



George Block

Consumer



CLIMATE CONTROL IN THE HOME

3:50 pm

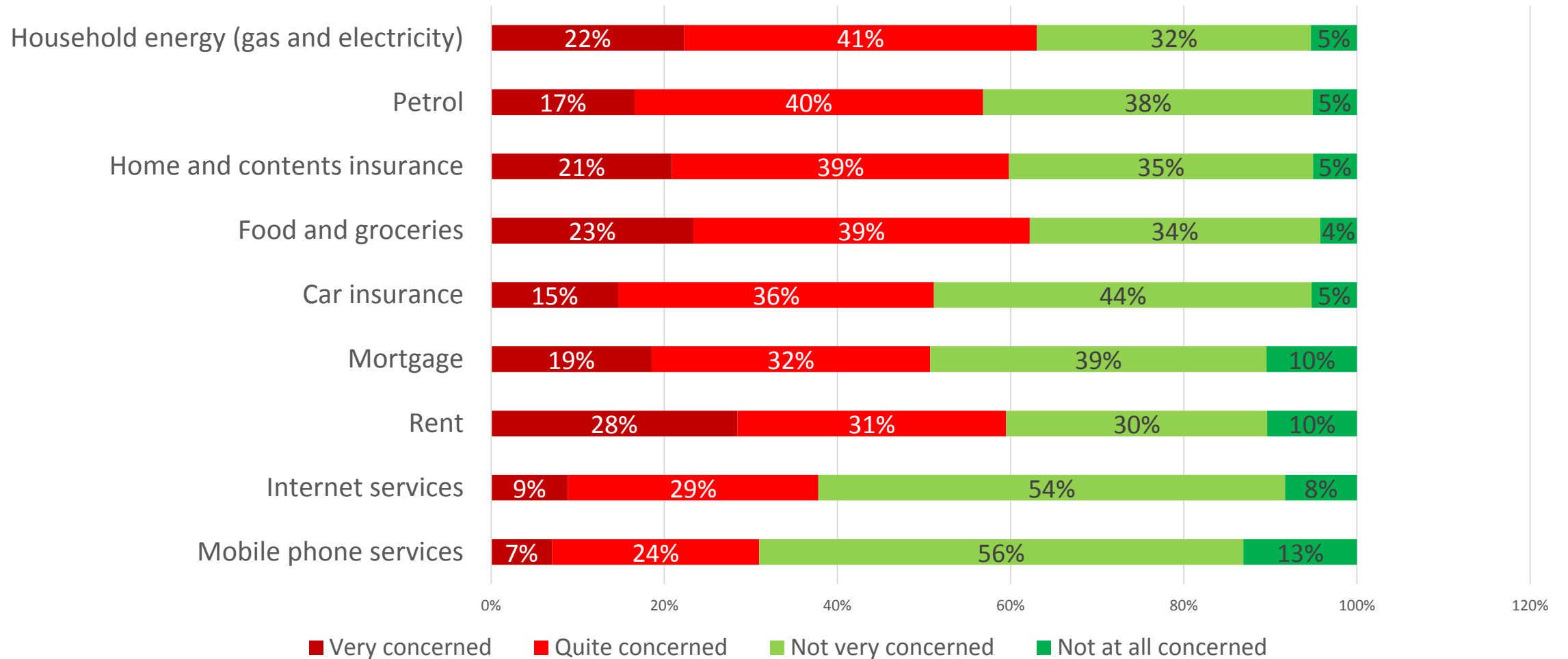
consumer.



Climate control in the home

COL Survey: household expenses

Overall, more Kiwis are concerned about energy costs than any other household expense.



