



Electricity Authority

Distribution Pricing Conference 17 Aug 2016

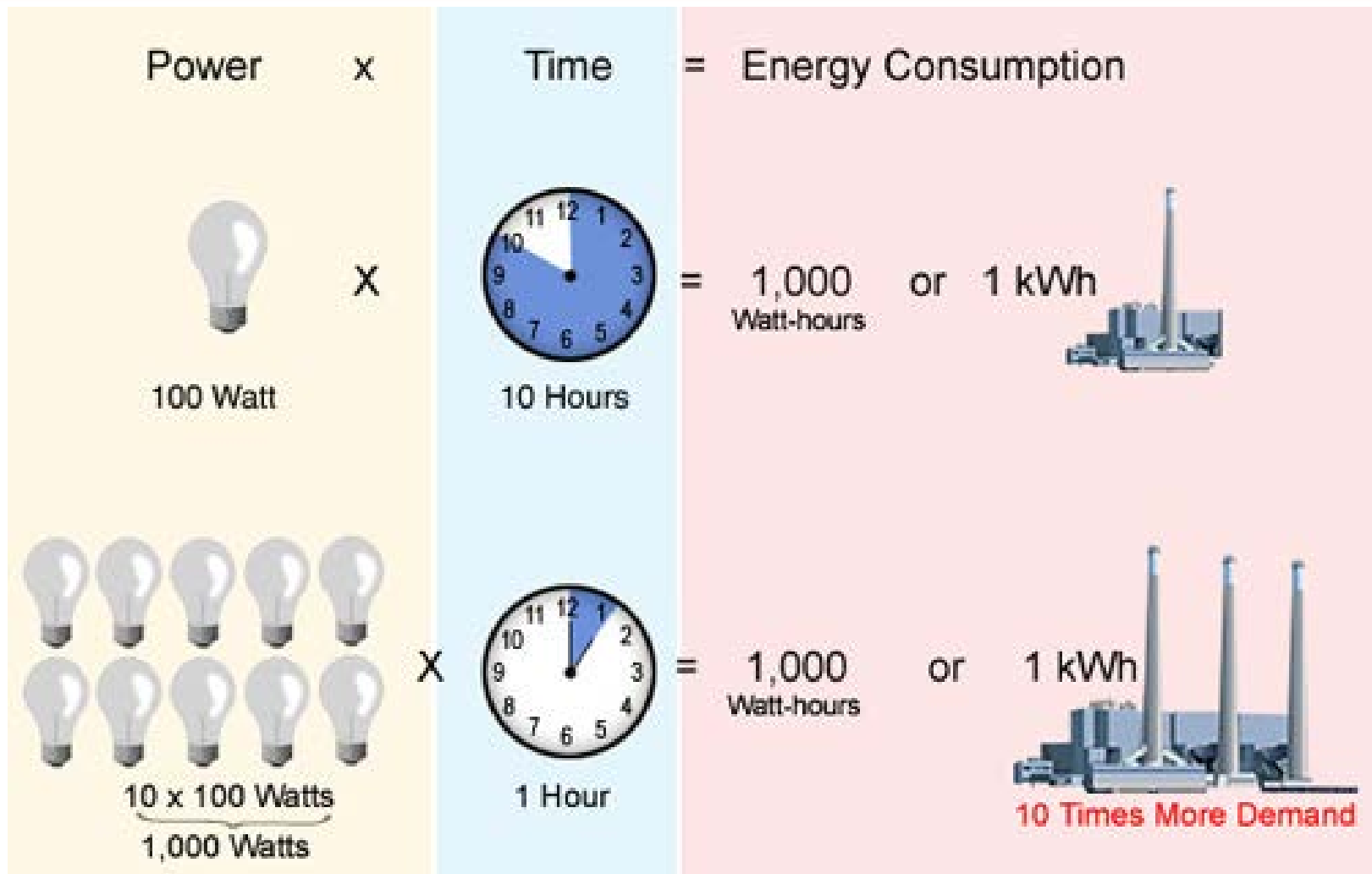
Pass-through of Distribution Price Structures

