACTION PLAN

Table 5 outlines the key actions required for the implementation of the campaign and the associated timeframes.

Table 5: Action plan

	Action	Comment	Timeframe	Responsible party
1	Secure funding for the public awareness campaign	The amount of funding will influence the communication tools to be used during the campaign.	January – February 2023	Ministry of Natural Resources and Energy
2	Establishing a baseline (collect additional data to	This task is required to set up a baseline against which the success of the campaign will be	February – March 2023	The University of Eswatini (in

Action		Comment	Timeframe	Responsible party
	the one gathered for the study)	measured during and post-implementation. the collected data needs to be linked to the indicators used in the monitoring and evaluation system.		particular the Center for Sustainable Energy Research)
3	Set up a Project Steering Committee (PSC) comprising of relevant stakeholder groups and develop Terms of Reference for it	The PSC needs to comprise the representatives of the key stakeholders. The TOR needs to define the roles and responsibilities of the PSC in relation to the campaign.	January 2023	Ministry of Natural Resources and Energy
4	Undertake informative research to inform the development of awareness and education materials	In order to make sure that the funds are spent on materials and other communication tools that will lead to the greatest return, it is important to undertake research that will assist in determining which type of communication tools (referred to in Table 4) will be most successful with what type of target groups. This information should assist with refining the selection of communication material to be developed and communication tools to be used during the campaign, as well as the most effective type of training to be offered to sales personnel at retail stores and repair service providers. Particular attention should be paid to determining whether the do's and don't's of the campaign launched in South Africa and reported in Chapter 2 are also applicable to Eswatini.	March – April 2023	Ministry of Natural Resources and Energy
5	Workshopping messages within the PSC	In order to inform the development of communication materials, it is important that PSC determines the key messages that need to be conveyed to the targeted groups. These messages need to be approved by PSC and should be used to drive the campaign.	April – May 2023	Ministry of Natural Resources and Energy
6	Development of communication material, including: <ul style="list-style-type: none"> <li>pre-launch testing</li> <li>translating these into the required languages</li> </ul>	Once the messages are approved, +using the insights gathered during step 4 (undertaking informative research), the communication material needs to be developed. As mentioned earlier, the type of communication material will need to be decided considering the funding available (step 1) and the data gathered during information research (step 4). It will be	May – July 2023	Project PSC

Action		Comment	Timeframe	Responsible party
		important that once the communication tools are determined and the material is developed, their level of acceptance by the targeted group is tested during a pre-launch test – a workshop with a small group of individuals representing each targeted group.		
7	Engaging with relevant authorities and entities to obtain their buy-in for the roll out of the communication campaign	increase the success of the campaign, it will be critical to engage with the relevant authorities to obtain their buy-in and potentially to get their representatives involved as a show of “endorsement”.	June – August 2023	Project PSC
8	Training sales personnel and repairers	While the campaign is underway, it will be important to make sure that the sales personnel and repairers are well-equipped to explain and respond to any questions related to the labelling. Therefore, training should be undertaken before the campaign is launched. The sales personnel and repairers should also be informed of the communication material that is being used during the campaign to make sure that they are also able to make references to it or respond to questions regarding specific information that is conveyed through the campaign.	August – September 2023	Contracted party
9	Roll out communication material	This is the official launch of the campaign. To achieve greater positive results, the campaign will need to be run for a minimum of 6 months. The use of certain tools may need to be extended to 12 months.	September 2023 – June 2024	Ministry of Natural Resources and Energy
10	Monitor and evaluate the success of the campaign	While the campaign runs, it will be important to monitor its progress – whether it reaches the desired audiences and whether the tools used are effective. An evaluation of the overall success of the campaign will need to be conducted immediately after its conclusion.	July – December 2024	Ministry of Natural Resources and Energy
11	Adapt the messages and communication means based on feedback received from the evaluation	This activity will be undertaken while the campaign is still running and will involve the adaption of the messages or the communication tools used depending on the results of the effectiveness assessment.	January – February 2025	Project PSC

Action		Comment	Timeframe	Responsible party
1 2	Develop a maintenance plan	It is required to determine how often should the messages be communicated post initial launch to keep the information fresh and ensure maximum effectiveness.	February 2025	Ministry of Natural Resources and Energy

## 4.5 MONITORING AND EVALUATION PLAN

Monitoring and Evaluation is an integral part of any project, programme or campaign for that matter. It aims to provide an insight into whether the campaign is on course to achieve objectives, which in turn allows one to adapt its execution if any gaps or challenges are identified. Table 6 provides a list of indicators that could be used to monitor the progress of the campaign and to evaluate its success after its completion.