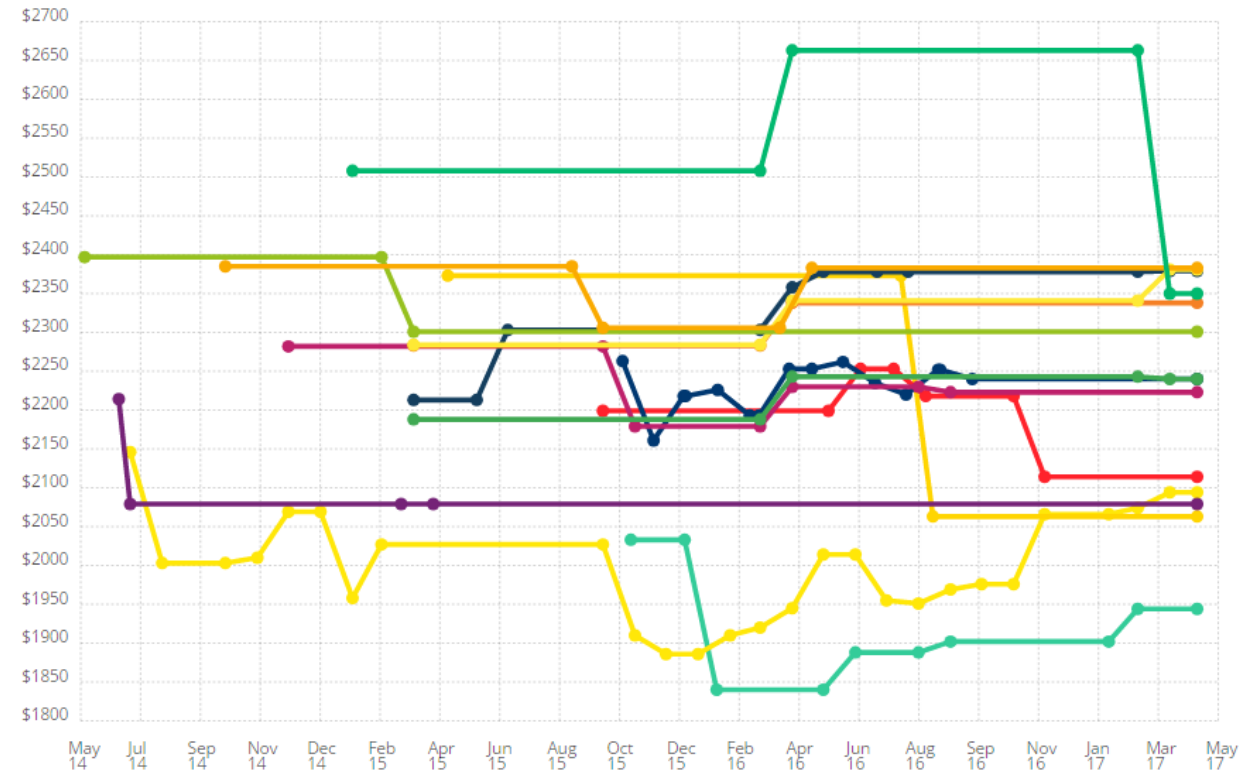
Q: How concerned are you about the current costs of each of the following household expenses?

Switch providers!!!

Many consumers still paying too much for power

- **38 percent** of respondents said their home wasn't as warm as they'd like because they had to restrict how much power they used.
- **Big five all below average for customer service**
- Significant difference in annual power bill between cheapest and most expensive retailers
 - Wellington: \$439
 - Auckland: \$356
 - **Dunedin: \$631**

Based on an average annual consumption for a medium sized household (8492 kWh per year)



All	<input checked="" type="checkbox"/>	Contact Energy	<input checked="" type="checkbox"/>	Genesis Energy	<input checked="" type="checkbox"/>
Paua to the People	<input checked="" type="checkbox"/>	Ecotricity	<input checked="" type="checkbox"/>	Mercury	<input checked="" type="checkbox"/>
Flick Electric Co.	<input checked="" type="checkbox"/>	Powershop	<input checked="" type="checkbox"/>	Energy Online	<input checked="" type="checkbox"/>
Electric Kiwi	<input checked="" type="checkbox"/>	Pulse Energy	<input checked="" type="checkbox"/>	Nova Energy	<input checked="" type="checkbox"/>
Trustpower	<input checked="" type="checkbox"/>	Meridian Energy	<input checked="" type="checkbox"/>	GLOBUG	<input checked="" type="checkbox"/>

New retail tariff structures allow smarter appliance use

And smarter heating

- Spot tariffs pass through half-hourly wholesale power cost: risk and reward are all yours
- Use timers to take advantage of low prices during off-peak periods (daytime and overnight)
- Set heat pump to come on earlier (4pm). If well insulated, it can get most of its heating out of the way
- Days of fixed-term contracts largely over, many offer leave-anytime and no break fees
- BUT if you have high consumption at peak times you're unable to time-shift, e.g. a large family relying on plug-in electric heaters and electric elements, consider flat rate or smoothpay

Spot tariffs:



Hour of free power:




Powerswitch.org.nz


New, easier to use site


- Electricity + gas
- Free and accurate
- Don't need power bill (but works better if you do)


Now for heating


Do you use any of these to heat your home?


