

Green Hotel Forum

Business Energy Efficiency Advisor

Lily Koo

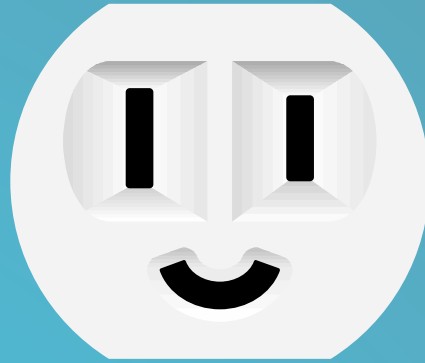
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Hawai'i Energy

HawaiiEnergy.com



Hawai'i Energy's mission is to empower island families and businesses to make smart energy choices to reduce energy consumption, save money, and pursue a 100% clean energy future.





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[HawaiiEnergy.com](https://www.hawaiienergy.com)

WHAT WE DO

- ✦ Provide Incentive funding for residential and commercial energy-efficient upgrades and equipment
- ✦ Support and provide education and training opportunities, ranging from teachers to energy industry professionals
- ✦ Help your save money and energy, while growing your business



Market Trends

- 5 more new hotels in the market
- Manage your operating expenses by being energy efficient



Lighting Distributor Instant Rebate Program

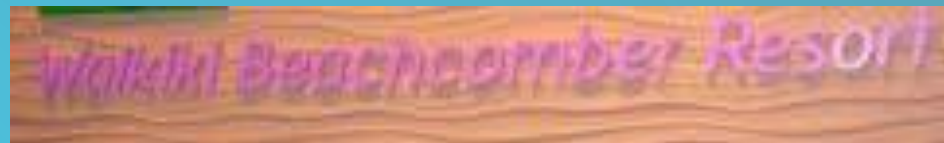




Hilton Hawaiian Village



OUTRIGGER HOTELS & RESORTS



Hale Koa Hotel

TRUMP INTERNATIONAL HOTEL
WAIKIKI

US Government



INSTANT LIGHTING REBATES



Lighting can account for 20-50% of a business' energy costs.

Energy-efficient lighting is one of the easiest and fastest ways to cut costs and save on energy. Now with instant rebates from Hawaii Energy, you can purchase energy-efficient lighting products quicker, easier and more affordably than ever.

HOW TO GET YOUR INSTANT REBATE

Contact our reps for a full list of eligible lighting products, like the ones listed below. Shop our catalog and receive your rebate when you check out. It's that simple!

Benefits:

- No applications or paperwork
- Rebates are instant, at the point of purchase
- Wide range of qualifying products
- Up to \$7 off per lamp



LED A-Shape
\$3 rebate



LED PAR, BR or MR16
\$7 rebate



LED Decorative
\$3 rebate



LED T8
\$5 rebate



PIN MOUNT
\$5 rebate



LED LAMPS



Lamp Type	Incentive
Omni-Directional / A-base	\$3.00
Omni-Directional / Pin Mount	\$5.00
PAR20/30/38/, MR 16, BR Lamps	\$7.00
LED T8 - Plug & Play (Type A) LED T8- Internal Drive (Type B)	\$5.00
LED T8 Linear Tubes External Driver (Type C)	\$10.00



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LED TROFFERS



2X2, 1X4, 2X4



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LOWER WATTAGE FLUORESCENT LIGHTING

- ✦ Replace T12's or 32w T8's with reduced wattage fluorescent lamps. Ballast must be replaced. Lamp must be www.cee1.org listed

Lamp Type	Incentive
T8 2 ft. Lamp	\$3.00
T8 3 ft. Lamp	\$4.00
Reduced Wattage T8 25W or 28W	\$2.00



Why such aggressive boosts to performance?

- Need to better segment the highest-performing products
 - DLC Premium trying to incorporate the top 5%
- New requirements were determined cooperatively
 - DLC staff
 - DLC Member utilities
 - DLC Industry Advisory Committee
 - General industry feedback
- Very good news for lighting customers!



