



HAWAII ENERGY

Your Conservation and Efficiency Program

How We're Working with You to...

Save Energy
Strengthen the Economy
Protect our Environment

Walter Enomoto, Maui County Program

Specialist

June 21, 2013

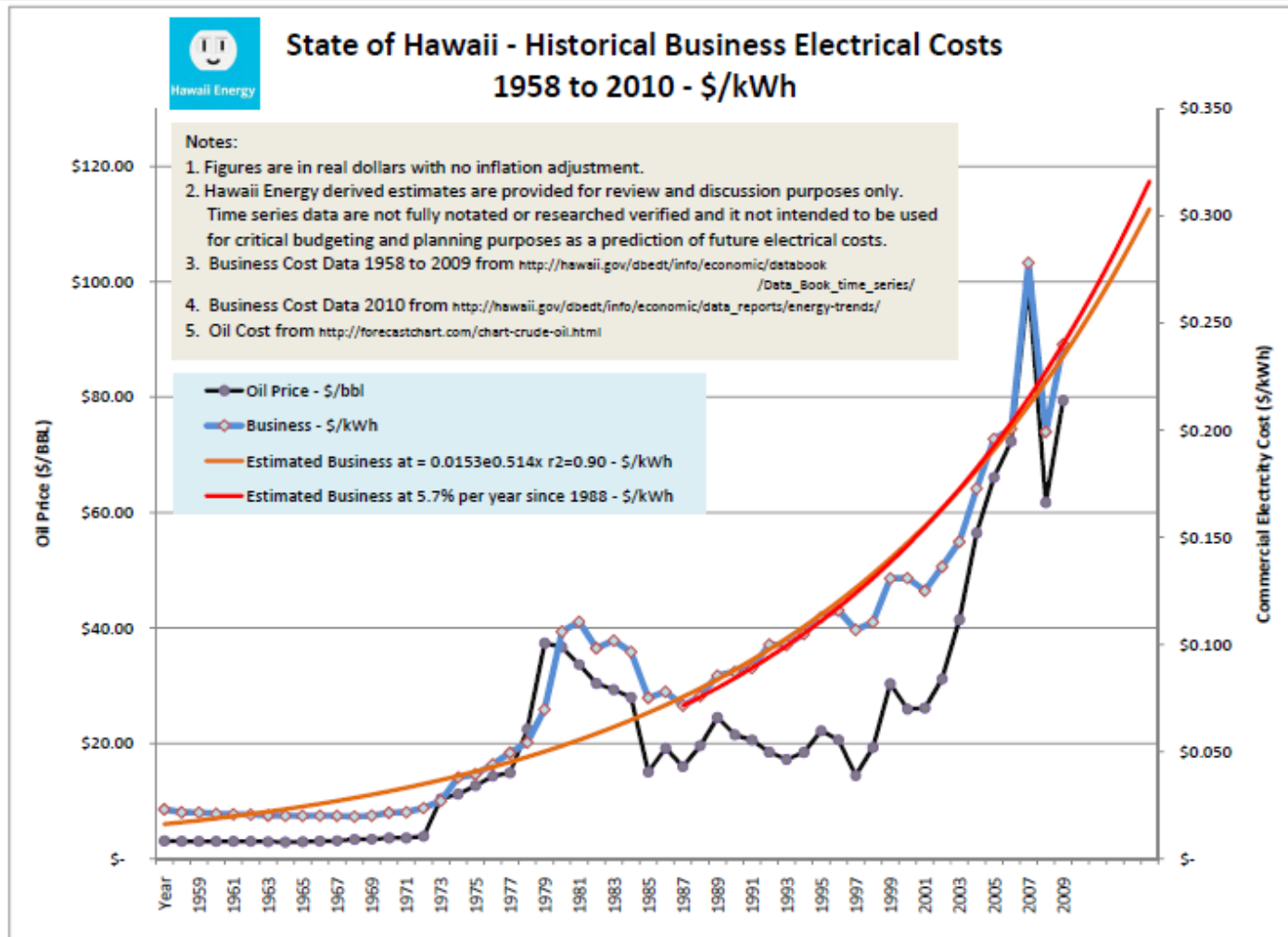
HAWAII ENERGY IS...