 Wood burner

 Electric heater


 Night store heater


 LPG heater

 Heat pump


 None of these

Which heating do you use the most?

 Electric heater

 LPG heater


TOP PICK!

 **Electricity**
Simple As All Inclusive - Low user

Estimated cost: \$1418/yr
(Prices Incl. GST)
Includes \$0 discount

[SWITCH NOW](#) [MORE DETAILS](#)


SECOND PICK!

 **Electricity**
Smart Saver (Low User)

Estimated cost: \$1458/yr
(Prices Incl. GST)
Includes \$147 discount

[SWITCH NOW](#) [MORE DETAILS](#)

THIRD PICK!

 **Electricity**
Cheap As plan All Inclusive (Low user)

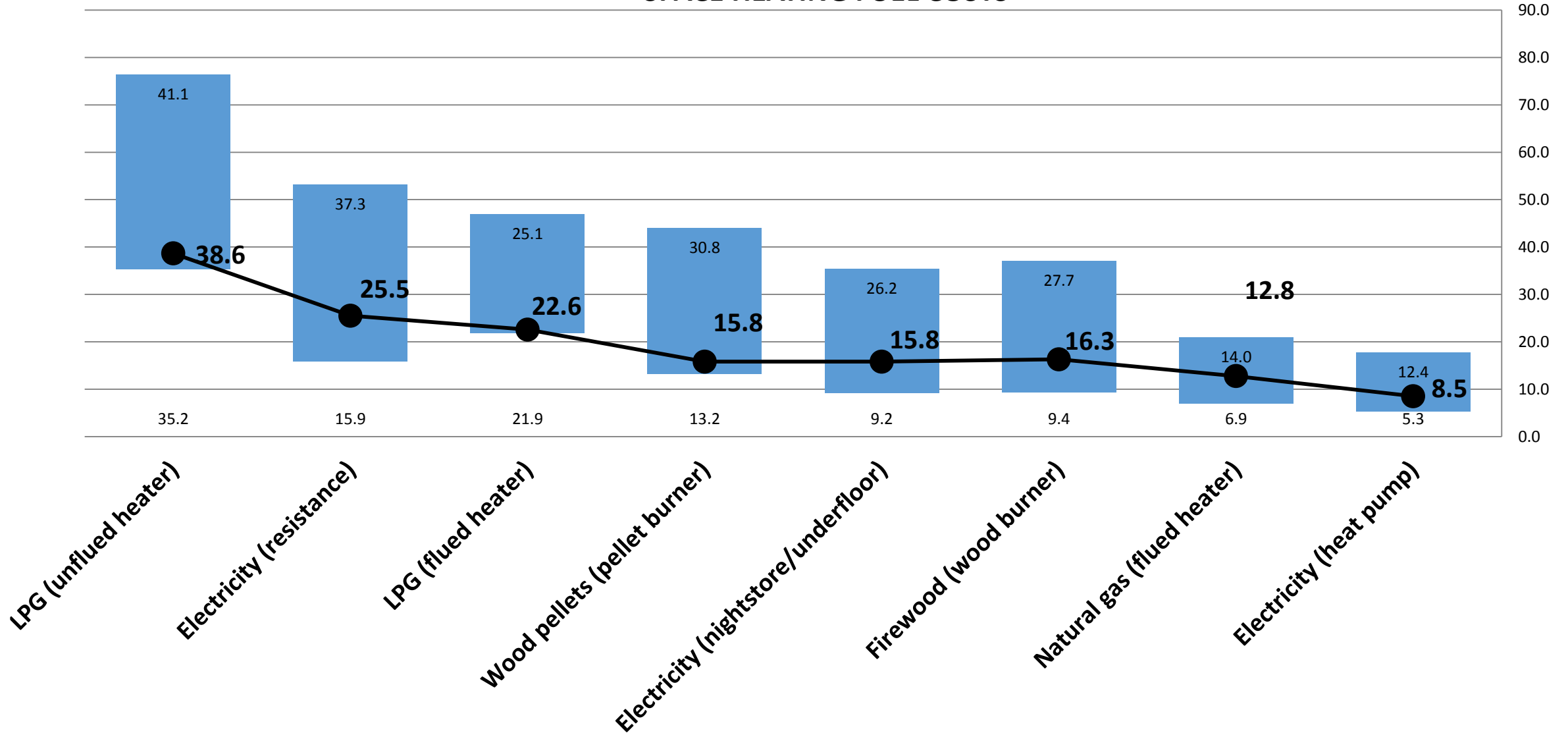
Estimated cost: \$1481/yr
(Prices Incl. GST)
Includes \$0 discount

