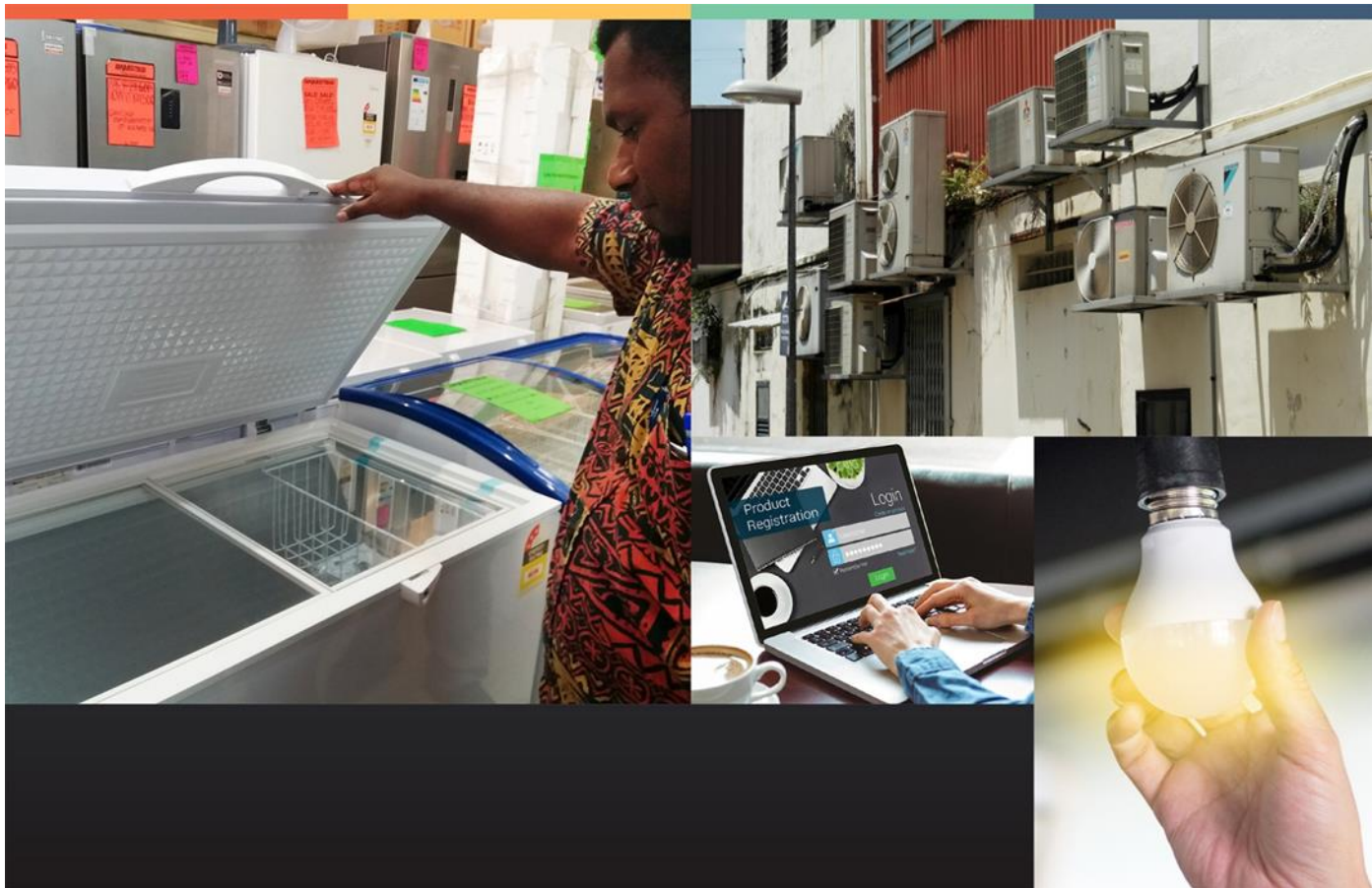


# PROJECT CLOSURE MEETING SUMMARY

## Enhance Vanuatu's Market for Energy Efficient Appliances

26 May 2023, 1.30 – 2.30 pm (Vanuatu Time), Digital Platform



**INTERNATIONAL INSTITUTE FOR ENERGY CONSERVATION - ASIA**

1168/27 Unit B, 15<sup>th</sup> Floor, Lumpini Tower, Rama IV Road  
Thungmahamek, Sathorn, Bangkok 10120, THAILAND

**May 2023**

## Introduction

The “*Enhance Vanuatu’s Market for Energy Efficient Appliances*” project, funded by the Green Climate Fund (GCF) through the Climate Technology Centre and Network (CTCN), was successfully concluded with a project closure meeting conducted online on May 26<sup>th</sup>, 2023. The objective of the project closure meeting was to present the outcomes of this technical assistance (TA) project to stakeholders in Vanuatu, to discuss recommendations for immediate implementation, and to address any related concerns of stakeholders.

During the meeting, a comprehensive presentation was delivered, highlighting key tasks and activities, and achievements made through the main project components, i.e., 1) improvement of the recently introduced standards and labelling programme for electrical appliances; 2) introduction of MV&E activities and improvement of a product registration system; and 3) introduction of financial mechanisms. The stakeholders actively participated in the discussion and clarification session, raising work-related issues, expressing their concerns, and discussing the way forward. The project closure meeting report summarizes the main presentation and discussion points. Annexes of this report provide a list of participants and a copy of the presentation made during the meeting.

