



# CAREEP

CARILEC Resiliency and Energy Efficiency Project



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## IMPLEMENTATION GUIDE for Caribbean Households to Conduct an Energy Self-Audit

### ConserVE-2-SaVE

To keep your energy costs from being too high, you want to ensure you are being both **efficient and conservative** in your **energy use**. One easy way to ensure this is to take the time to have a home **energy self-audit** done. While a **professional home energy assessment is the best way to determine** where your home is losing energy and where you can save, you can start to identify areas of high energy consumption and simple cost saving potentials by conducting your own **energy self-audit**. This **"do-it-yourself"** home energy assessment will not be as thorough as a professional home energy assessment, but it can help you to better understand your home's energy consumption pattern and its energy performance to pinpoint some of the easier areas where you can make a change.

**The main implementation steps to conduct your own energy self-audit are:**

**Step 1: Review, familiarisation, and interpretation of your monthly electricity bill**

**Step 2: Creation of an inventory using the excel template "Energy Self-Audit Consumption Inventory", available under [here](#).**

**Step 3: Estimating Appliance and Home Electronic Energy Use through by either:**

- i) **Monitoring the average load** or wattage in W with a **plug-in monitoring device** (see picture on the right) and multiply with the estimated usage in hours per month.  
*Monitoring the daily or monthly consumption in kW*
- ii) **h** with a **plug-in monitoring device** and multiply with the estimated usage in days per month.
- iii) **Calculate the power consumption** of your device based on the **estimated power demand** i) as stated on the **nameplate** of the electric device, ii) as printed directly on the light bulbs or lighting fixtures or iii) as measured with the monitoring devices during the typical operation mode as well as based on the estimated time of usage/operation.
- iv) **Calculate the power consumption** of your device based on the average annual consumption (e.g., refrigerator) or the average consumption per hour(s) of operation (TV set) as per **energy label**.

**Step 4: Analysis and interpretation of inventory results**

**Step 5: Optional – Preparation of an audit report** to summarize the audit results, e.g., by using the word template "Energy Self-Audit Report" in the annex to the detailed implementation guide.



*Plug-in Monitoring device/Watt meter with US/UK and European power inlet (Sources: Amazon.com, Amazon.uk, Amazon.de)*

**Step 6: Identification of energy saving opportunities** (energy efficiency measures) that can reduce your monthly electricity consumption and save money. The CAREEP Project website under <https://careep.carilec.org/> under "Publications" and "E-Learning" will provide further guidance on the implementation of suitable and cost-efficient energy efficiency measures for Caribbean households.

**Step 7: Monitor your monthly energy consumption** and repeat Steps 1 - 5 after 3-6 months to monitor your progress.

Please find more information and detailed guidance on the seven implementation steps for the energy self-audit in the extended version of this Implementation Guide under <https://careep.carilec.org/guidance-and-learning-materials/>.

The CAREEP Project Team wishes you a successful energy self-audit that allows for new ideas and inspiration to implement energy saving measures in your home and reduce your monthly electricity bill!

### In Partnership With



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