Greg Skelton, CEO
Wellington Electricity

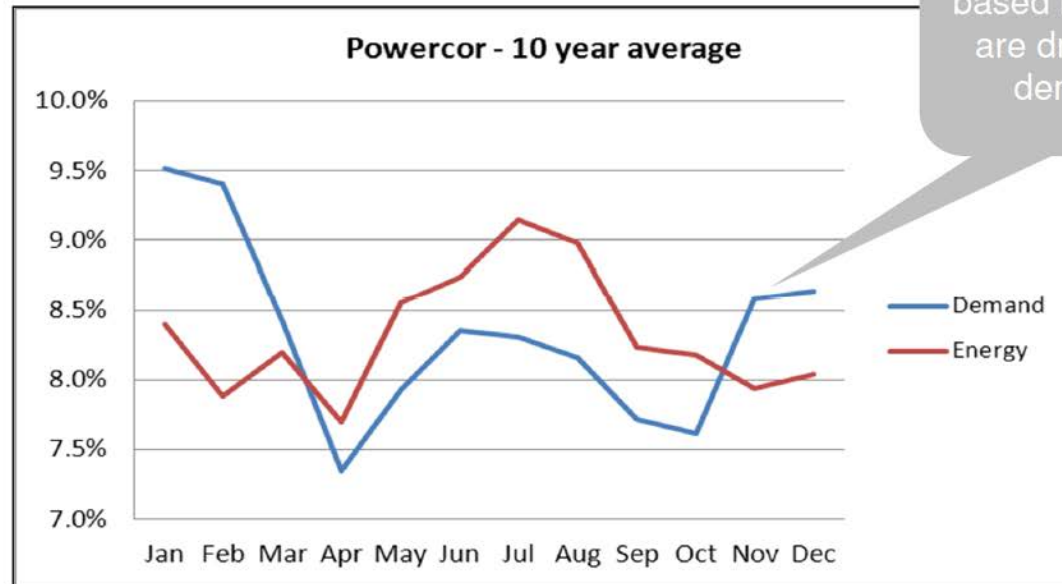


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Points of Difference – Energy v Demand

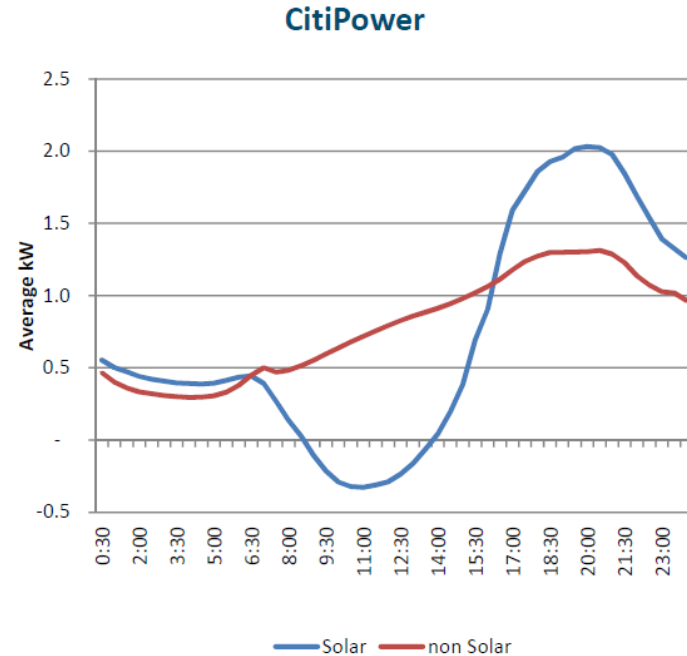
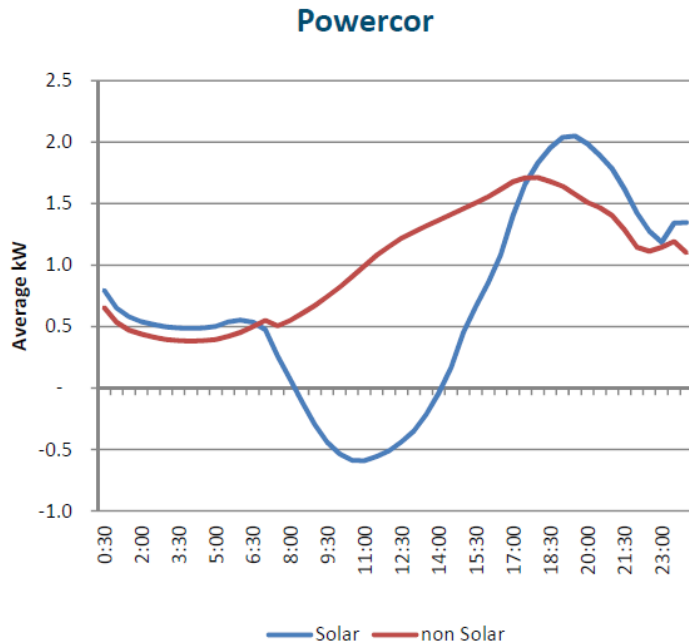