## Summary of Meeting

### 1. Welcome and Introduction

**Ms. Clara Landeiro, Regional Manager, Asia-Pacific, UNFCCC Climate Technology Centre and Network (CTCN)**

Ms. Clara Landeiro delivered a welcome remark, highlighting the roles of CTCN as part of the United Nations Framework Convention on Climate Change (UNFCCC) Technology Mechanism. She emphasized CTCN's mission to promote the accelerated transfer of environmentally sound technologies for low carbon and climate resilience through TA, capacity building, and networking. In this regard, CTCN was pleased that Vanuatu had requested TA for enhancing its market for energy-efficient appliances. The request was made by the Department of Energy (DoE) through the CTCN's National Designated Entity (NDE), the Ministry of Climate Change Adaptation, Meteorology, Geo-Hazards, Environment, Energy, and Disaster Management in Vanuatu. CTCN provided support in the implementation of this TA in partnership with the International Institute for Energy Conservation (IIEC).

The objective of the TA was to capitalize on Vanuatu's significant efforts in accelerating the transition to energy-efficient appliances, which contribute to energy and GHG emission savings. The focus of the TA was on assessing a market and policy of energy-efficient appliances, analyzing the existing labelling and standards programme, developing a monitoring, verification, and enforcement (MV&E) plan, upgrading the product registration system, and exploring financing mechanisms. These efforts aimed to accelerate the adoption of energy-efficient appliances in households. The expected outcome of the TA was that it would make a significant contribution to Vanuatu's endeavors in combating climate change. Furthermore, it would assist Vanuatu in achieving its commitment to reducing greenhouse gas emissions from the energy sector by targeting 15% energy savings through the adoption of energy-efficient measures. Ms. Landeiro also emphasized the importance of valuable contributions and inputs from government, non-government, and private sector stakeholders in advancing these efforts.

**Mr. Antony Garae, Director, Department of Energy (DoE)**

Mr. Antony Garae provided an opening remark on behalf of Ms. Esline Garaebiti, NDE. He expressed his appreciation for the funding support from GCF through CTCN, in ensuring the successful implementation of the project. He also extended his gratitude to IIEC for leading the project and to the project team for their work in assisting the DoE. Mr. Garae emphasized the critical role of energy efficiency in Vanuatu, particularly in the electricity sub-sector.

Reflecting on Vanuatu's progress in promoting energy efficiency, Mr. Antony Garae mentioned that legislation has been in place since 2017 to regulate energy-efficient products. However, challenges have been encountered in effectively promoting these products in the Vanuatu market. Therefore, the formulation of the technical assistance and the involvement of IIEC in exploring options will assist DoE in advancing its effort to transit Vanuatu's appliances market into an energy-efficient market. As the project nears its completion, Mr. Garae emphasized the importance of inputs and contributions from local stakeholders in Vanuatu to shape the recommendations and outputs of the assignment.

## 2. Summary of the Technical Assistance

Ms. Kullakant Chertchutham, Project Associate, provided the meeting with the following project details, outcomes, achievements, and recommendations:

### 2.1 Objectives & Components of Project

The project schedule was originally planned for completion on December 7, 2022, and was extended to June 7, 2023, due to COVID-19-related delays. The main objectives of the Enhance Vanuatu's Market for Energy Efficient Appliances project are to support the acceleration of the transition to energy-efficient appliances through various components involving key stakeholders as follows:

<b>Components</b>	<b>Stakeholders in Programme Implementation</b>
<b>Improvement of the MEPSL programme</b>	DoE, Customs Officials Importers/Retailers
<b>Introduction of Monitoring Verification and Evaluation (MV&amp;E) activities</b>	DoE, Customs Officials
<b>Improvement of a product registration system</b>	DoE, Vanuatu Electronic Single Window Project (VESWP) Team
<b>Introduction of financial mechanisms</b>	DoE/NGEF (National Green Energy Fund), Importers/Retailers

The implementation of the project was carried out through the following five main tasks, with Task 1 and Task 5 dedicated to project planning and reporting, in accordance with CTCN's requirements. Tasks 2, 3, and 4 aligned with the project outcomes.

- Task 1 - Development of implementation planning and communication documents
- Task 2 - Comprehensive market and policy analysis for higher efficiency refrigerators, freezers, air conditioners, and lighting products
- Task 3 - Assessment and upgrade of the existing Vanuatu Electronic Single Window (VeSW) registration system and development of an MV&E plan
- Task 4 - Development of financing mechanisms for the incentivization towards the purchase of energy-efficient appliances
- Task 5 – Project closure

## 2.2 Project Scope of Work, Deliverables, and Milestones

All the activities, timelines, and deliverables for the completion of the project were explained and summarized below.

**Table 1: Summary of Project Scope of Work, Deliverables, and Milestones**

No.	Description of Activities	Deliverables	Timeline
<b>Task 1 - Development of implementation planning and communication documents</b>	1.1: Preparation of Implementation Plan	Detailed work plan	February 2022 (Completed)
	1.2: Preparation of Monitoring and Evaluation Plan	Monitoring and evaluation plan	January 2022 (Completed)
	1.3: Preparation of Impact Description Document	CTCN impact description	January 2022/ May 2023
	1.4: Preparation of Closure and Data Collection Report	Closure and data collection report	December 2022 (Completed)
<b>Task 2 - Comprehensive market and policy analysis for higher efficiency refrigerators, freezers, air conditioners, and lighting products</b>	2.1: Kick-off meeting	Kick-off meeting report	30 March 2022 (Completed)
	2.2: Detailed market assessment for refrigerators, freezers, air conditioners, lighting products, TVs, and clothes washers	Market assessment	30 July 2022 (Completed)
	2.3: Analysis of the existing standards and labelling program for energy-efficient appliances	Evaluation report	20 August 2022 (Completed)
	2.4: Recommendations for the improvement of the existing standards and labelling program	Recommendations for the program improvement	20 August 2022 (Completed)
<b>Task 3 - Assessment and upgrade of the existing Vanuatu Electronic Single Window (VeSW) registration system and development of an MV&amp;E plan</b>	3.1: Development of an MV&E plan	MV&E Plan	December 2022 (Completed)
	3.2: Assessment and upgrade of the existing VeSW product registration system	Recommendations on product registry system upgrade	February 2023 (Completed)
	3.3: Design of training on the enhancement of MV&E	Training curriculum and material	November 2022 (Completed)
	3.4: Delivery of a Training program	Training report	December 2022 (Completed)
<b>Task 4 - Development of financing mechanisms for the incentivization towards the purchase of energy-efficient appliances</b>	4.1: Identification of options for national financing mechanisms	National financing mechanism options	October 2022 (Completed)
	4.2: Financing mechanisms consultation with stakeholders	Interviews with stakeholders on financing schemes	November 2022 (Completed)
	4.3: Consultation & Recommendation of financial	Recommendations on financial mechanism	May 2023 (Completed)

