

Clean and Clever Energy

Burnett Inland Economic Development Organisation

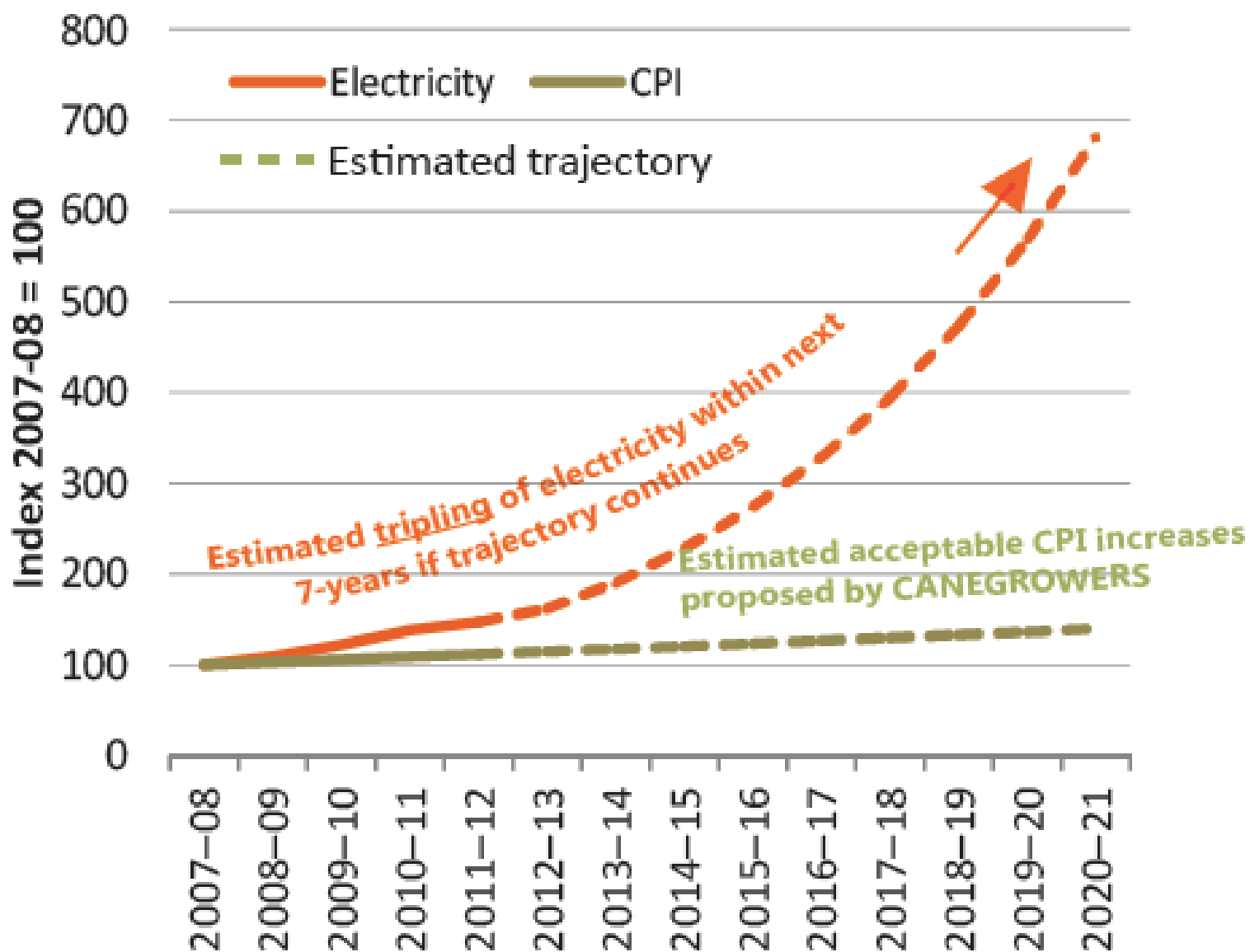


Presenter: Ross Anderson

What We Offer

- **Clean & Clever Business Energy Assessment**
- **Energy Information Toolkits for Business**
- **Clean and Clever Energy Clusters**
- **Clean and Clever Energy Accreditation and Champion Program**
- **Clean and Clever Energy Business Directory**
- **Clean and Clever Energy Newsletter and Fast Facts**
- **Energy Tender Development/Marketing Assistance**
- **<http://www.biedo.org.au/article/134/clean-and-clever>**