c/kWh tariffs have been a poor cost signal



Tariffs are energy based but costs are driven by demand

Solar PV not helping Hot summer day with no cloud



Cost Reflective Pricing would promote efficient outcomes for NZ Customers:

- **Send the right signals on the efficient choice of energy source**
- **Send the right signals on the efficient use of energy**
- **Recognise technology will reduce kWh's but not peak demand**
- **Clearer signals for the efficient use of networks**

This would then promote the efficient investment in NZ infrastructure and energy markets more broadly

Cost Reflective Pricing needs time to be transitioned into place:

- **Allow Policy & Regulations to become enabling and adaptive**
- **Allow Retailers to adjust their Customer Offers and Customer Engagement promotions**
- **Allow Customers time to adjust and respond to changes**

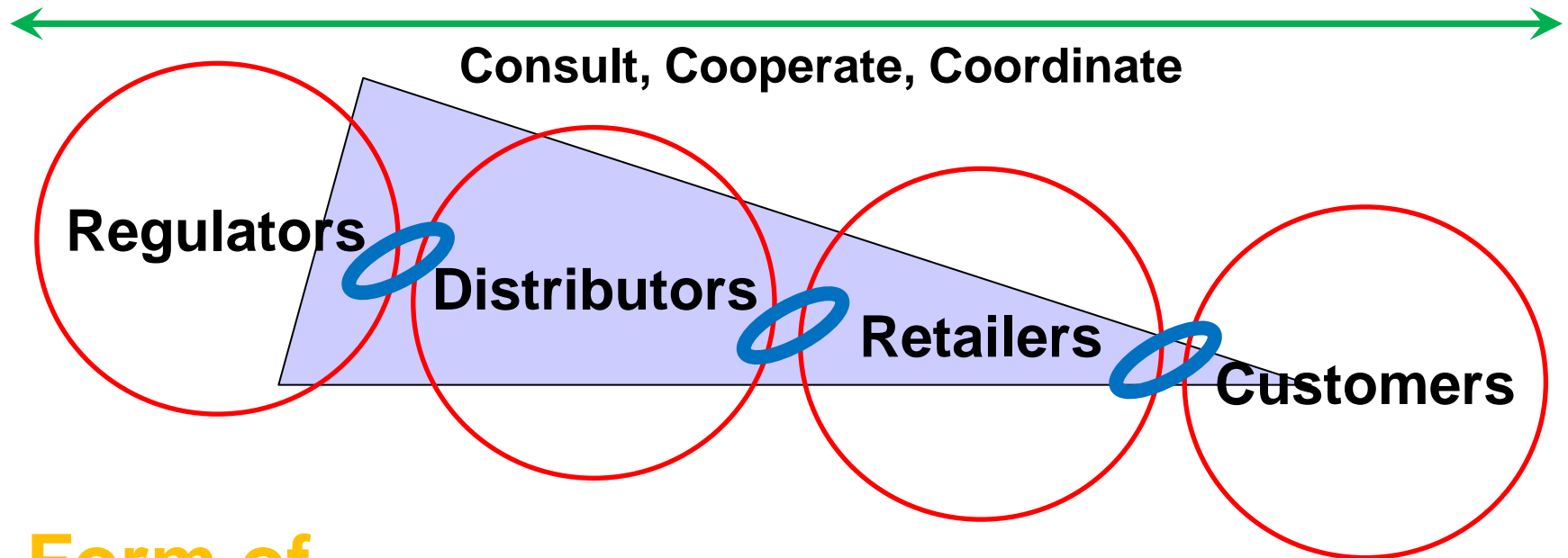
Otherwise, if a short term approach is taken, then the winners and losers will cause uncertainty and a lack of buy-in will result

Support needed from **ALL** Market Participants, Whole of System approach is needed to be successful, not just a single participant.