No.	Description of Activities	Deliverables	Timeline
	mechanism and related implementation plan		
<b>Task 5 - Project closure</b>	5.1: Closure meeting	Meeting report and presentation	Jun 2023

#### *Task 1 - Development of implementation planning and communication documents*

The project commenced its implementation in January 2022 with the preparation of the Monitoring and Evaluation Plan and a detailed project work plan. Task 1 also involved the development of the CTCN Impact Description Document and the preparation of the Closure and Data Collection Report which will be submitted before the project conclusion.

#### *Task 2 - Market and policy analysis for higher efficiency refrigerators, freezers, air conditioners, and lighting products*

Following the kick-off meeting in March 2022, the project team initiated the market assessment phase. This involved conducting a comprehensive analysis of the appliance market in Vanuatu. The assessment aimed to gather information and insights on the current state of the market, including the types of appliances available, their energy efficiency levels, market trends, and consumer preferences.

To gather the necessary data, the project team relied on a variety of secondary resources. These included literature reviews, which involved examining existing reports, studies, and publications related to the appliance market in Vanuatu. Additionally, the team analyzed internet-based import/export statistics to understand the flow of appliances into the country.

The main data sources included the household surveys undertaken by IIEC in 2013 under the Promotion of Energy Efficiency in the Pacific – Phase 2 (PEEP2), consumer awareness and the use of energy rating labels in the Pacific Island Countries and Territories (PICTs) commissioned by the Secretariat of the Pacific Community (SPC) from 2016 to 2017, the final evaluation report of the Pacific Appliance Labelling and Standard Programme by SPC in 2019, and more recent findings from the Vanuatu Household census report in 2020, and the household income and expenditure surveys (HIES). UN Comtrade which provides statistical data on electrical appliances exported to Vanuatu from 2012 to 2021, and the Vanuatu Electronic Single Window (VeSW) system, which contained energy-efficient (EE) appliance product certificates approved by DoE, were also important data sources for the analysis. Various reports and studies on electricity supply and household surveys in Vanuatu were also reviewed.

In addition to reviewing existing secondary data, small-scale household and retailer surveys were conducted to gather supplementary information. The household survey aimed to verify the current ownership and saturation levels of different lighting products and appliances among households in Vanuatu, while the retailer survey sought data on popular types, supply frequencies, market size, growth, and energy efficiency performance of electrical appliances and lighting products available on the shelves.

The findings from the market assessment formed the basis for analyzing the MEPSL programme and evaluating its overall effectiveness and efficiency in Vanuatu. Based on the findings from the market assessment and the evaluation of the MEPSL programme, conclusions and recommendations were made regarding possible improvements to the existing program.

Key highlights of the Market Assessment Findings are presented below:

- Refrigerators, freezers, and TVs collectively contribute to approximately 50% of the total trade value of all regulated appliances in Vanuatu.
- The average annual market size of the selected appliances was estimated at 2 million USD between 2012 and 2020. Additionally, an average of 2,000 units of refrigerators and freezers are exported to Vanuatu annually.
- The household penetration rate of lighting products in 2013, 2017, and 2022 was examined to understand the adoption rates of different lighting technologies in Vanuatu households. The findings reveal that LED lighting technologies have surpassed other conventional lighting technologies (such as fluorescent and incandescent lamps) in terms of adoption. In the 2022 survey, 57% of household respondents reported using LED lighting, compared to only 5.3% in 2017. Over the past five years, there has been a significant replacement of CFLs and linear fluorescent tubes with LED technologies.
- The assessment also indicates that, on average, each Vanuatu household possesses 7.7 light points.

The main recommendations to strengthen the operationalization of the existing MEPSL programme are:

**Recommendation No. 1: Review and update registration procedures and database** - The MEPSL regulation provides application forms and templates for certification of registration, but these documents have not been updated in the past five years and began to impact the efficiency of the registration process and the accuracy of recorded product details. Therefore, it is strongly recommended for the DoE and the Customs Department review and optimize these forms and templates, ensuring that the registration process is efficient and that all necessary details of registered products are accurately recorded. Additionally, the applicability of the Pacific Appliance Database should be reviewed by the DoE, and necessary updates should be performed.

**Recommendation No. 2: Develop and implement a market surveillance program for MEPSL** - It is recommended that the DoE initiate a market surveillance program to verify that products offered for sale have been registered and labeled correctly. The product inspection forms in the Standard Operating Procedures (SOP) can be used as templates for the initial compliance checks. Implementing a market surveillance program will enhance the DoE's ability to monitor the effectiveness of the registration and certification procedures. It will also provide valuable feedback to optimize the design and implementation of the MEPSL programme.

**Recommendation No. 3: Monitor MEPS and labelling requirements for LED lamps** - The household penetration rate of LED lamps in Vanuatu has significantly increased, and it is expected to continue growing. Given this trend, it is strongly recommended that the DoE monitor the MEPS and labelling requirements for LED lamps being developed by the AS/NZS Energy Rating program. Once the MEPS and labeling requirements for LED lamps are approved by the AS/NZS Energy Rating program, the DoE can include LED lamps within the scope of the MEPSL programme.

*Task 3 - Assessment and upgrade of the existing Vanuatu Electronic Single Window (VeSW) registration system and development of an MV&E plan*

This task consisted of three main activities. The first activity focused on designing and delivering training sessions to customs officials and the DoE to enhance MV&E activities. The second activity involved conducting a comprehensive review of MV&E processes and providing recommendations.