- Hawaii's conservation & efficiency program
- Funded by you through electric utility bills
- Directed by the Public Utility Commission
- Helping to ensure the Hawaii Clean Energy Initiative succeeds



BUSINESS RISK?





Get the Facts

It's time to break Hawaii's dependency on imported oil.

[More Info](#)



Residential Rebates

[Learn More](#)



Business Rebates

[Learn More](#)



Live WTI Crude Oil Price [More Details](#)



2010 OIL PRICES

LOW **75.24**

AVERAGE **79.40**

HIGH **89.15**

About 77% of electricity in Hawaii is generated by burning imported oil – about 11 million barrels of oil per year. (Real time prices and other data by [oil-price.net](#))

Featured News [More News](#)

Posted August 24, 2011

[Hawaii: The State of Clean Energy](#)

Hawai'i News Now and the Hawai'i Energy Policy Forum are partnering to produce and broadcast "Hawai'i: The State of Clean Ener... [Read More](#)

Posted June 21, 2011

[Third-party verification phone survey being implemented](#)

A third-party phone verification survey and on location inspections are currently being conducted to evaluate the performance of the Hawaii Energy, Co... [Read More](#)

Latest Media [More Media](#)



[Check out the Shed Some Light TV commercial!](#)



Hawaii Energy Business Program

Hawaii Energy
Your Conservation & Efficiency Program

Business Incentives Summary

Refer to Incentive Applications for Qualifying Efficiencies of Mechanical Equipment.

Questions: Call 537-5577 (Oahu) or 877-231-8222 (Neighbor Islands)

www.hawaiienergy.com

Hawaii Energy is a ratepayer-funded conservation and efficiency program administered by SAIC under contract with the Hawaii



Hawaii Energy

Your Conservation and Efficiency Program

SAIC

ENERGY STAR® LED LAMPS

- Energy Star® Approved LED Lamps
- Non-Dimmable
 - A19 - \$7
 - MR16 & PAR Lamps - \$7
- Dimmable and Compatible with Controls
 - A19 - \$7
 - MR16 & PAR Lamps - \$10
- Purchased from Commercial Distributors



REFRIGERATED CASE LED LIGHTING

- Reach-In Refrigerated Vertical Case Lamps
- 5 and 6 foot Lamps
- Can save up to 45%
- \$75 per Lamp

CVS LAHAINA



HVAC INCENTIVES

Incentive levels
subject to change
come July 2013

TECHNOLOGY	INCENTIVE					
Air-cooled packaged & split air conditioning system (*SEER)	\$200 per ton					
	Unit Size (BTU/hr)	Unit Size (Btu/tons)	IECC 2006 (kW/ton)	EER	Hawaii Energy Premium Efficiency (kW/ton)	Qualifying EER
	Package < 65,000	< 5.42	1.36	*9.7	1.159	*11.2
	Splits < 65,000	< 5.42	1.33	*10.0	1.113	*11.5
	65,001 to 135,000	> 5.42 to 11.25	1.17	10.3	0.990	11.8
	135,001 to 240,000	> 11.25 to 20.0	1.24	9.7	1.052	11.2
	240,001 to 760,000	> 20.0 to 63.33	1.26	9.5	1.074	10.9
> 760,000	> 63.33	1.30	9.2	1.109	10.6	
Variable Refrigerant Flow (VRF) air conditioning	<u>New Construction</u> \$250 per ton			<u>Retrofit</u> \$300 per ton		
Water cooled chiller (*See enhanced chiller program worksheet for details.)	*Enhanced \$150 per ton			Standard \$50 per ton		
	Type	Size	IECC 2006 IPLV (kW/ton)	Hawaii Energy Premium Efficiency IPLV (kW/ton)		
	Reciprocating	All	0.70	0.60		
	Rotary Screw and Scroll	< 150 tons	0.68	0.58		
		150 – 300 tons	0.63	0.54		
		> 300 tons	0.57	0.48		
	Centrifugal	<150 tons	0.67	0.57		
150 – 300 tons		0.60	0.51			
> 300 tons		0.55	0.47			
Variable Frequency Drive (VFD) control	<u>Air Handler</u> \$50 per hp (for retrofit only)			<u>Chilled and Condenser Water Pumps</u> \$80 per hp (for retrofit only)		
Electronically Commutative Motor (ECM) and speed control	<u>Commercial Refrigeration</u> \$85 per motor and control			<u>Fan Coil Application</u> \$55 per motor and control		
Consortium for Energy Efficiency (CEE) qualified premium efficient motors Visit www.CEE1.org for a list of motors.	1 - 200 hp: \$10 per hp (Submit customized application for motors greater than 200 hp or not listed and meet one band above NEMA Premium Efficiency level.)					