*Table 6: Monitoring and evaluation indicators for refrigerator awareness campaign*

Measured output/outcome	Means of gathering data / tools	Frequency of data gathering	Sample
Attitude towards energy saving	Survey at the point of sale	On-going at the point of sale	<ul style="list-style-type: none"> <li>Households – different income group and in rural and urban areas</li> <li>Sales personnel at retail stores</li> <li>Repairers</li> </ul>
	Survey (in person / telephonic)	Quarterly during the campaign, starting from just before the campaign in order to obtain the baseline	
Awareness regarding new energy efficient standard	Survey at the point of sale	On-going at the point of sale	<ul style="list-style-type: none"> <li>Households – different income group and in rural and urban areas</li> <li>Sales personnel at retail stores</li> <li>Repairers</li> </ul>
	Survey (in person / telephonic)	Quarterly during the campaign, starting from just before the campaign in order to obtain the baseline	
Knowledge and understanding of energy label	Survey at the point of sale	On-going at the point of sale	<ul style="list-style-type: none"> <li>Households – different income group and in rural and urban areas</li> <li>Sales personnel at retail stores</li> <li>Repairers</li> </ul>
	Survey (in person / telephonic)	First, before the campaign for baseline and then after the campaign	
Change in purchase behaviour / purchase (sale) of refrigerators by energy efficient label and trend	Survey	Every month of the campaign starting from just before the campaign for baseline	<ul style="list-style-type: none"> <li>Households – different income group and in rural and urban areas</li> <li>Sales personnel at retail stores</li> <li>Repairers</li> </ul>

Measured output/outcome	Means of gathering data / tools	Frequency of data gathering	Sample
	Retailers' data	Every month of the campaign starting from just before the campaign for baseline	<ul style="list-style-type: none"> <li>Local and international retailers</li> <li>Local manufacturer - Palfridge</li> </ul>
Savings derived by a household from purchasing a more energy efficient refrigerator	Case studies; point of sale mini-survey	Quarterly, starting at the start of the campaign	<ul style="list-style-type: none"> <li>3-5 households at a time</li> </ul>
Energy consumption by the residential sector	National statistics / annual reports	One a year	<ul style="list-style-type: none"> <li>Ministry of Natural Resources and Energy</li> </ul>

# 5 AWARENESS RAISING CAMPAIGN FOR DISTRIBUTION TRANSFORMERS

This section focuses on the awareness campaign that will need to be deployed to raise awareness and knowledge about MEPS for distribution transformers.

## 5.1 STATUS QUO

The following information regarding the current usage and deployment of distribution transformers in Eswatini, which was derived during the market assessment exercise, has relevance for the awareness campaign:

- Eswatini Electricity Company is the main owner and operator of distribution transformers in the country. However, there are other owners and operators of distribution transformers, such as Ubombo Sugar and Royal Swazi Sugar.
- All transformers used in Eswatini are imported and most of them are imported from South Africa.
- The major manufacturers and suppliers of distribution transformers in South Africa, which also supply distribution transformers in Eswatini, have been forced to manufacture higher efficiency transformers as a standard practice since 2013.
- Currently, the EEC purchases distribution transformers based on up-front cost alone without consideration of the total cost of ownership.

## 5.2 GOALS AND OBJECTIVES

The **goals** of the public awareness camping focusing on more energy efficient distribution transformers is to:

Raise awareness among entities purchasing distribution transformers with regard to the new standard and facilitate a change in their procurement decision-making to reduce electricity losses and electricity consumption in the country.

Considering the above goal, the table below outlines the **targeted audiences** and the key **objectives** of the public awareness campaign that reflect the change desired to be achieved through it.