Lastly, the third activity entailed assessing and making recommendations for upgrading the energy module within the VeSW product registration system.

In November 2022, the project team conducted two training sessions for customs officials and the DoE at the DoE office. Additionally, the project team conducted a field inspection of imported MEPS-regulated goods together with the Customs Officers. During the inspection, the team also witnessed the examination of an imported used household refrigerator alongside DoE officials.

The project team successfully completed this task in February 2023, and the key recommendations from the review of MV&E activities are summarized below:

***Recommendation No. 1: Maintain up-to-date MEPS for lighting and appliances in line with AS/NZ revisions*** - It is recommended to address any inconsistencies in MEPS requirements and test methods by updating the Vanuatu regulations to align with the most up-to-date revisions of relevant Australian and New Zealand standards. Alternatively, developing detailed standard operating procedures for administrators to manage situations where standards are not harmonized or updated would be beneficial.

***Recommendation No. 2: Separate product registration and import certificate application processes*** - It is recommended to separate the process of capturing of product data (product registration) from the application for import certificates (certificate application) by establishing two distinct processes. This approach will streamline information processing and enhance the traceability of product registration and import certificate creation.

***Recommendation No. 3: Update the Vanuatu register to include essential information*** – Additional data shall be incorporated into each record of registered project, such as Category A products with expired registration in other countries, as well as Category B and C products with performance levels. This update would necessitate changes to the product registration forms to facilitate the collection of product performance data.

***Recommendation No. 4: Remove the Deemed-to-Comply provision from the Manual of Standard Operating Procedures and from practice*** – The Deemed-to-Comply provision has not been utilized by the DoE and it is recommended to remove this provision in line with the harmonization updates to Vanuatu regulations.

***Recommendation No. 5: Utilize a 4-digit National Component of the statistical HS code (Tariff or Statistical Code) for electrical appliances and lighting products*** - This approach will facilitate the categorization of products into in-scope, out-of-scope, and banned types under the MEPSL programme.

***Recommendation No. 6: Upgrade the energy module within the VeSW (Vanuatu Electronic Single Window) product registration system*** - Revise the current product registration forms to allow for the collection of product performance data. This revision will enable the proper maintenance of the registry, including outdated Category A, B, and C products. Improve data management by effectively extracting, tracking, and organizing key information collected by the DoE. This enhancement will support data reporting and analytics, facilitating decision-making and assisting in MEPSL programme planning.

*Task 4 - Development of financing mechanisms for the incentivization towards the purchase of energy-efficient appliances*

The main activities under Task 4 focused on the development of financing mechanisms for promoting energy-efficient appliance and lighting products.

In November 2022, the project team visited and held discussions with key stakeholders, including the National Green Energy Fund (NGEF), National Bank of Vanuatu (NBV), Bank South Pacific (BSP), ANZ Bank, BRED Bank, and electrical appliance retailers such as Computer World and Rapid Electrical. The purpose of these meetings was to understand the current market practices on consumer financing and to explore potential financing schemes that could be implemented among Vanuatu households.

Following the stakeholder interview, the project team developed two potential financing options to support Vanuatu households in purchasing energy-efficient appliances. The first option is Soft Personal loans for EE appliances, and the second option is a Portfolio Guarantee mechanism for EE appliance lending, along with specific criteria for selecting the most suitable financing option for the DoE. The project team also conducted a stakeholder consultation meeting on May 17, 2022, where the proposed financing options were presented. During this meeting, comments and feedback from the DoE and private sector stakeholders were received.

### 2.3 Challenges in Project Implementation

The project team encountered a number of challenges during the implementation of this TA. During the market assessment, a challenge encountered was the lack of appliances import data available in key stakeholder databases, such as the DoE and the Customs department websites. This limited the ability to obtain accurate and comprehensive information on the trade flow values and quantities of electrical appliances being imported into Vanuatu. To address this data limitation, the project team employed alternative sources of information. One such source was UN Comtrade, which provided data on products exported by country of origin to Vanuatu. By analyzing this proxy information, the project team was able to gather insights into the types of products being imported and their respective origins. It is important to note that proxy information may not capture the full picture of the actual number of units imported. However, it served as a useful alternative to gather supplementary data and gain a better understanding of the market landscape.

The implementation of this TA coincided with the COVID-19 pandemic, which presented unprecedented challenges, including the enforcement of lockdown measures, restrictions on direct contact with households, and limitations on movement and travel. These circumstances significantly impacted the project implementation timeline, resulting in delays in the planned activities. Vanuatu opened its border to fully-vaccinated international travelers on July 1, 2022. However, the project still faced many challenges in scheduling and coordinating international travel to Vanuatu after the border reopening. One of the major challenges was the limited availability of flights to Vanuatu. Reduced flight frequencies and cancellations of certain routes resulted in restricted travel options and difficulties in planning and scheduling trips.

Another significant challenge the project team encountered was that Vanuatu experienced a cyber-attack that disrupted government servers and websites, rendering them offline for over a month (from November 6, 2022, to January 2023). This incident affected government email accounts and computer services, further complicating coordination efforts.

## 2.4 Recommended Actions for 2023

The recommended actions for 2023 to enhance the MEPSL program were presented as follows:

- Update performance standards and test methods to align with the Australian New Zealand Energy Rating Program. This update will ensure consistency and harmonization with international energy efficiency standards.
- Improve the Energy Module in the VeSW system. Enhancements should focus on streamlining data analysis and reporting capabilities to enable effective monitoring and evaluation of EE in appliances. This will facilitate better tracking and assessment of energy performance and support evidence-based decision-making.
- Develop statistical HS codes for appliances to accurately identify regulated and banned products. The implementation of these codes will provide a standardized and efficient way to categorize appliances and differentiate between products that fall within the scope of MEPSL regulations and those that do not.
- Establish a methodology for the identification of products selected for verification processes. This methodology will provide a systematic approach for determining which products should undergo verification to ensure compliance with the MEPSL requirements. It will help prioritize resources and efforts for effective enforcement and monitoring of EE standards.