Challenges facing the industry to offer Cost Reflective Tariffs include:

- Access to Cost Reflective Meter Data, need to be able to measure and monitor customer response
- An equivalent obligation on Retailers to Price Signal Customers so that support is provided for the correct response
- Rules & Incentives from the Regulatory regime need to enable a wider scope for Cost Reflective Pricing which is currently limited by Low Fixed User and Price Cap mechanisms
- Regulators, Government Departments and Politicians need to provide full support through policy for successful transition.

**Signal: Efficient Energy Source, Efficient Energy Use,
Efficient Investment (Asset & Markets)**



**Form of
Control
“enable”**

**Business
Models
“signal”**

**Information
Reflected
“offers”**

**Engage &
Educate
“adopt”⁸**

Mature Industrial TOU market provides a tapestry of pass-through signals, Mass Market is simple, day/night at best

- **Retailer attraction of simple Mass Market pricing**
- **Distributor attracted to build an efficient network (lower peaks)**

- **We need better quality conversations between market participants to define principles & provide choice for customers**

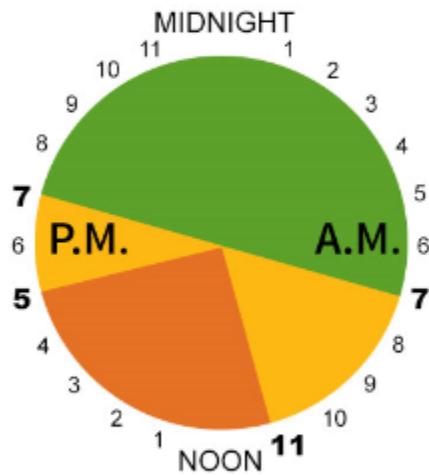
Do we widen the current market structure?

A Residential TOU market > 8000 kWh?

A Residential Mass Market < 8000 kWh (no LFU)?

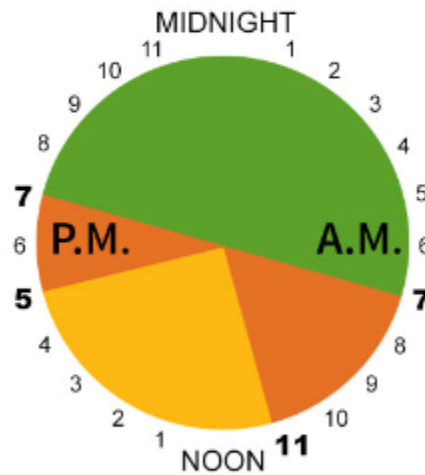
TOU Rates effective May 1, 2016:

Summer - Weekdays
(May 1 - Oct 31)



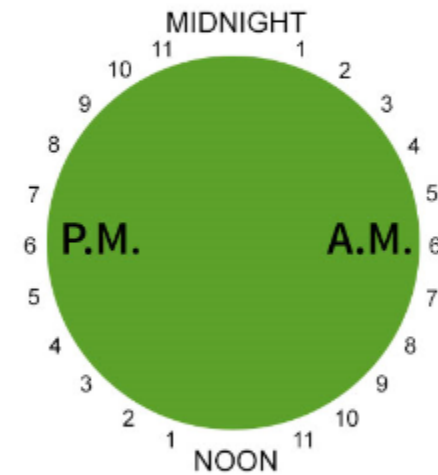
8.7¢ Off-peak
per kWh*
Demand is lowest

Winter - Weekdays
(Nov 1 - Apr 30)

