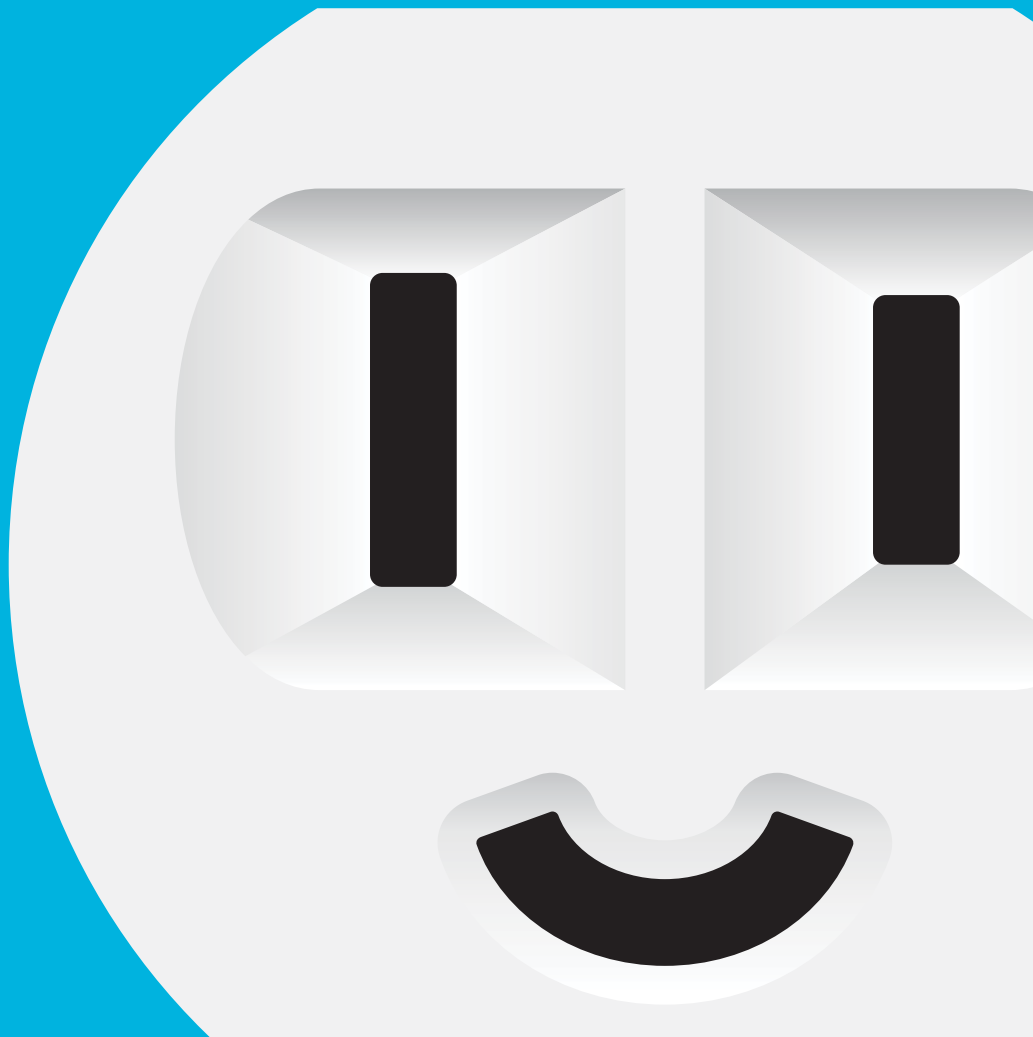
YOUR GUIDE TO AN

ENERGY-EFFICIENT HOME

SAVE ENERGY AND MONEY LOCAL-STYLE!



Congratulations on your new home!

Whether you're a life-long Hawaii resident or a newcomer to the islands, we hope this guide is helpful in understanding our unique electricity situation. Ensuring your home is as efficient as possible will help you keep electricity costs down, reduce ongoing maintenance, and lower your carbon footprint.