*Table 7: Targeted audiences and key objectives of the distribution transformer awareness campaign*

Targeted audience	Key objectives and desired changes
EEC	<ul style="list-style-type: none"> <li>• Change the attitude towards energy saving</li> <li>• Achieve a high level (100%) of awareness regarding new energy efficient standard for distribution transformers among technical and procurement personnel</li> <li>• Achieve a high level (100%) of knowledge and understanding of benefits derived when considering total cost of ownership of a distribution transformer among technical and procurement personnel</li> <li>• Change procurement decision-making to include total cost of ownership considerations</li> <li>• Reduced electricity consumption by distribution transformers linked to reduced losses</li> </ul>

Targeted audience	Key objectives and desired changes
Private companies with installed transformers	<ul style="list-style-type: none"> <li>• Change the attitude towards energy saving</li> <li>• Achieve a high level (100%) of awareness regarding new energy efficient standard for distribution transformers among technical and procurement personnel</li> <li>• Achieve a high level (100%) of knowledge and understanding of benefits derived when considering total cost of ownership of a distribution transformer among technical and procurement personnel</li> <li>• Change procurement decision-making to include total cost of ownership considerations</li> <li>• Reduced electricity consumption by distribution transformers linked to reduced losses</li> </ul>
Installers and Repairers	<ul style="list-style-type: none"> <li>• Change the attitude towards energy saving</li> <li>• Achieve a high level (100%) of awareness regarding new energy efficient standard for distribution transformers</li> <li>• Achieve a high level (100%) of knowledge and understanding of benefits derived when considering total cost of ownership of a distribution transformer</li> </ul>

### 5.3 MESSAGES AND COMMUNICATION CHANNELS

Considering the objectives for the public awareness campaign set out in Table 7, the following table outlines the **key messages** that should be promoted to achieve the desired changed:

*Table 8: Key objectives and associated messages for distribution transformer awareness campaign*

Key objectives and desired changes	Messages
Change the attitude towards energy efficiency	<ul style="list-style-type: none"> <li>• Energy is scarce resource that needs to be conserved</li> <li>• Eswatini consumers are under pressure – lets reduce our energy costs by becoming more energy efficient</li> <li>• Saving energy today will ensure it is available to future generations</li> <li>• Being energy efficient is easy – just make a right choice</li> </ul>
Achieve a high level (100%) of awareness regarding new energy efficient standard for distribution transformers among technical and procurement personnel of utilities and private companies, and among electrical contractors	<ul style="list-style-type: none"> <li>• New distribution standard and cost of ownership considerations make the procurement decision easy</li> </ul>
Achieve a high level (100%) of knowledge and understanding of benefits derived when considering total cost of ownership of a distribution transformer among technical and procurement personnel of utilities and private companies, and among electrical contractors	<ul style="list-style-type: none"> <li>• Total cost of ownership – a major factor in your procurement decision and your savings</li> <li>• Better performance translates into reduced load on the electricity system, lower electricity bills, and greater reliability</li> </ul>
Change procurement decision-making to include total cost of ownership considerations of utilities and private companies	<ul style="list-style-type: none"> <li>• Look long-term and short-term - consider the total cost of ownership</li> </ul>

Key objectives and desired changes	Messages
Reduced electricity consumption by distribution transformers linked to reduced losses	<ul style="list-style-type: none"> <li>Use of more efficient transformers can save electricity consumption in the country and reduce the reliance on imports.</li> </ul>

Given the nature of targeted audiences, the following **communication channels** are proposed to be employed to disseminate the message.

*Table 9: Targeted audiences and communication tools for distribution transformer awareness campaign*

Targeted audience	Communication tools
EEC	<ul style="list-style-type: none"> <li>Training on standards for distribution transformers</li> <li>Training on total cost of ownership considerations, including costing tool</li> <li>Webinars</li> <li>Posters</li> </ul>
Private companies with installed transformers	<ul style="list-style-type: none"> <li>Training on standards for distribution transformers</li> <li>Training on total cost of ownership considerations, including costing tool</li> <li>Webinars</li> <li>Posters</li> </ul>
Installers and Repairers	<ul style="list-style-type: none"> <li>Training on standards for distribution transformers</li> <li>Training on total cost of ownership considerations, including costing tool</li> <li>Webinars</li> <li>Posters</li> </ul>

## 5.4 IMPLEMENTATION PLAN

Table 10 outlines the key actions required for the implementation of the campaign for distribution transformers and the associated timeframes.