Estimated Electricity Increases



Isis Cane Growers Irrigation Energy Audit

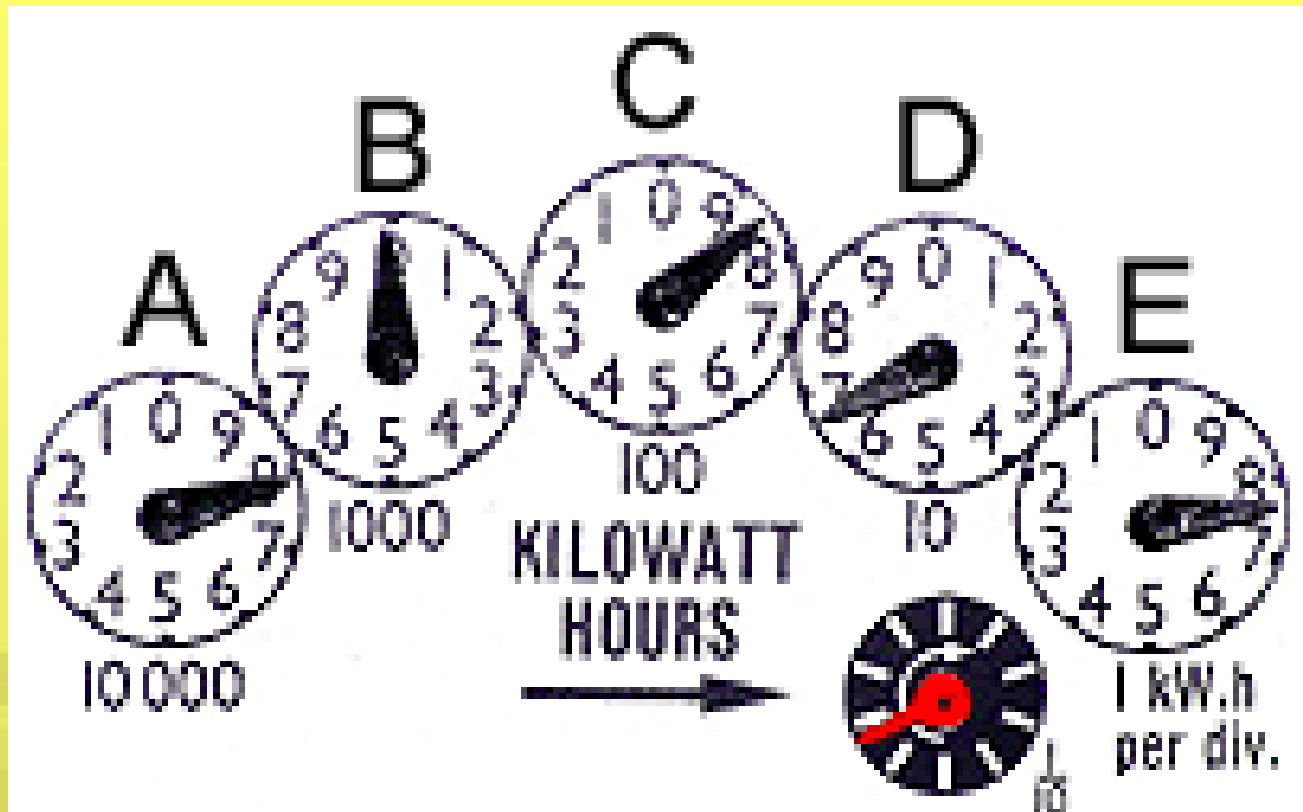
- In December 2013 Conducted 15 irrigation Audits
- Ergon Energy is the only power provider for the region.
- The majority of cane farmers from the audits were using tariffs 62, 65 and 66 with only 14% using the new tariff 22.
- From analysing the growers most current quarterly irrigation power bills over \$20,000 in errors were identified.