## 3. Discussion - Potential Issues, and Concerns

*Mr. Sommai Phon-amnuaisuk, Appliance Expert & Project Coordinator*, moderated the Q&A and discussion session. The bullets below summarize the discussions and issues raised by the participants:

- **Assessment and upgrade of the Energy Module within the VeSW product registration system**

*Mr. Stanley Trief, Manager of the Vanuatu Electronic Single Window Project (VESWP)*, conveyed his appreciation for the assessment and recommendations provided by the project team. He acknowledged the importance of collaboration between the DoE officials and the VESWP team in achieving the desired outcomes. During the development of the energy module, the VESWP team faced limitations in terms of background information and relied heavily on guidance from the DoE officials involved.

In response to the recommendations made, Mr. Trief encouraged the DoE to approach the VESWP team for further collaboration. He emphasized that some of the recommendations could potentially be implemented without significant changes to the system, but the VESWP team requires a clear understanding of the specific requirements. Therefore, he suggested that the DoE takes the lead and organizes consultations to ensure a shared understanding of the recommendations and to facilitate effective collaboration. Taking ownership of the system is crucial for the DoE, as the VESWP team is primarily responsible for providing technical solutions.

- **Implementation of a financing scheme for personal loans with a fiscal measure**

*Mr. Emmanuel Roshan, Rapid Electric*, agreed with implementing a financing scheme for personal loans, which would facilitate the availability of more energy-efficient products in the market. He added that the government should offer a temporary exemption or reduction of import duties specifically for energy-efficient products. This would help lower the overall cost of these products and make them more accessible to consumers, especially considering the current high exchange rates that contribute to elevated prices.

- **Progress updates regarding the MEPS and labelling programme for LED lighting in Australia and New Zealand**

*Mr. Steve Coyne, MV&E Expert*, provided an update on the MEPS status for LED lighting in Australia. The Australian and New Zealand governments are currently in the process of preparing MEPS for LED lamps, which has taken some time due to various COVID-19 related situations in recent years. In December 2022, the proposed regulations were released for public stakeholder consultation. The response to the consultation came from both local stakeholders within Australia and international entities, including NGOs. It is worth mentioning that a submission was also received from the DoE in Vanuatu, reinforcing the need for Australia to have MEPS for LED lamps, as it supports the Pacific nations through the existing Pacific Appliance Labelling and Standards Programme (PALS). The process of public submissions closed in January 2023 and is currently being reviewed by Australian government officials. The officials will assess the responses and prepare a report for senior officers within the Australian Government. The report will then be passed on to the relevant ministers for a final decision.

If the regulations proceed, they are likely to be signed off by the Minister for Energy later this year. The implementation of MEPS in Australia would commence 12 months after the signing of the regulation. Although it may take some time for the implementation, the drafted determination (regulation) will be made publicly available once it is signed by the minister. This means that by the end of this year, if approved, the regulation would be accessible to the Pacific nations. They can then utilize the regulation to make necessary preparations and potentially implement MEPS around the same timeframe as Australia, starting in 2024.

## Annex 1: Meeting Agenda



**AGENDA**  
**Enhance Vanuatu's Market for Energy Efficient Appliances**  
**PROJECT CLOSURE MEETING**  
**26 May 2023, 13.30 – 14.30 pm (Vanuatu Time), Digital Platform**

The “**Enhance Vanuatu’s Market for Energy Efficient Appliances**” project is funded by the Green Climate Fund (GCF) through the Climate Technology Centre and Network (CTCN). This technical assistance (TA) project aims to support *accelerating the transition to energy-efficient appliances* through: 1) improvement of the recently introduced standards and labeling programme for electrical appliances; 2) introduction of MV&E activities and a product registration system; and 3) introduction of financial mechanisms.

The support was achieved through:

- Conducting a comprehensive market and policy analysis for higher efficiency refrigerators, freezers, air conditioners (ACs), and lighting products.
- Assessing and upgrading the existing Vanuatu Electronic Single Window (VeSW) registration system and developing an MV&E plan.
- Developing financing mechanisms for the incentivization towards the purchase of energy-efficient appliances

The purpose of this meeting is to present the results of the technical assistance and discuss and clarify any related work issues in the meeting.

The participants of the Closure Meeting are representatives from the following organizations:

- **Project Sponsor:** UNFCCC Climate Technology Centre and Network (CTCN)
- **Project Proponent:** Department of Energy
- **National Designated Entity (NDE) to the UNFCCC Technology Mechanism:** Ministry of Climate Change Adaptation, Meteorology, Geo-Hazards, Environment, Energy and Disaster Management
- **Project Team/consultant:** Led by the International Institute for Energy Conservation (IIEC)
- **Key Stakeholders**
  - Customs Department
  - Vanuatu's Electronic Single Window Project (VESWP) Team
  - Electrical Appliance Stores

26 May 2023	
<b>13.30 – 13.40</b>	Welcome Remark <ol style="list-style-type: none"> <li>1. CTCN/NDE</li> <li>2. Department of Energy</li> </ol>
<b>13.40 – 14.10</b>	Presentation by the Project Consultant Team (International Institute for Energy Conservation) <ul style="list-style-type: none"> <li>• Project Objective and Components</li> <li>• Project Scope of Work</li> <li>• Project Deliverables &amp; Milestones</li> <li>• Challenges in Project Implementation</li> <li>• Recommended Actions for 2023</li> </ul>
<b>14.10 – 14.30</b>	Discussion - Potential issues, risks, questions, and concerns