*Table 10: Targeted audiences and communication tools for the regurgitator awareness campaign*

Action		Comment	Timeframe	Responsibility
1	Secure funding for the public awareness campaign	The amount of funding will affect the key parameters of the communication campaign.	January – February 2023	Ministry of Natural Resources and Energy
2	Establishing a baseline (collect additional data to the one gathered for the study)	assist with monitoring and evaluation of the campaign, baseline data needs to be collected. These data need to specifically refer to the indicators that will be used in the monitoring and evaluation exercise.	February – March 2023	The University of Eswatini (in particular the Center for Sustainable Energy Research)

Action		Comment	Timeframe	Responsibility
3	Set up a Project Steering Committee comprising relevant stakeholder groups and develop Terms of Reference for it	The PSC needs to comprise the representatives of the key stakeholders. The TOR needs to define the roles and responsibilities of the PSC in relation to the campaign.	January 2023	Ministry of Natural Resources and Energy
4	Undertake informative research to inform the development of materials	Once the communication campaign for transformers focuses on various training initiatives, this research needs to determine the key characteristics of the groups that will need to be trained, including but not limited to their education levels, qualifications, language preferences, etc. This information will need to inform the type and means of training to be offered for various courses to make them most effective.	March – April 2023	Ministry of Natural Resources and Energy
5	Workshopping training requirements and fact sheet/poster messaging within the PSC	To ensure that the training is effective, PSC needs to determine the range of training required and devise specs for these courses. They will also need to determine the scope/key messages of fact sheets and posters to be developed.	April – May 2023	Ministry of Natural Resources and Energy
6	Engaging with relevant authorities and entities to obtain their buy-in for the roll out of the communication campaign	Once the specs for both training and information communication are defined, the next step will be to obtain buy-in from various stakeholders who will need to implement or who will be on the receiving side of the training. These include, among others, training institutions, EEC, private companies with installed transformers, and Installers.	June – August 2023	Project PSC
7	Development of training material and identification of parties to provide training	Once the specs for training and other material have been defined, a call for the provision of training will need to be issued. Following the procurement process, the contracted party/ies will need to be appointed to start with training. It will be the responsibility of the parties to develop the necessary materials (printed and web-based), including translating them into the required languages.	June – September 2023	Contracted party

Action		Comment	Timeframe	Responsibility
8	Training of utility's and private businesses' personnel	Conduct training among the targeted groups. Training is to be done by the contracted party.	September – November 2023	Ministry of Natural Resources and Energy and the contracted party
9	Roll out communication material	In support of the training, any other communication material that can be developed and for which the budget is available will need to be developed and released. This material could include, among others, webinars, posters and fact sheets.	September 2023 – June 2024	Ministry of Natural Resources and Energy and the contracted party
10	Monitor and evaluate the success of the campaign	This activity will be undertaken while the training is being done, as well as after training has been completed. The focus will be on determining the effectiveness of the training and informing any changes to the content of the way it is delivered.	July – December 2024	Ministry of Natural Resources and Energy
11	Refresher courses	This is required to determine how often should the refresher courses be offered, as well as the requirement for new training.	January – March 2025	Contracted party

## 5.5 MONITORING AND EVALUATION PLAN

Table 11 provides a list of indicators that could be used to monitor the progress of the campaign and to evaluate its success after its completion.

*Table 11: Monitoring and evaluation indicators for the distribution transformer awareness campaign*

Measured output/outcome	Means of gathering data / tools	Frequency of data gathering	Sample
Attitude towards energy saving	Survey (online / telephonic)	Every quarter of the campaign starting from just before the campaign for baseline	<ul style="list-style-type: none"> <li>• EEC employees</li> <li>• Private businesses with installed transformers</li> <li>• Electrical contractors</li> </ul>

Measured output/outcome	Means of gathering data / tools	Frequency of data gathering	Sample
Achieve a high level (100%) of awareness regarding new energy efficient standard for distribution transformers among technical and procurement personnel of utilities and private companies, and among electrical contractors	Test / questionnaire for of individuals participating in training session	After each training session	<ul style="list-style-type: none"> <li>• EEC employees</li> <li>• Private businesses with installed transformers</li> <li>• Electrical contractors</li> </ul>
Achieve a high level (100%) of knowledge and understanding of benefits derived when considering total cost of ownership of a distribution transformer among technical and procurement personnel of utilities and private companies, and among electrical contractors	Test / questionnaire for of individuals participating in training session	After each training session	<ul style="list-style-type: none"> <li>• EEC employees</li> <li>• Private businesses with installed transformers</li> <li>• Electrical contractors</li> </ul>
Change procurement decision-making to include total cost of ownership considerations of utilities and private companies	Survey	Every quarter since the start of the campaign	<ul style="list-style-type: none"> <li>• EEC procurement department</li> <li>• Private businesses with installed transformers procurement departments</li> </ul>
Reduced electricity consumption by distribution transformers linked to reduced losses	EEC annual reports / National statistics	One a year	<ul style="list-style-type: none"> <li>• Ministry of Energy and Meteorology</li> </ul>

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