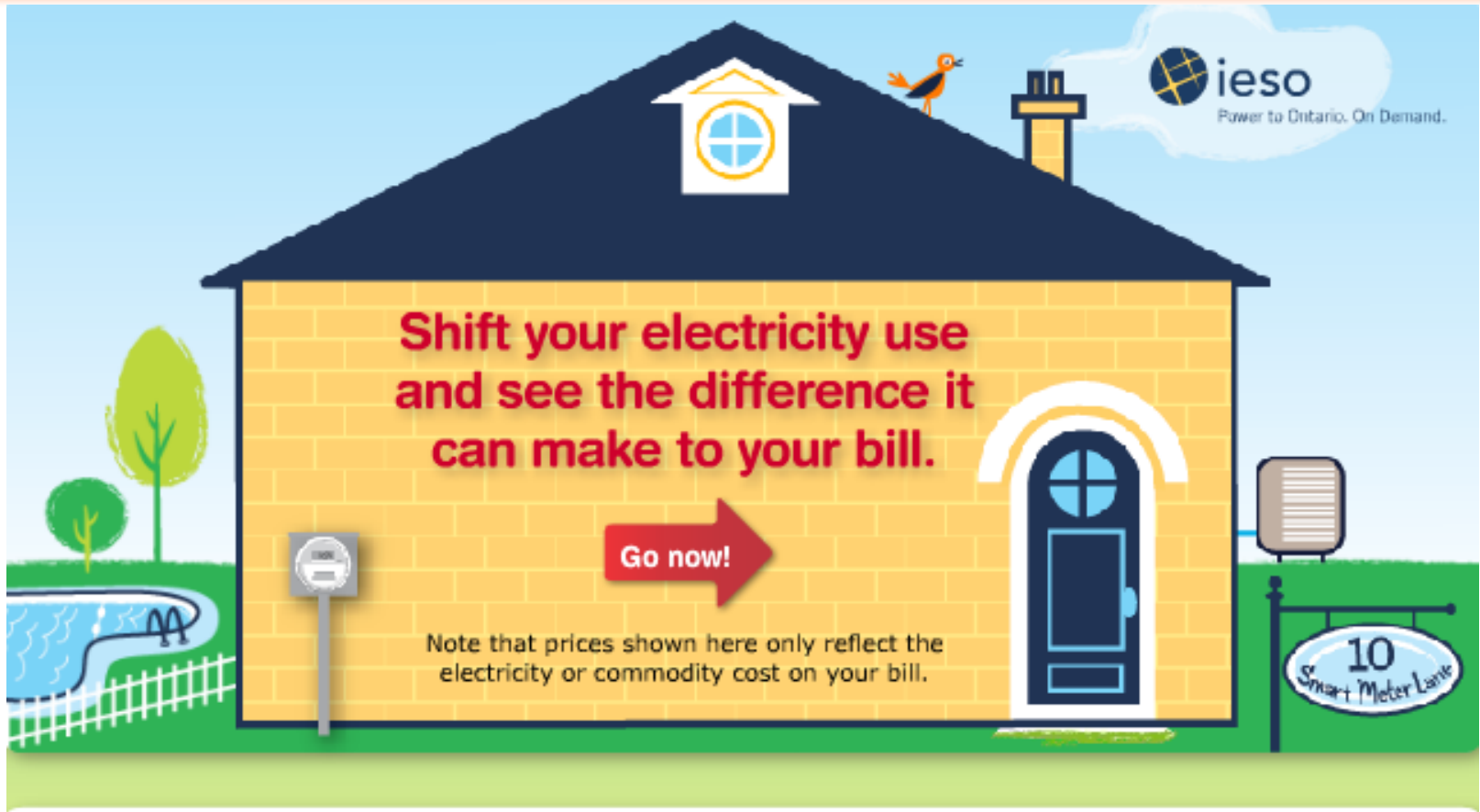


13.2¢ Mid-peak
per kWh*
Demand is moderate

Weekends & Statutory Holidays



18.0¢ On-peak
per kWh*
Demand is highest



2:25 AM OFF-PEAK

CURRENT TIME-OF-USE PRICE

8.7 ¢/KWH

OFF-PEAK STARTS
AT 12:00 AM

Canadian Experience – What’s ahead for NZ

AIR CONDITIONER CLOSE

Room

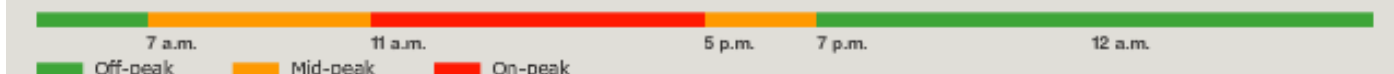
Central Energy Star

Run ceiling fan at same time
Running fans along with the a/c can reduce your energy use by at least 10 %.