## Annex 2: List of Participants

<b>Name</b>	<b>Title</b>	<b>Organization</b>
<b>Antony Garae</b>	Director	Department of Energy, Ministry of Climate Change Adaptation, Meteorology, Geo-hazards, Energy, Environment and National Disaster Management
<b>Misel Sisi</b>	Manager Energy Security Unit	Department of Energy, Ministry of Climate Change Adaptation, Meteorology, Geo-hazards, Energy, Environment and National Disaster Management
<b>Willie Obed</b>	Appliance & Labeling Officer	Department of Energy, Ministry of Climate Change Adaptation, Meteorology, Geo-hazards, Energy, Environment and National Disaster Management
<b>Serah T Chilia (Ms)</b>		Department of Energy, Ministry of Climate Change Adaptation, Meteorology, Geo-hazards, Energy, Environment and National Disaster Management
<b>Stanley Trief</b>	Manager	Vanuatu Electronic Single Window Project (VESWP) Team
<b>Clara Landeiro (Ms)</b>	Regional Manager, Asia-Pacific	Climate Technology Centre & Network (CTCN)
<b>Arbel Lagaroe</b>		Leon Hardware
<b>Emmanuel Roshan Fdc</b>		Rapid Electric
<b>Sommai Phon-amnuaisuk</b>	Appliance Expert	International Institute for Energy Conservation (IIEC)
<b>Kullakant Chertchutham (Ms)</b>	National Registry & Database Analyst	International Institute for Energy Conservation (IIEC)
<b>Steven Coyne</b>	MV&E Expert	International Consultant
<b>Gillian Isoardi (Ms)</b>	MV&E & Lighting Specialist	International Consultant

Annex 3: Group Photo from the Meeting



## Annex 4: Presentation



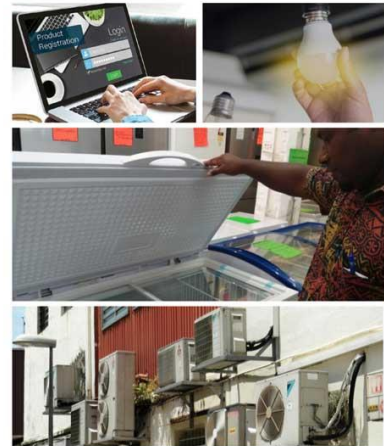
# Enhance Vanuatu's Market for Energy Efficient Appliances

## Project Closure Meeting

📅 Fri, 26<sup>th</sup> May 2023

🕒 01:30 PM Vanuatu Time

👤 International Institute for Energy Conservation (IIEC)



## Objective and Presentation Outline

### ▪ Objective of Meeting

- To present the results of the technical assistance and discuss and clarify any related work issues in the meeting

### ▪ Presentation Outline

- Project Objective and Components
- Project Scope of Work
- Project Deliverables & Milestones
- Challenges in Project Implementation
- Recommended Actions for 2023

5/26/2023

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## About the Project

### Enhance Vanuatu's Market for Energy Efficient Appliance

- Funded by **Green Climate Fund (GCF)** through the **Climate Technology Centre & Network (CTCN)**
- **Applicant:** Department of Energy, Vanuatu
- **National Designated Entity (NDE):** Ministry of Climate Change Adaptation, Meteorology, Geo-Hazards, Environment, Energy and Disaster Management
- **Consultant:** International Institute for Energy Conservation (IIEC)

CTCN Support (December 2021 – June 2023)



The Climate Technology Centre and Network promotes the transfer of climate technologies at the request of developing countries for energy-efficient, low-carbon and climate resilient development. By connecting stakeholders with technology experts from around the world, CTCN delivers customized capacity building and technical assistance aligned with national climate objectives.



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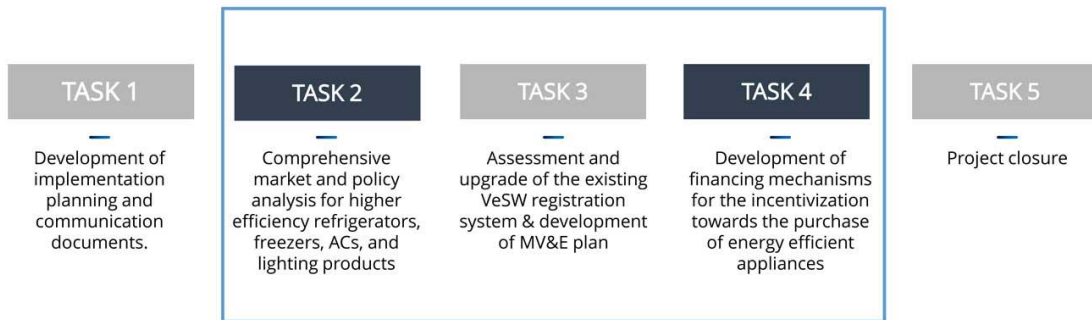
## Project Objective and Components

To support accelerating the transition to energy-efficient appliances through:

Components	Stakeholders in Programme Implementation
Improvement of the MEPSL programme	DoE, Customs Officials Importers/Retailers
Introduction of Monitoring Verification and Evaluation (MV&E) activities including Improvement of a product registration system	DoE, Customs Officials, and Vanuatu Electronic Single Window Project (VESWP) Team
Introduction of financial mechanisms	DoE/NGEF (National Green Energy Fund), Importers/Retailers

- The Project has 5 main tasks
- Tasks 1 & 5 are for project planning and reporting per CTCN's requirements
- Tasks 2, 3, and 4 correspond with the outcomes

## Project Scope of Work



## Project Deliverables and Milestones

Task 1 - Development of implementation planning and communication documents



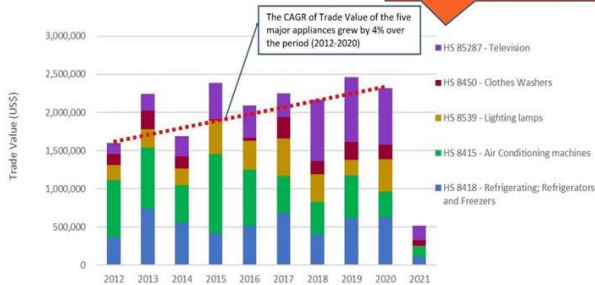
# Project Deliverables and Milestones

Task 2 - Market and policy analysis for higher efficiency refrigerators, freezers, air conditioners, and lighting products