MOVE-IN CHECKLIST

As you get settled in to your new home, here are some easy things to tackle right away.

- [ ] Swap all light bulbs to LED. Don't forget those specialty bulbs, like bathroom mirrors and chandeliers.
- [ ] Install advanced or "smart" power strips in areas where there are lots of electronics, like an office or living room. These cut power to everything all at once, preventing energy waste.
- [ ] Check the seals on windows, doors, and even around outlets. If you find gaps, seal them.
- [ ] Check the ages of your kitchen appliances and research/write down their expected end of life. (See page 13 for a guide!) This will help you plan ahead for replacements (and take advantage of rebates and sales).
- [ ] Shopping for something brand new? Shop at one of Hawai'i Energy's participating retailers to make sure you receive our rebates, which can be up to $700.
- [ ] Consider curtains or blinds to keep indoor temperatures down during the day and cut back on AC and fan use.
- [ ] Install a smart thermostat to avoid unnecessary cooling expenses.
- [ ] Schedule a tune-up for your water heater to ensure proper insulation and max efficiency. Hawai'i Energy recommends doing this every 5 years for solar water heaters and every 3 years for heat pumps.
- [ ] Schedule a tune-up for your air conditioner to check for dirty filters and more. Hawai'i Energy recommends doing this once a year.

SIMPLE STEPS TO SAVE

You can also save big by making easy, simple changes to your activities. Here are our top tips to live green all the time – no purchase necessary!

Shorten your showers. Just 2 minutes less can save up to $100 per person, per year. You'll save on water too!

Wash full loads in cold water. Most detergents work best in cold water anyway. Hang dry laundry for even more savings!

Create a cross-breeze by opening windows or using house fans where possible. If you use AC, set a timer for a few hours a day or use energy-saver mode.

Keep refrigerator temperature within 36°- 42° F and freezer between -5° F and 6° F. Remember to dust off the coils or filters.

Limit opening your oven when cooking.

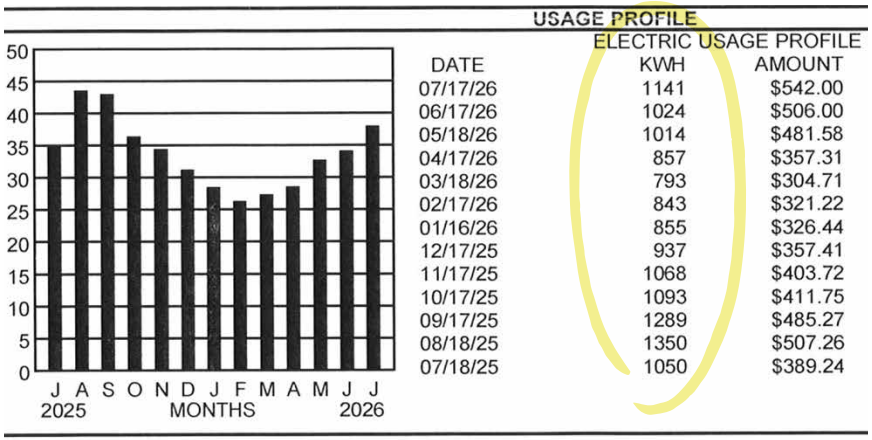
Opt for the microwave or toaster oven where possible; they use about 60% less energy than conventional ovens.

Unplug **everything** you're not using. Even small items draw electricity when they're off and can be as much as 10% of your bill! Use advanced power strips to cut power to multiple things at once.

For more, visit our website at HAWAIIENERGY.COM/TIPS

UNDERSTANDING YOUR ENERGY BILL

Hawaii residents pay the most for electricity in the nation. Our rates are nearly triple the national average – that can add up! The first step in managing these costs is to be aware of how much you use regularly.