7 am to 7 pm
 7 pm to 7 am
 24 hours

21°C
 25°C
 28°C

GO
DEACTIVATE APPLIANCE



■ Off-peak
 ■ Mid-peak
 ■ On-peak



WEEKDAYS ✓	APPLIANCE LIST 0 ACTIVE	PRICE	CONSUMPTION	COST	DAILY TOTALS
WEEKENDS & HOLIDAYS		0.0 ¢/kWh	0.0 kWh	\$ 0.00	\$ 0.00

Canadian Experience – What’s ahead for NZ

AIR CONDITIONER CLOSE

Room

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Run ceiling fan at same time
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7 am to 7 pm
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21°C
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GO

DEACTIVATE
APPLIANCE



Off-peak
 Mid-peak
 On-peak

WEEKDAYS <input checked="" type="checkbox"/>	AIR CONDITIONER	PRICE	CONSUMPTION	COST	DAILY TOTALS
WEEKENDS & HOLIDAYS	APPLIANCE LIST 0 ACTIVE	13.2c/kWh	42.0 kWh	\$ 6.55	\$ 0.00

Canadian Experience – What’s ahead for NZ

wellington
electricity™



Canadian Experience – What's ahead for NZ

HOME HOW IT WORKS



CLOTHES DRYER CLOSE

7 p.m. Start Time

2 How many loads?

GO DEACTIVATE APPLIANCE

10 Smart Meter Lane

7 a.m. 11 a.m. 5 p.m. 7 p.m. 12 a.m.

Off-peak Mid-peak On-peak

WEEKDAYS ✓	CLOTHES DRYER	PRICE	CONSUMPTION	COST	DAILY TOTALS
WEEKENDS & HOLIDAYS	APPLIANCE LIST 0 ACTIVE	8.7 ¢/kWh	6.9 kWh	\$ 0.60	\$ 0.00