[SWITCH NOW](#) [MORE DETAILS](#)

Heating fuel costs

SPACE HEATING FUEL COSTS

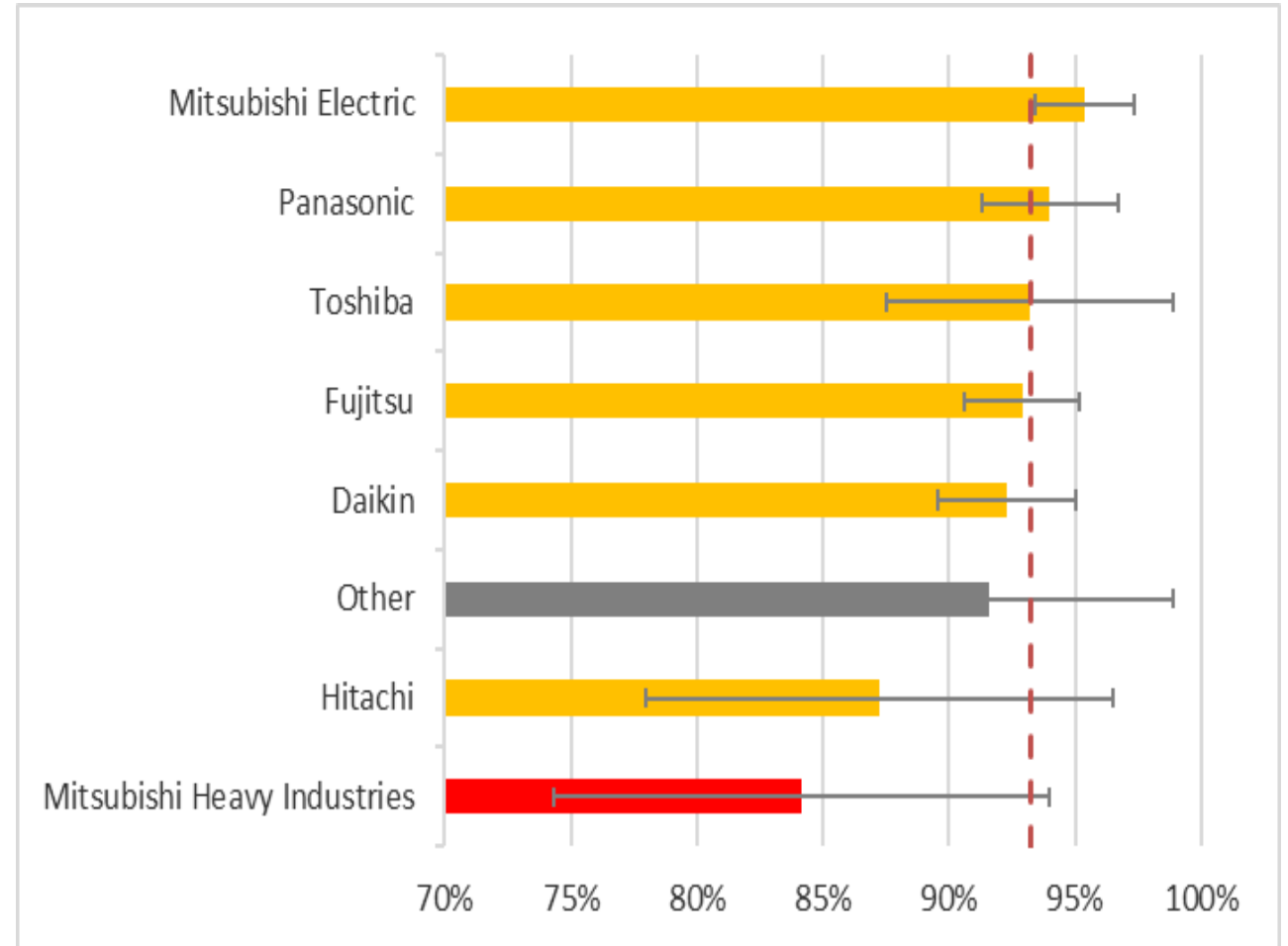
CENTS / kWh of heating



Heat pumps

- Technology has matured
- Reliable (93% on average) and effective
- Getting better at not frosting up at low temperatures
- Getting quieter indoors,
Mitsubishi Electric really are quietest
- Infrared tech increasingly used to address draft issues, but some consumers still aren't fans
- Big four brands all very reliable and effective