Performance Changes in DLC Premium 4.0 for 2017

—In a nutshell, DLC Premium products require:

- Increased efficacies (~25% over DLC Standard)
- Improved lumen maintenance ($L_{90} > 36,000$ hours)

Luminaire Application	Standard LPW	Premium LPW	% Increase
Outdoor - Low Output	90	110	22%
Outdoor - Mid Output	95	115	21%
Outdoor - High Output	100	120	20%
Interior Directional	65	90	38%
Troffer	100	125	25%
Linear Ambient	105	130	24%
High- and Low-Bay	105	130	24%
Average	94	117	25%



Exterior /Parking lot Lighting & Lighting controls



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CUSTOMIZED PROJECTS-NON-LIGHTING & LIGHTING

- ✦ Incentive amount is based on projected first-year energy savings and are evaluated on a case-by-case basis

≤5 yrs. Measure of life \$0.08/kWh saved

>5 yrs. Measure of life = \$0.12/kWh saved

Peak Demand reduction, 5-9 pm \$125/kW

*Incentive cannot exceed 50% of incremental project cost.

*Lighting payback > 6 mo. Non-lighting > 1 yr.

Pre-approval is required for all customized projects –

Contact a Hawaii Energy Specialist



How does Facility Manager Benefit?

- Lower Wattage helps reduce “watts per square foot” allowing freedom in design renovations in a building;
- Easier to meet LEED goals for local tax incentives;
- Potential for higher lease rates with higher LEED level;
- Promotes “Go Green” culture people and businesses are striving to become.



TYPES OF INCENTIVES



Building Envelope
Improvements

[See Incentives](#)



Customized Projects

[See Incentives](#)



Energy Services &
Maintenance

[See Incentives](#)



ENERGY STAR®
Kitchen Equipment

[See Incentives](#)



HVAC

[See Incentives](#)



Pumps & Motors

[See Incentives](#)



Submetering

[See Incentives](#)



Water Heating

[See Incentives](#)



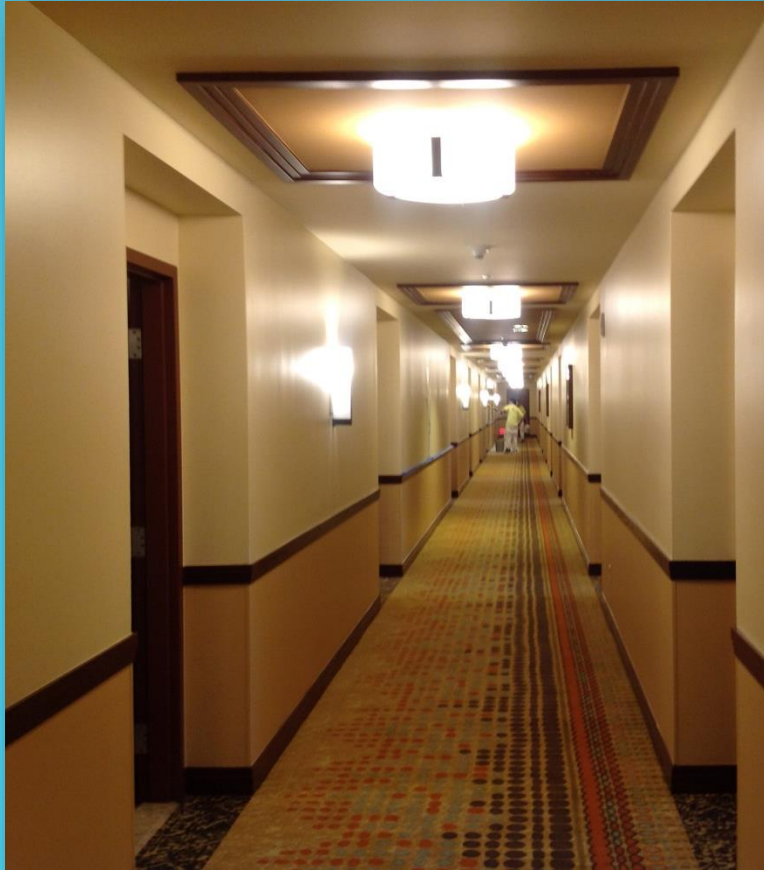
Additional

[See Incentives](#)