ELECTRIC USAGE PROFILE

DATE	KWH	AMOUNT
07/17/26	1141	$542.00
06/17/26	1024	$506.00
05/18/26	1014	$481.58
04/17/26	857	$357.31
03/18/26	793	$304.71
02/17/26	843	$321.22
01/16/26	855	$326.44
12/17/25	937	$357.41
11/17/25	1068	$403.72
10/17/25	1093	$411.75
09/17/25	1289	$485.27
08/18/25	1350	$507.26
07/18/25	1050	$389.24

On your HECO bill, look for "KWH" or kilowatt-hours. Electricity is measured in watts, and you are billed by the kilowatt-hour (KWH), which is the number of watts you've used multiplied by the number of hours you've used them. Consuming 1000 watts for 1 hour = 1 kilowatt-hour.

You may notice the numbers are not the same every month. That's because many factors can affect a home's energy usage, like how it's designed, the number of occupants, and our own lifestyle choices.

Why is our electricity so expensive?

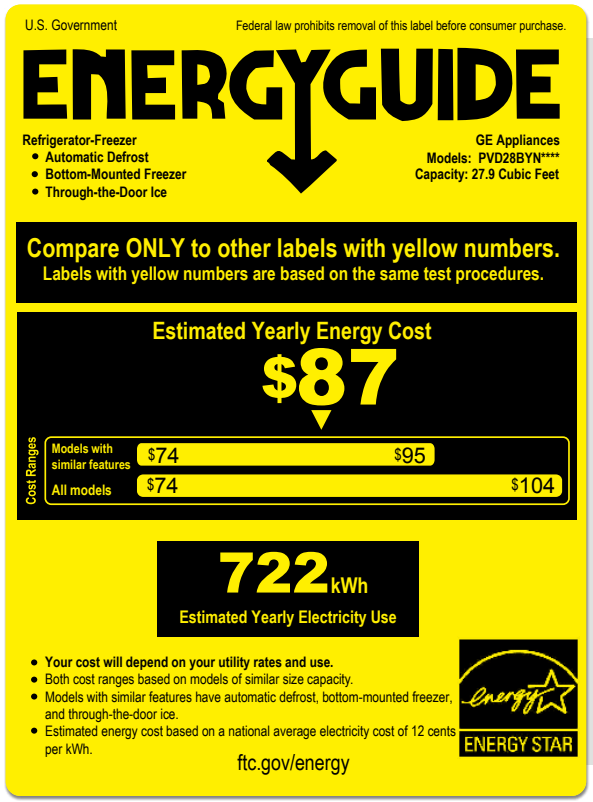
Most of Hawaii's energy comes from imported fossil fuels, so it is subject to the markup that occurs when shipping it to the islands.

Hawaiian Electric's detailed guide to reading your bill:
HAWAIIANELECTRIC.COM/BILLING-AND-PAYMENT

WHAT'S CONTRIBUTING TO MY BILL?

Now that you know how to read your electricity bill, you may wonder about what contributes to your total usage.

There is an easy way to estimate the power used by each appliance in your home: look for the yellow Energy Guide label. This label is required to be applied by federal law.


U.S. Government

Federal law prohibits removal of this label before consumer purchase.

ENERGYGUIDE

Refrigerator-Freezer
- Automatic Defrost
- Bottom-Mounted Freezer
- Through-the-Door Ice

GE Appliances
Models: PVD28BYN****
Capacity: 27.9 Cubic Feet

Compare ONLY to other labels with yellow numbers.
Labels with yellow numbers are based on the same test procedures.

Estimated Yearly Energy Cost
$87

Cost Ranges
Models with similar features $74 $95
All models $74 $104

722 kWh
Estimated Yearly Electricity Use

- Your cost will depend on your utility rates and use.
- Both cost ranges based on models of similar size capacity.
- Models with similar features have automatic defrost, bottom-mounted freezer, and through-the-door ice.
- Estimated energy cost based on a national average electricity cost of 12 cents per kWh.

ENERGY STAR

ftc.gov/energy

The label shows a calculation that translates the kilowatt hours used by the appliance into dollars.