% Reliability 2017



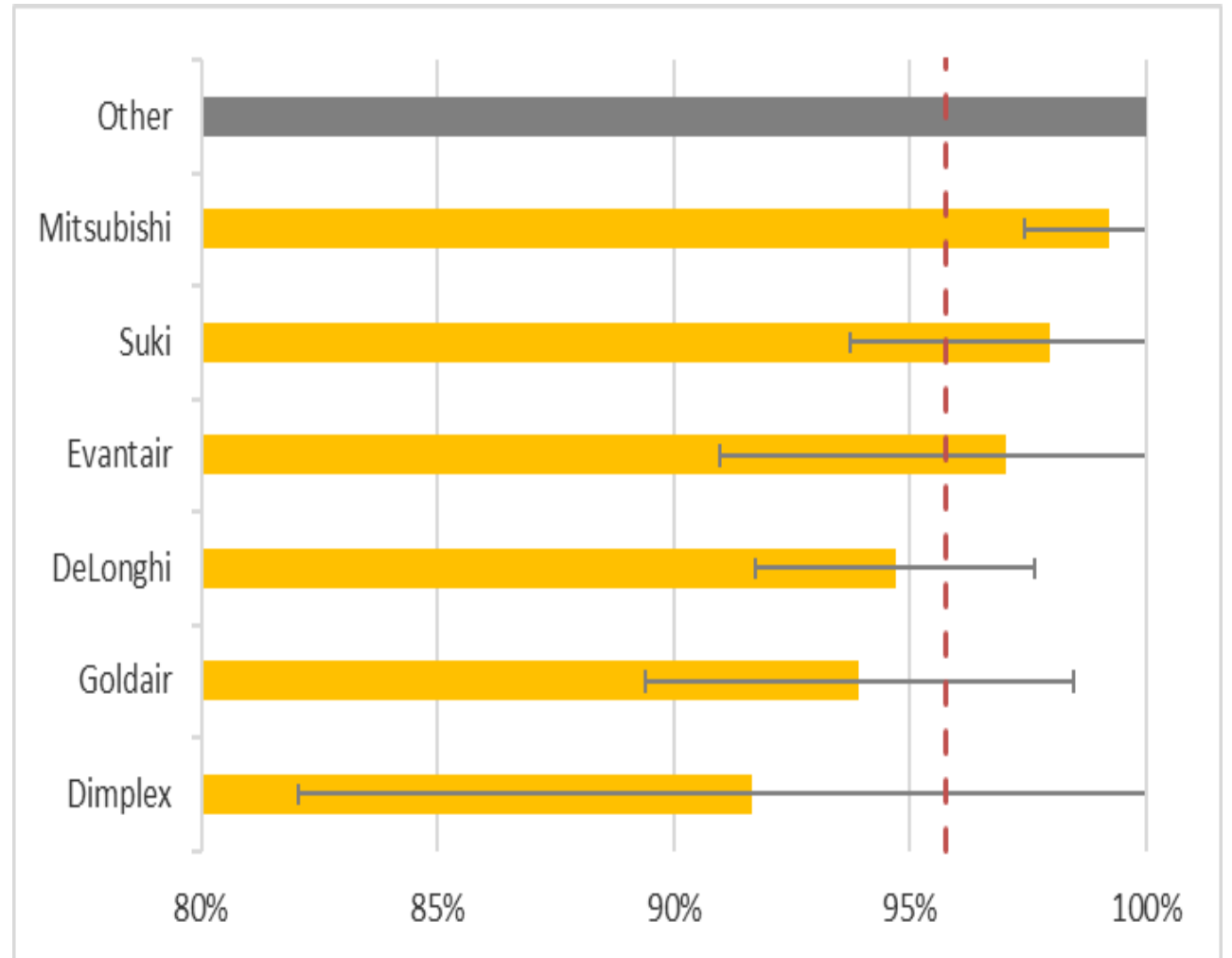
Dehumidifiers

- Desiccant vs. Compressor (refrigerant)
= low temperature performance vs. running costs
- Stopgap solution
- Mitsubishi Electric incredibly reliable, but middling satisfaction
- Cheap units (Evantair) perform especially badly at low temperatures