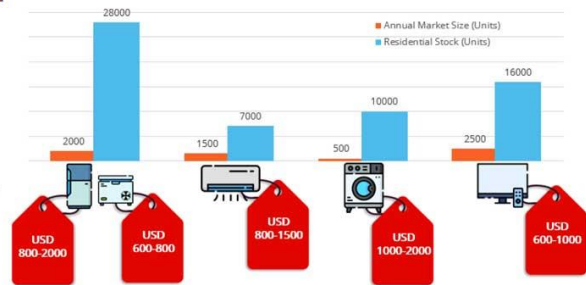
## Highlight of Market Assessment Findings

Appliance Market in Vanuatu



Refrigerators, Freezers, and Televisions combined account for about 50% of the total "Trade Value" in US\$ of all regulated appliances in Vanuatu

Estimated Total Annual Market Size ≈ USD 2 million (based on trade flow data 2012 - 2020)

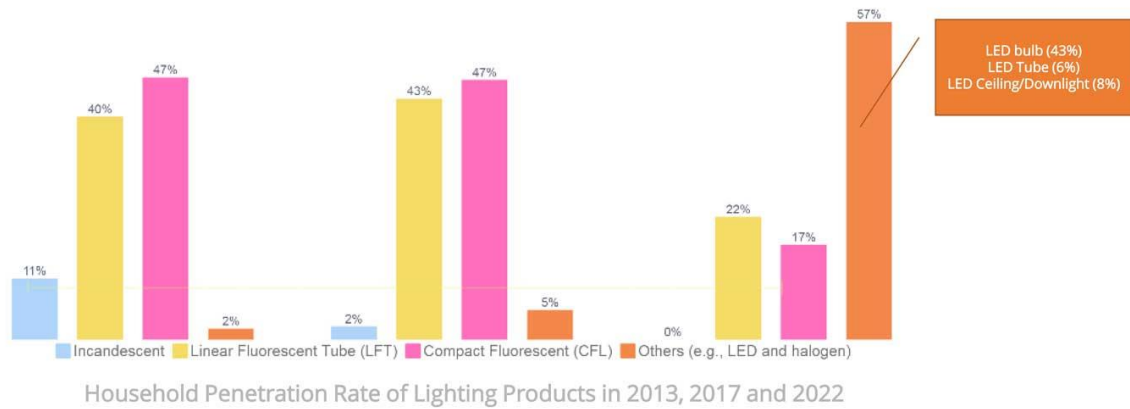


5/26/2023

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## Highlight of Market Assessment Findings

Each Vanuatu household owns an average of 7.7 light points



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## Key Recommendations for Existing MEPSL Programme Improvement

### 1. Review and update registration procedures and database

Stakeholder(s): DoE & Customs Officials

- Regulation Order No. 126 of 2017 provides **application forms and templates for certification of registration**. These documents have not been updated over the past five years
- Update the **Pacific Appliance Database** (outdated data) and perform updates as necessary

### 2. Develop and implement a market surveillance program for MEPSL

Stakeholder(s): DoE & Importers/Retailers

MV&E activities have not yet been implemented by DOE, and it is recommended that DOE start **developing a market surveillance program focusing on initial compliance checks** such as checking that the products offered for sale have been registered and are correctly labeled.

### 3. Review and update the scope of MEPSL Programme

Stakeholder(s): DoE

Due to the increasing prevalence of LED lamps, it is strongly recommended that DoE commence **monitoring the MEPSL and labeling requirements for LED lamps** being developed by the AS/NZS Energy Rating program

# Project Deliverables and Milestones

Task 3 - Assessment and upgrade of the existing Vanuatu Electronic Single Window (VeSW) registration system and development of an MV&E plan



## Delivery of Training Program



*Project Team Deliver a Training Session 1 on MV&E to DoE Officers, held on November 9, 2022, at the Department of Energy, Port Vila, Vanuatu*



*Project Team Discussed with Custom Official on Inspection of Imported MEPS-Regulated Goods*



*Project Team Observed Physical Inspection of Imported MEPS-Regulated Goods with the Customs Department Officers*



*Training Session 2 – DoE and Customs Officials, held on November 10, 2022, at the Department of Energy, Port Vila, Vanuatu*



*Mr. Tony, Controller Enforcement Mgr, Customs and Inland Revenue Dept, Sharing Current Practices on Inspection Procedures and Import Application Processing of Regulated Products under MEPSL Programme*



*Project Team with DoE Officials Inspected the Imported Used Household Refrigerator*

## Key Recommendations of Development of MV&E Plan

### 1. Maintain up-to-date MEPS for lighting and appliances in line with AS/NZ revisions

Stakeholder(s): DoE

Updating the Vanuatu regulation to resolve any inconsistencies in MEPS and test methods with recognised countries' MEPS programs (Australia, New Zealand, and Fiji)

### 3. Update the Vanuatu register

Stakeholder(s): DoE

A process needs to be implemented for updating the Vanuatu register to include information regarding:

- Category A products with expired registration in other countries
- Category B and C products with performance levels (to assess against any updated MEPS)

This will require changes to the product registration forms to allow for the collection of product performance data

### 2. Separate product registration & import certificate application processes

Stakeholder(s): DoE & Customs Officials

It is recommended to separate the capture of product data (product registration) from the application for import certificates (certificate application) into two separate processes in order to simplify the processing of information and support the traceability of product registration and import certificate creation.