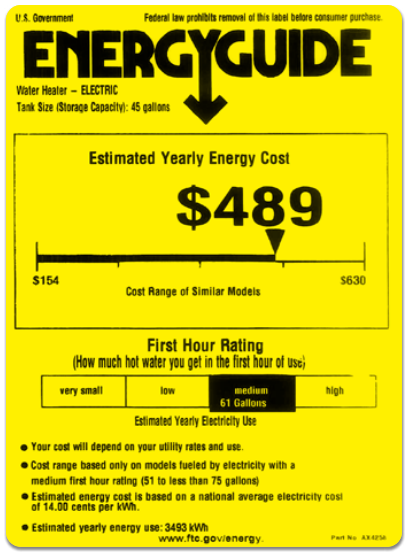
However, these labels are based on the national average electricity rate – not Hawaii's, which is nearly 3x higher.

If you see the ENERGY STAR® logo on the label, this means the product is energy efficient.

In Hawaii, water heaters and air conditioners are usually the highest energy consumers in most homes, but appliances like refrigerators, freezers, and stoves can also use a lot.

SHOPPING EXERCISE

Compare the two water heater labels below. The conventional water heater has a much higher Yearly Energy Cost than an ENERGY STAR® heat pump water heater. Use these labels to compare models and you could save money for years to come.


U.S. Government

Federal law prohibits removal of this label before consumer purchase.

ENERGYGUIDE

Water Heater – ELECTRIC
Tank Size (Storage Capacity): 45 gallons

Estimated Yearly Energy Cost
$489

$154 Cost Range of Similar Models $630

First Hour Rating
(How much hot water you get in the first hour of use)

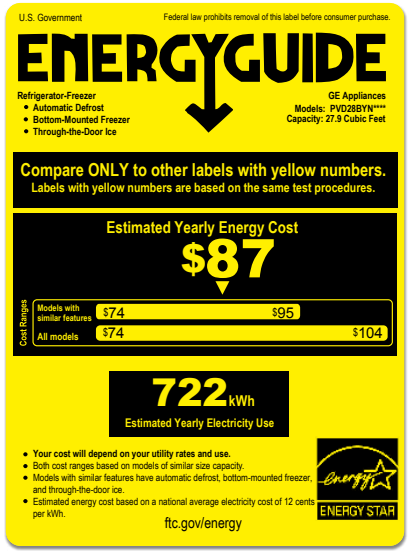
very small | low | medium 61 Gallons | high

Estimated Yearly Electricity Use

- Your cost will depend on your utility rates and use.
- Cost range based only on models fueled by electricity with a medium first hour rating (51 to less than 75 gallons)
- Estimated energy cost is based on a national average electricity cost of 14.00 cents per kWh.
- Estimated yearly energy use: 3493 kWh

www.ftc.gov/energy.

Conventional Water Heater


U.S. Government

Federal law prohibits removal of this label before consumer purchase.

ENERGYGUIDE

Refrigerator-Freezer
- Automatic Defrost
- Bottom-Mounted Freezer
- Through-the-Door Ice

GE Appliances
Models: PVD28BYN****
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ENERGY STAR

ftc.gov/energy

Heat Pump Water Heater



$330

Average yearly cost of a **heat pump water heater** for a family of four.



$1,325

Average yearly cost of a **standard, inefficient water heater** for a family of four.

Calculated using a blended (average) rate of $0.45/kWh and based on a 50-gallon tank.

MAINTENANCE IS KEY

If your new home isn't newly built, it may have come with equipment like air conditioners, water heaters, and even refrigerators that are decades old. Though they might still work, over time they will lose efficiency, requiring more electricity (which costs additional money) to keep operating. Also, older appliances often contain components that are harmful if not cleaned or checked.

This is why regular maintenance can make a big difference. For example, an AC tune-up service can restore efficiency by up to 15%. Not only can this prevent you from wasting electricity, it can help remove harmful mold build-up you can't see or clean without taking apart the blower unit (see image below). Without the service, your air quality can be compromised and can cause health issues. (American Lung Association)

Make it a point to regularly clean what you can (like AC filters and refrigerator coils). For the things you can't, schedule a tune-up service with a professional. Here are a few important services we highly recommend:

- Central and split air conditioning systems should be serviced once a year.
- Solar water heating systems should be serviced once every 5 years.
- Electric and hybrid electric water heaters like heat pump water heaters should be serviced every 3 years.



