



KILOWHATT?

Lektric Energy Efficiency Report

1. Appliance Usage Summary

APPLIANCE NAME	ORIGINAL WATTS	EFFECTIVE POWER (W)	DAILY USE (HRS)	USAGE BEHAVIOR (%)	DAILY KWH	MONTHLY KWH	MONTHLY COST (PHP)	VOLTAGE REGION
Air Conditioner Window Type (800W)	800	320.00	11	40	3.52	105.60	623.04	NCR (Metro Manila)
Air Conditioner Window Type (1000W)	1000	400.00	15	40	6.00	180.00	1062.00	NCR (Metro Manila)
6x Lights (10 watts per Lights)	60	60.00	12	100	0.72	21.60	127.44	NCR (Metro Manila)
tv	160	104.00	4	65	0.42	12.48	73.63	NCR (Metro Manila)
Small Electric Fan	30	30.00	6	100	0.18	5.40	31.86	NCR (Metro Manila)
Desktop PC	450	247.50	8	55	1.98	59.40	350.46	NCR (Metro Manila)
Electric Fan1	45	24.75	8	55	0.20	5.94	35.05	NCR (Metro Manila)

Appliance Name	Original Watts	Effective Power (W)	Daily Use (hrs)	Usage Behavior (%)	Daily kWh	Monthly kWh	Monthly Cost (PHP)	Voltage Region
Electric Fan2	45	24.75	8	55	0.20	5.94	35.05	NCR (Metro Manila)
Wifi Router	20	20.00	24	100	0.48	14.40	84.96	NCR (Metro Manila)

2. Energy Hogs - Top Spenders

Based on your current usage, the following appliances contribute the most significantly to your monthly electricity bill:

- 1. **Air Conditioner Window Type (1000W): PHP 1062.00/month**
- 2. **Air Conditioner Window Type (800W): PHP 623.04/month**
- 3. **Desktop PC: PHP 350.46/month**

3. Quantified Recommendations for Savings

Here's how you can reduce electricity consumption and save money, focusing on your top energy hogs:

Energy Hog 1: Air Conditioner Window Type (1000W)

Current Monthly Cost: PHP 1062.00 | **Current Monthly kWh:** 180.00 kWh

A. Usage/Behavioral Recommendations (Quick Wins)

- **Reduce Daily Use Hours:** Lowering usage from 15 hours to 10 hours daily.
 - Estimated Monthly kWh Savings: **60.00 kWh**
 - Estimated Monthly PHP Savings: **354.00 PHP**
- **Increase Thermostat Setpoint:** Raising the thermostat by just 1-2 degrees Celsius can significantly reduce the compressor's runtime and effective power usage.
- **Regular Cleaning:** Clean or replace air filters monthly for optimal performance and efficiency.

B. Appliance Replacement Recommendations (Long-Term Savings)

- **Upgrade to an Inverter Air Conditioner:** Replace your old 1000W window type AC with a modern 1.5 HP inverter model. These units are highly efficient and can drastically reduce running costs.
 - Estimated New Monthly Cost (at 15 hrs/day, equivalent cooling): PHP 663.75

- Estimated Monthly kWh Savings: **67.50 kWh**
- Estimated Monthly PHP Savings: **398.25 PHP**

Energy Hog 2: Air Conditioner Window Type (800W)

Current Monthly Cost: PHP 623.04 | **Current Monthly kWh:** 105.60 kWh

A. Usage/Behavioral Recommendations (Quick Wins)

- **Reduce Daily Use Hours:** Cutting usage from 11 hours to 8 hours daily.
 - Estimated Monthly kWh Savings: **28.80 kWh**
 - Estimated Monthly PHP Savings: **169.92 PHP**
- **Utilize Natural Ventilation:** Open windows and use fans during cooler parts of the day or when the AC is not strictly necessary.

B. Appliance Replacement Recommendations (Long-Term Savings)

- **Upgrade to an Inverter Air Conditioner:** Replace your old 800W window type AC with a modern 1.0 HP inverter model.
 - Estimated New Monthly Cost (at 11 hrs/day, equivalent cooling): PHP 389.40
 - Estimated Monthly kWh Savings: **39.60 kWh**
 - Estimated Monthly PHP Savings: **233.64 PHP**

Energy Hog 3: Desktop PC

Current Monthly Cost: PHP 350.46 | **Current Monthly kWh:** 59.40 kWh

A. Usage/Behavioral Recommendations (Quick Wins)

- **Reduce Daily Use Hours:** Reducing active usage from 8 hours to 6 hours daily.
 - Estimated Monthly kWh Savings: **14.85 kWh**
 - Estimated Monthly PHP Savings: **87.61 PHP**
- **Utilize Sleep Mode/Power Off:** Enable power-saving settings to put the PC to sleep after a short period of inactivity (e.g., 30 minutes) and turn it off completely when not in use for extended periods.

B. Appliance Replacement Recommendations (Long-Term Savings)

- **Switch to an Energy-Efficient Laptop or Mini PC:** Modern laptops or mini PCs consume significantly less power than traditional desktop towers.
 - Estimated New Monthly Cost (at 8 hrs/day, 70W effective power): PHP 99.12
 - Estimated Monthly kWh Savings: **42.60 kWh**
 - Estimated Monthly PHP Savings: **251.34 PHP**

Total Potential Monthly Savings

By implementing the most impactful recommendations (e.g., replacing your ACs and Desktop PC with more efficient models), you could potentially save up to **PHP 883.23** on your electricity bill each month.