YOUR POWER BILL

Page 2/2

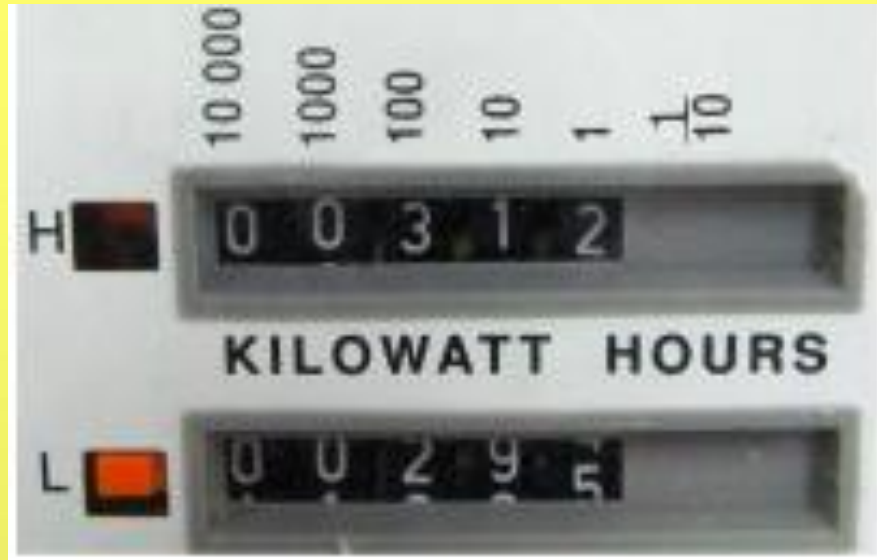
Meter Number	Tariff Description	Previous Reading 22/04/13	Current Reading 19/07/13	Supply Period	Tariff Component	Days	kWh	Cents per kWh (exc GST)	GST	Total (inc GST)
Electricity Charges										
D8436	Tariff 65	51778	53098	22/04/13 to						
D8436	Irrigation Time	50764	51983	30/06/13						
D8437	of Use	51749	53084		High Rate		3874	25.982	\$100.65	\$1107.19
N8436		108838	110104							
N84369		107957	109286							
N84370		107895	109177		Low Rate		3877	14.311	\$55.48	\$610.32
					Service fee	67			\$3.79	\$41.69
D84367	Tariff 65	53098	53462	01/07/13 to						
D84369	Irrigation Time	51983	52319	19/07/13						
D84370	of Use	53084	53451		High Rate		1067	29.580	\$30.50	\$335.45
N84367		110104	110452							
N84369		109286	109652							
N84370		109177	109530		Low Rate		1067	17.742	\$16.80	\$184.77
					Service fee	19			\$1.15	\$12.63
Total							9885		\$208.37	\$2292.05

Clock Face (Pointer) Meters



In this example the reading is 7 - 9 - 8 - 6 - 7.