REBATES

Find tune-up service rebates for qualifying systems at **HAWAIIENERGY.COM/REBATES**

KNOWING WHEN TO UPGRADE

Let's face it, household appliances and lighting won't last forever no matter how well you take care of them. Knowing when it's time to upgrade can make all the difference, especially as more efficient versions of products are always being made. When you are ready to replace, make sure you look for the most efficient model you can–and don't forget to claim your rebates!

LEDs to brighten our savings

Incandescent and halogen bulbs use 90% more energy than LED bulbs. With an average of 32 bulbs used per home, you could be saving a bundle with efficient lighting. During the holidays, that saving goes up even more with decorative lighting.

Make the switch to LEDs today to start saving on your energy bill. LED bulbs are available in every shape and size and are required to have an Energy Guide label, so look for those when shopping. Plus, old lighting runs hot, making LEDs the safer choice.

Energy Smart 4 Homes

Check if you qualify for our Energy Smart 4 Homes (ES4H) program at hawaiienergy.com/es4h. This no-cost in home service provides families with a licensed technician who will install the most efficient LED bulbs. They can also install high-efficiency showerheads and faucet aerators, and advanced power strips to help you save even more!

REBATES

For the latest retail specials and promotions, visit **HAWAIIENERGY.COM/PROMOTIONS**

Maximize your wallet by switching out your systems

It can be a nuisance when your clothes don't come out clean from the washer or you run out of hot water when showering. These can all be telltale signs of an aging appliance. Don't ignore the signs! Newer, ENERGY STAR® energy-efficient models can outperform older models by as much as four times. Plus, they can reduce energy costs immediately, paying for themselves and ensuring consistent savings year after year.

Signs it's time to replace

Air conditioners – Not getting cold enough, uneven cooling, unusual sounds, leaks, health/respiratory issues, energy bill increases, nearing unit life expectancy.

Water heaters – Not getting hot enough, runs out of hot water too fast, leaks, energy bill increases, nearing life expectancy.

Refrigerators/freezers – Not staying cold, unusual sounds, leaks, food gets moldy quickly, 10 years or older.

REBATES

To help bring the cost of a new appliance down, check out our full list of rebates available now:
HAWAIIENERGY.COM/APPLIANCES

Tips when replacing your appliances

- Select a properly sized system based on your needs. Oversizing appliances, such as air conditioners or water heaters, can cause them to run inefficiently.
- Consider the lifetime cost of operating the system, not just the purchase price. The savings on your electric bill will offset your initial cost, and will keep benefiting you the longer you own your system.



Do you have an old, extra fridge you can get rid of?
We can recycle it for FREE and pay you $75 for each one!
Visit **HAWAIIENERGY.COM/RID-A-FRIDGE**

BEYOND BASICS – USING ADVANCED TECH

Today's advances in smart home technology offer even more ways to save, by allowing you to fine-tune appliance power, timers, temperature, and more. Many of these are available for purchase, but always make sure to check compatibility first before buying.

Here are just a few in market today

Smart plugs can monitor your energy usage and remotely shut off power on lamps, fans, ACs, and other appliances when they're not in use.

Adjusting your home's cooling system with smart thermostats based on room occupancy and schedule maximizes efficiency.

ENERGY STAR® appliances with connected functionality offer new features, like alerting you when your fridge is open or scheduling your laundry or dishwasher cycles.

PLANNING FOR THE FUTURE

For appliance replacements, buy ENERGY STAR® products.

For water heating, consider a solar water heater (which heats using the sun) or a heat pump water heater (which heats with warm, ambient air). Both of these options use significantly less electricity than a standard electric or on-demand water heater.

On average, an EV uses 3,000 kWh a year – that's over $1,100 in additional electricity costs. You may be able to offset this increase by saving energy in other ways, like utilizing public charging when possible or upgrading an old appliance.