CLOTHES DRYER CLOSE

4 p.m. Start Time

2 How many loads?

GO DEACTIVATE APPLIANCE

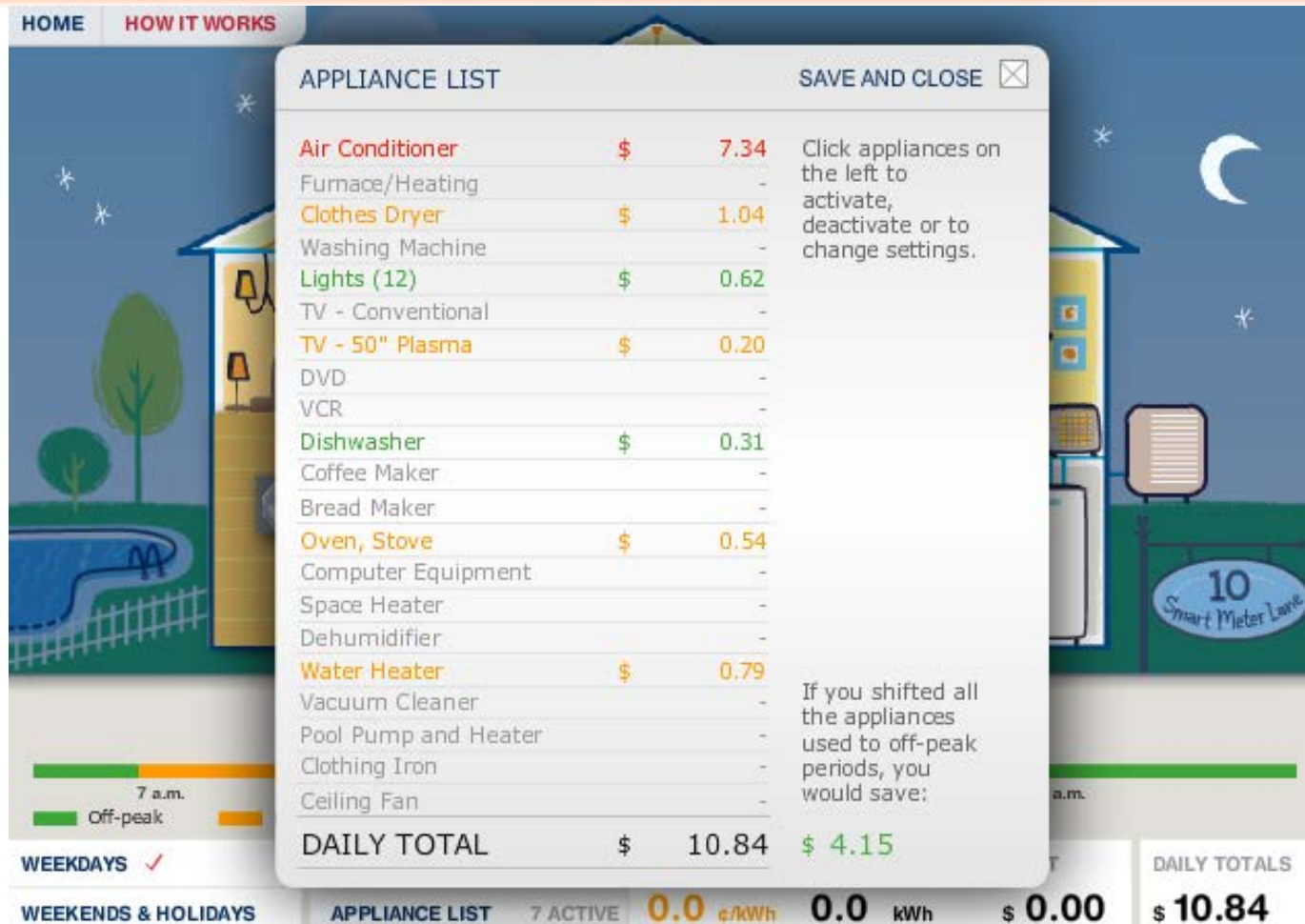
10 Smart Meter Lane

7 a.m. 11 a.m. 5 p.m. 7 p.m. 12 a.m.

Off-peak Mid-peak On-peak

WEEKDAYS ✓	CLOTHES DRYER	PRICE	CONSUMPTION	COST	DAILY TOTALS
WEEKENDS & HOLIDAYS	APPLIANCE LIST 0 ACTIVE	13.2 ¢/kWh	6.9 kWh	\$ 1.04	\$ 0.00

Canadian Experience – What’s ahead for NZ



HOME HOW IT WORKS

APPLIANCE LIST SAVE AND CLOSE

Air Conditioner	\$	7.34	Click appliances on the left to activate, deactivate or to change settings.
Furnace/Heating	-	-	
Clothes Dryer	\$	1.04	
Washing Machine	-	-	
Lights (12)	\$	0.62	
TV - Conventional	-	-	
TV - 50" Plasma	\$	0.20	
DVD	-	-	
VCR	-	-	
Dishwasher	\$	0.31	
Coffee Maker	-	-	
Bread Maker	-	-	
Oven, Stove	\$	0.54	
Computer Equipment	-	-	
Space Heater	-	-	
Dehumidifier	-	-	
Water Heater	\$	0.79	If you shifted all the appliances used to off-peak periods, you would save:
Vacuum Cleaner	-	-	
Pool Pump and Heater	-	-	
Clothing Iron	-	-	
Ceiling Fan	-	-	
DAILY TOTAL	\$	10.84	\$ 4.15

7 a.m. Off-peak

WEEKDAYS

WEEKENDS & HOLIDAYS

APPLIANCE LIST 7 ACTIVE 0.0 ¢/kWh 0.0 kWh \$ 0.00

DAILY TOTALS \$ 10.84

Cost Reflecting Retail Options on Networks - Informing Customers of their CRP Choices

Appliance	Cost	Notes
Air Conditioner	\$ 7.34	Click appliances on the left to activate, deactivate or to change settings.
Furnace/Heating	-	
Clothes Dryer	\$ 1.04	
Washing Machine	-	
Lights (12)	\$ 0.62	
TV - Conventional	-	
TV - 50" Plasma	\$ 0.20	
DVD	-	
VCR	-	
Dishwasher	\$ 0.31	
Coffee Maker	-	
Bread Maker	-	
Oven, Stove	\$ 0.54	
Computer Equipment	-	
Space Heater	-	
Dehumidifier	-	
Water Heater	\$ 0.79	If you shifted all the appliances used to off-peak periods, you would save:
Vacuum Cleaner	-	
Pool Pump and Heater	-	
Clothing Iron	-	
Ceiling Fan	-	
DAILY TOTAL	\$ 10.84	\$ 4.15

Cost Reflective Pricing needs to be simple and clearly communicated

Either the customer can implement or purchase as a service

Technologies are developing to enable both to happen

Smart Phone messaging of energy choices on networks will continue to develop

What's My Number (Savings) may become

What's my Behaviour (Choice/cost)

Let's complete the conversation

Customers are sensitive to price perceptions





are committed to being New Zealand's
pre-eminent electricity distribution
network company

Mission Statement:

To own and operate a sustainably profitable electricity distribution business which provides a safe, reliable, cost effective and high quality energy delivery system to our customers.

wellington
electricity™