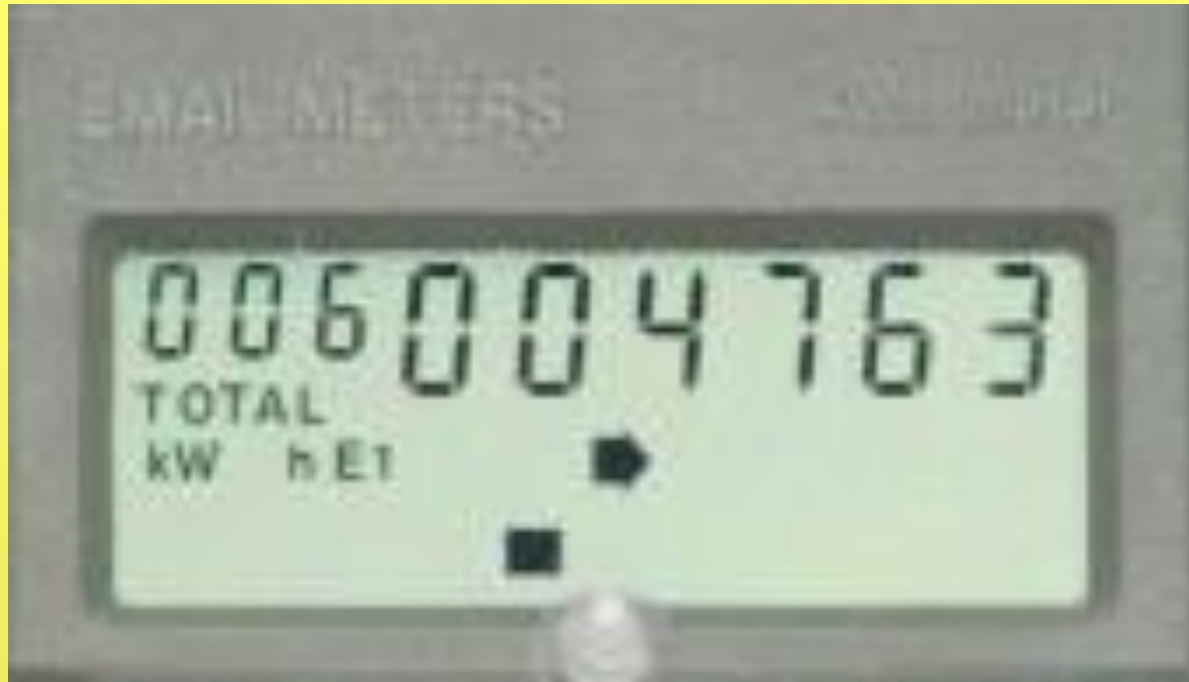
- **Digits (Cyclometer) Display Meters - Dual Rate**



The reading for this example is:

- **H 0 - 0 - 3 - 1 - 2**
- **L 0 - 0 - 2 - 9 - 5**

Electronic Digital Display Meters



In this example the reading is 0 - 0 - 4 - 7 - 6 - 3.

Tariff 65 Irrigation Time of Use (Transitional)

- This tariff is for electricity used in a fixed 12 hour daily pricing period as agreed between Ergon Energy and the customer (from the range 7am to 7pm; 7.30am to 7.30pm; or 8am to 8pm) Monday to Sunday inclusive.

TARIFF 65 IRRIGATION TIME OF USE (TRANSITIONAL) PRICING STRUCTURE	GST INCLUSIVE NOTIFIED PRICE
High rate - cents per kWh (7am-7pm or 7.30am-7.30pm or 8am-8pm)	31.438
Low rate - cents per kWh (7pm-7am or 7.30pm-7.30am or 8pm-8am)	17.316
Daily supply charge (service fee) - cents per day	66.468

horse power(hp) to kilowatts(kW)

horse power = kilowatts

$$10\text{hp} = 7.355\text{kW}$$

$$20\text{hp} = 14.710\text{kW}$$

$$\mathbf{30\text{hp} = 22.065\text{kW}}$$

$$40\text{hp} = 29.420\text{kW}$$

$$50\text{hp} = 36.775\text{kW}$$

Energy Usage/Cost to run Calculator

	Item Details
Items Power in Watts	22065
Ballast Power if used	0
Duty - percentage of the usage time that the item is drawing full power for.	1.00
how many hours /day does the item run	10
How many days /week does it run	7
Number of Items running	1
Energy Company kWh/unit Cost (i.e. Ergon Energy Tariff 20 = 25.54 cents/kWh)	\$0.3144
Power used for 1 hour (kWh)	22.065
Power cost for 1 hour	\$6.94
Power used for 1 Month (kWh)	6693.05
Power cost for 1 month	\$2,104.16
Power used for 1 year (kWh)	80316.60
Power Cost for 1 year	\$25,249.93