Project Highlight

Marriott Ko'olina Beach Club



Replaced 6,420 incandescent lamps in the common area and guestrooms with LED A19 and Candelabra

Project Cost \$65,650

Energy Savings: 57.92 kW, 429,736 kWh

HE rebate \$20,460

Annual Savings approx. \$68,757.00

Payback: 11 months

= 344 room nights if the AOR is \$200/nite



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Project Highlight

Princess Ka'iulani Resort



Installed 411 AC EMS control systems

Project Cost \$185,097

Energy Savings: 41.19 kW, 308,250 kWh

HE rebate \$41,000

Annual Savings approx. \$49,320

Payback: 3 years and 9 months

= 246 room nights if the AOR is \$200/nite



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What did participants say about Hawai'i Energy?



RESIDENTIAL OFFERINGS

The screenshot shows the Hawaii Energy website's 'For Your Home' section. The header includes the Hawaii Energy logo, navigation links for 'FOR YOUR Home', 'FOR YOUR Business', 'Education & Training News & Events For Contractors', and a search bar. A large banner image of a modern kitchen features the text 'FOR YOUR HOME Saving Energy and Money for your Home'. Below this, a headline reads 'Get Cash Rebates to Help Make Your Home Energy Smart', followed by a paragraph explaining the rebate program. A blue button labeled 'LEARN HOW YOU CAN GET CASH REBATES' is positioned next to an image of energy-efficient appliances (refrigerator, dishwasher, and washing machine). The footer contains icons for various home energy topics: a smartphone, a lightbulb, a water drop, a fan, and a leaf.

www.hawaiienergy.com/for-your-home

Hawaii Energy

FOR YOUR Home

FOR YOUR Business

Education & Training News & Events For Contractors

Search About Resources

FOR YOUR HOME

Saving Energy and Money for your Home

Get Cash Rebates to Help Make Your Home Energy Smart

Hawaii Energy's rebates gives you money back when you buy energy-efficient equipment for your home. And, your energy-saving investment will pay for itself and keep on saving you money for years to come.

LEARN HOW YOU CAN GET CASH REBATES

Smartphone icon, Lightbulb icon, Water drop icon, Fan icon, Leaf icon



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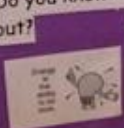
Thursday
At 9:00am
With it

Power my learning.com



What is Energy?

Energy is a source that can be used for lots like energy can make things move and also energy can make machines work. Do you know energy does not run out?



Energy is light

Light is a type of energy. It is used for night so we can see. Also its used for decoration for christmas. Did you know light is everywhere?



KEEP CALM
and
SAVE ENERGY

SAVE
ENERGY
THIS

KEEP CALM
and
SAVE ENERGY

We need Energy

Energy makes things move?

Energy makes things move by the energy stored in the gasoline. Many things have energy stored in it. Did you know boats are pushed from the energy in the wind.

Energy is heat

ENERGY MAKE HEAT. ALSO HEAT IS USED TO WARM THINGS UP AND HEAT CAUSE FOOD AND OUR BODIES TO BE WARM ALSO ENERGY STORED IN PLANT AND OTHER THINGS TO MAKE HEAT. DO YOU THINK HEAT WOULD GO OUT?



Energy makes things grow

Plants grow by the heat of the energy from the sun also the sun gives vitamin d. did you know that sun is light and heat?





Energy Technology Workshops



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[HawaiiEnergy.com](https://www.hawaiienergy.com)



Our REWARD



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HawaiiEnergy.com





Questions?

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*Get the latest updates! Sign up for our
e-newsletter at hawaiienergy.com/newsletter*



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