VARIABLE REFRIGERANT FLOW

- HVAC units with inverter driven variable speed compressors, air handler fans, condenser fans and high efficiency motors provide 20-35% reduction in energy use.
- \$300 per ton existing
- \$250 per ton new construction



REFRIGERATED CASE ECM MOTOR/CONTROLLER RETROFITS

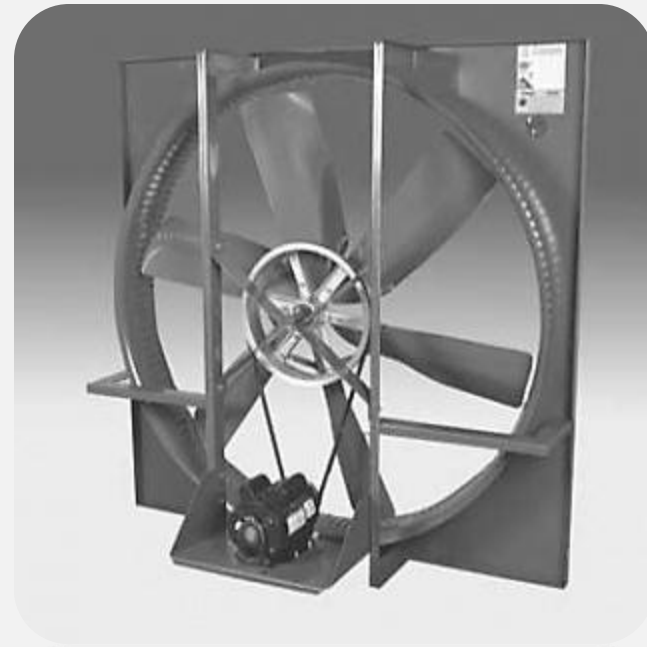
- Dramatic improvement over older shaded pole motors commonly used in refrigeration systems.
- Can save 30-40%
- \$85 per motor with controls

Walk In Reefer
w/EC motors
and control



GARAGE ON-DEMAND VENTILATION CONTROL

- There are opportunities to reduce runtimes 60-90% with active CO monitoring systems.
- \$0.12/kWh



Cool Roofs

- Cool roofs reflect sunlight back to the atmosphere
- Must have AC conditioned space below roof
- \$0.20 per sq. ft.
- Energy Star rated roof products



VFD POOL PUMP

- A variable speed commercial pool pump motor/controllers in place of a standard single control can save energy by using a higher efficiency pump and by operating it less.
- Approximately \$225/hp



CONDOMINIUM & SMALL BUSINESS SUB-METERING

- Program will provide incentives and education for the installation of billing sub-meters
- Tenants within a master metered facility
- Motivation and ability to directly benefit from energy efficiency improvements and behaviors
- \$150 per submetered unit



CUSTOMIZED INCENTIVE PROGRAM

Measure Life	Reduction in Energy Use Incentive	Evening Peak Demand Reduction	Day Peak Demand Reduction (HVAC Only)
		(5-9 p.m. Weekdays)	(12-2 p.m. Weekdays)
≤ 5 years	\$0.08/kWh	\$125/kW	\$100/kW
> 5 years	\$0.12/kWh	\$125/kW	\$100/kW





HAWAII ENERGY

Your Conservation and Efficiency Program

Mahalo.

Neighbor Island 1-877-231-8222

My Cell: 298-4269

Email: enomotow@saic.com

www.HawaiiEnergy.com

Hawaii Energy is the ratepayer-funded conservation and efficiency program administered by SAIC under the direction of the Hawaii Public Utilities Commission serving Hawaii, Honolulu and Maui counties. All incentives are subject to change without notice. For the most current information, visit HawaiiEnergy.com or call 537-5577 (Oahu) or toll-free 1-877-231-8222.