GOLDAIR GD330
PERENIAL WINNER,
BUT CAN BE
TEMPREMENTAL



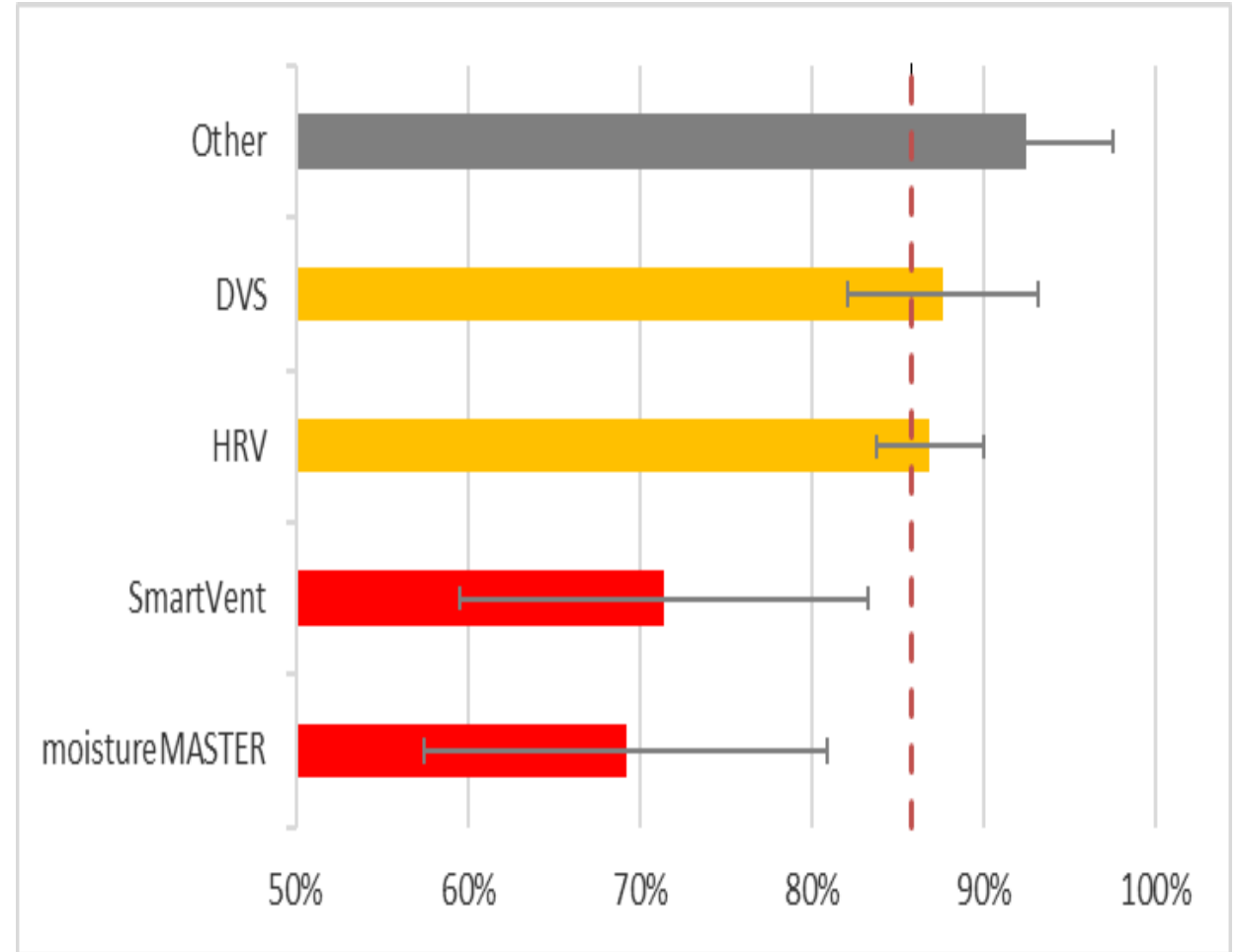
% Reliability 2017



Ventilation systems

- Work for most people: 89 percent said they were effective at reducing condensation
- HARD SELL: 1/3 HRV customers report aggressive tactics after purchase (upgrades + other products)
- 2007-2010 half of HRV customers reported bad behaviour, by 2015 only 15 percent
- DVS next worst (though just 9%...)

% Reliability 2017



Electric heaters

- Low purchase price often worth the high running costs in smaller rooms (Concept Consulting)
- Oscillating tower ceramic heaters best on performance, but big and noisy
- Oil columns: sluggish heating, but good bet for bedrooms
- Micathermic can be a good compromise
- **Kent Mica KPE216 (\$139 Mitre 10)**



% Reliability 2016