Home exercise: Check your efficiency!

Take a moment to assess your home's efficiency. Notice that some areas are more efficient than others? This information will help you become an energy champion in your whole home.

Windows & Doors

	AREA	CHECK FOR	REASON
☐	**Windows, doors & skylights**	ENERGY STAR-certified products	ENERGY STAR products act like sunscreen for your home, reducing exposure to direct sunlight and keeping the heat low. Look for low U-factor, Low-E coating, and Solar Heat Gain Coefficient.

Lighting

	AREA	CHECK FOR	REASON
☐	**Bulbs**	Light Emitting Diodes (LEDs)	LEDs cut your energy usage by 90% compared to old incandescent bulbs.
☐	**Shading**	Shaded windows, roof overhangs	Shades and large overhangs keep the heat out by blocking the sun's rays.

Water Usage

	AREA	CHECK FOR	REASON
☐	**Water heater**	Electric, solar, heat pump water heaters	Energy-efficient water heaters, like solar and heat pump, can save you up to 40% on your electric bill.
☐	**Showerheads, faucets & toilets**	WaterSense products	Low-flow faucet aerators, and toilets use 20% less water and save energy.

Heating & Cooling

	AREA	CHECK FOR	REASON
☐	**ACs**	High efficiency cooling systems	Check the Energy Guide labels to understand system efficiency, as well as estimated yearly operating costs. The higher Annual Fuel Utilization Efficiency and SEER2, the higher the efficiency.
☐	**Landscaping**	Hedges, trees, etc.	Landscaping, such as hedges and trees, help direct breezes into your home.

Appliances

	AREA	CHECK FOR	REASON
☐	**Refrigerator**	ENERGY STAR-certified products	Switching out appliances to ENERGY STAR models will help you save energy and reduce your electric bills.
☐	**Stove**		
☐	**Dishwasher**		
☐	**Washer**		
☐	**Dryer**		
☐	**Electronics**		

Maintenance Exercise: Check-up and save!

Take a moment to check on your appliances. Do you remember when you purchased them, or how long it's been since they got a tune-up? Regular maintenance will help keep them running efficiently and save lots of money.

	BOUGHT	CHECK EVERY	NEXT CHECK
Refrigerator	/	1 year	/
Stove	/	1 year	/
Dishwasher	/	1 year	/
Washer	/	6 months	/
Dryer	/	6 months	/
Water Heater	/	5 years	/
A.C. Unit 1	/	1 year	/
A.C. Unit 2	/	1 year	/
A.C. Unit 3	/	1 year	/
A.C. Unit 4	/	1 year	/
A.C. Unit 5	/	1 year	/
	/		/
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Resources – Hawai'i Energy

Scan these QR codes for offers that put savings back in your wallet:

Water Heating – Your home's largest energy consumer is your electric water heater. When you switch to more energy-efficient options, you can save up to 40% on your electric bill.

Appliances – Switching out your old appliances to ENERGY STAR® certified models will help you save energy immediately. These upgrades will not only pay for themselves but ensure consistent savings year after year.

HVAC – As much as half of the energy used in your home goes to heating and cooling. Regular maintenance and exploring other energy-efficient cooling options can have a big effect on your savings.

Additional Rebates – We offer additional cash rebates that can help you save money and energy.

Online Marketplace – Easily purchase curated energy-efficient products with flat rate shipping.

Resources – Other

Hawaiian Electric offers a wide range of information about your electric bill, residential and business services, renewable energy, and safety. **HAWAIIANELECTRIC.COM**

ENERGY STAR® helps save money and reduce greenhouse gas emissions by identifying energy efficient equipment for your home. **ENERGYSTAR.GOV**

Hawaii State Energy Office, which is attached to the Department of Business, Economic Development, and Tourism, promotes energy efficiency, renewable energy, and clean transportation. **ENERGY.HAWAII.GOV**



Hawai‘i Energy

We’re here to help you make smart energy choices.

HAWAIIENERGY.COM