### 4. Removal of the "Deemed-to-Comply" provision from SOP & from practice

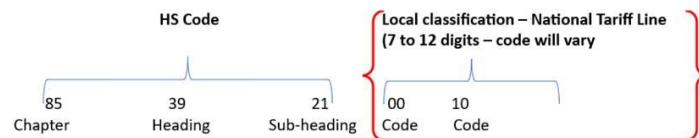
Stakeholder(s): DoE & Customs Officials

"Deemed-to-Comply" provision, as stated in MEPSL Regulation, applies specifically to lighting products. It poses a challenge for surveillance officers in determining if a non-registered product falls under the category of deemed-to-comply or non-compliant. This process consumes valuable time and resources that could be better utilized for cases where the determination of registration status is more straightforward.

## Key Recommendations of Development of MV&E plan

- **Statistical HS Codes for Appliances in Vanuatu** - Using an additional 4-digit National Component of HS code (Tariff or Statistical Code) for electrical appliances and lighting products to help distinguish between in-scope, out-of-scope, and banned product types under the MEPSL programme
  - A set of proposed Statistical Codes for the regulated lighting, air-conditioner, and refrigerator/freezer products provided to DoE.

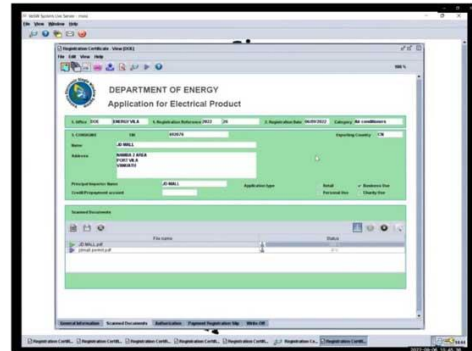
*Example of HS Classification: parts of lighting products, HS code 853921*



## Key Recommendations of Assessment and upgrade of the existing VeSW product registration system

Limitations of data analysis and reporting still exist due to insufficient information collection from the product registration process

- **Adding Data Tracking** below for each imported model/product and allowing DoE to export from the system to support tracking and analysing the impact of the MEPSL programme. This also aims to provide DoE with a record of baseline data to support policymaking and serves as a storehouse of ancillary information and data about products on the market.
  - Number of imported units of each model
  - Energy efficiency data
  - Sub-categorization of each product type
  - HS Codes (6 digits)
  - Linking expired registration data with new registration



Online Application Form of the "Appliance Registration Certificate" in the VeSW System

5/26/2023

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## Project Deliverables and Milestones

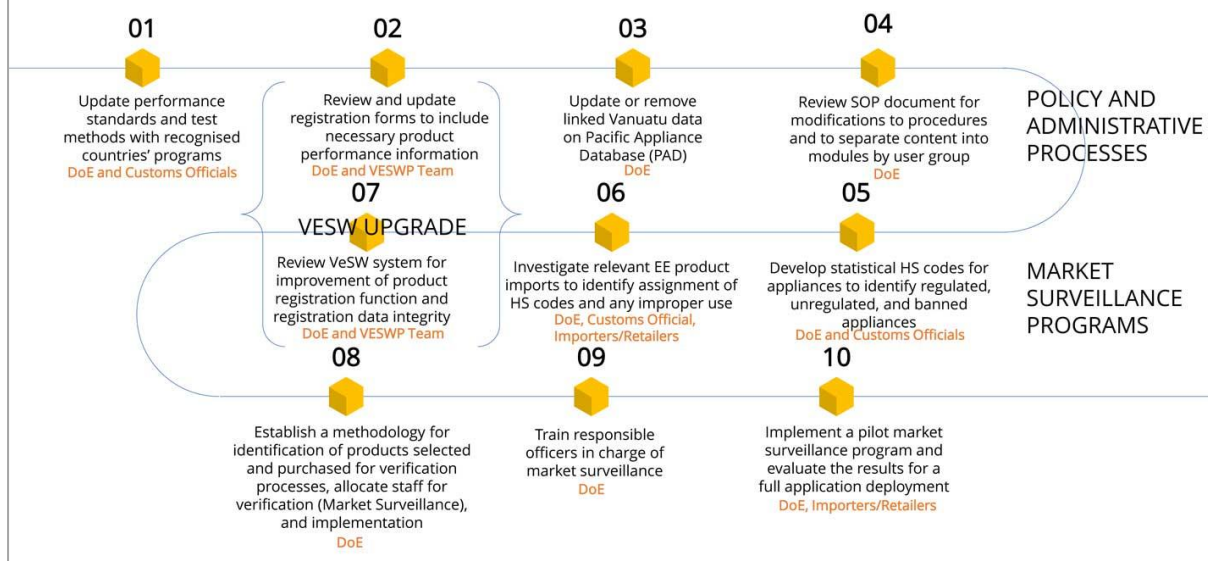
Task 4 - Development of financing mechanisms for the incentivization towards the purchase of energy-efficient appliances



# Challenges in Project Implementation

- 1 Import statistics are not available from the Vanuatu Customs Department and the United Nations Commodity Trade Statistics Database (UN Comtrade). Export statistics to Vanuatu from UN Comtrade were used as proxies for import statistics
- 2 Limitations of direct contact with households, restrictions on movement, and travel due to the COVID-19 pandemic's lockdown led to a delay in the scheduled plans.
- 3 Travel plan - Vanuatu closed its border and just opened to fully-vaccinated international travellers from 1 Jul 2022. Limited and canceled travel plans were scheduled due to the limited availability of flights to Vanuatu. The changes and uncertainties surrounding flight times resulted in problems with connecting flights, ultimately leading to the cancellation and/or rescheduling of the plans.
- 4 Coordinating efforts among various stakeholders, particularly government agencies, is crucial for an effective response / Vanuatu was knocked offline for more than a month (6 Nov 22 – Jan 23). A cyber-attack brought down government servers and websites in Vanuatu. No one could use government email accounts and computer services.

## Recommended Actions for 2023





# THANK YOU

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International Institute for Energy Conservation (IIEC)  
[www.iiec.org](http://www.iiec.org)