Energy Usage/Cost to run Calculator

	Item Details
Items Power in Watts	22065
Ballast Power if used	0
Duty - percentage of the usage time that the item is drawing full power for.	1.00
how many hours /day does the item run	10
How many days /week does it run	7
Number of Items running	1
Energy Company kWh/unit Cost (i.e. Ergon Energy Tariff 20 = 25.54 cents/kWh)	\$0.1732
Power used for 1 hour (kWh)	22.065
Power cost for 1 hour	\$3.82
Power used for 1 Month (kWh)	6693.05
Power cost for 1 month	\$1,158.97
Power used for 1 year (kWh)	80316.60
Power Cost for 1 year	\$13,907.62

Tariff 22 (Small and Large) General Supply Time of Use (Transitional)

This tariff is available for a period of no more than seven years from 1 July 2013. This tariff may be suitable for customers with a good deal of night and weekend electricity usage. Electricity is charged at a higher rate during the specified peak period and less during the specified off-peak period.

TARIFF 22 (SMALL AND LARGE) GENERAL SUPPLY TIME OF USE (TRANSITIONAL)	GST INCLUSIVE NOTIFIED PRICE
Weekdays (7am-9pm) - cents per kWh	40.902
Other times - cents per kWh	14.403
Daily supply charge (service fee) - cents per day	151.652

Energy Usage/Cost to run Calculator

	Item Details
Items Power in Watts	22065
Ballast Power if used	0
Duty - percentage of the usage time that the item is drawing full power for.	1.00
how many hours /day does the item run	10
How many days /week does it run	7
Number of Items running	1
Energy Company kWh/unit Cost (i.e. Ergon Energy Tariff 20 = 25.54 cents/kWh)	\$0.4090
Power used for 1 hour (kWh)	22.065
Power cost for 1 hour	\$9.03
Power used for 1 Month (kWh)	6693.05
Power cost for 1 month	\$2,737.59
Power used for 1 year (kWh)	80316.60
Power Cost for 1 year	\$32,851.10

Energy Usage/Cost to run Calculator

	Item Details
Items Power in Watts	22065
Ballast Power if used	0
Duty - percentage of the usage time that the item is drawing full power for.	1.00
how many hours /day does the item run	10
How many days /week does it run	7
Number of Items running	1
Energy Company kWh/unit Cost (i.e. Ergon Energy Tariff 20 = 25.54 cents/kWh)	\$0.1440
Power used for 1 hour (kWh)	22.065
Power cost for 1 hour	\$3.18
Power used for 1 Month (kWh)	6693.05
Power cost for 1 month	\$964.00
Power used for 1 year (kWh)	80316.60
Power Cost for 1 year	\$11,568.00

Summary

- The cost of power is going up regardless
- Make sure you are on the right tariff for your irrigating operation
- Your electricity bills Kwh usage matches your actual irrigating time of use.
- Make sure your power meters are running correctly
- Monitor your power meters regularly

QUESTIONS

Next Step

BBIFMAC is now inviting irrigation farmers to participate in the Energy Efficiency Gains for Australian Irrigators Project



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0417 429 586**



A *FREE* Audit can Help Reduce your Business *ENERGY* Costs!

BIEDO Clean and Clever Energy Audit

Book your *FREE* audit today

07 4169 7851

biedoclients@burnett.net.au

For more information visit:

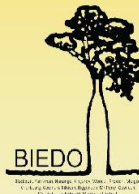
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Australian Government
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Burnett Inland Economic Development Organisation
Making a Difference Everyday