



**Energy Efficiency Labels
for
Swimming Pool Pumps

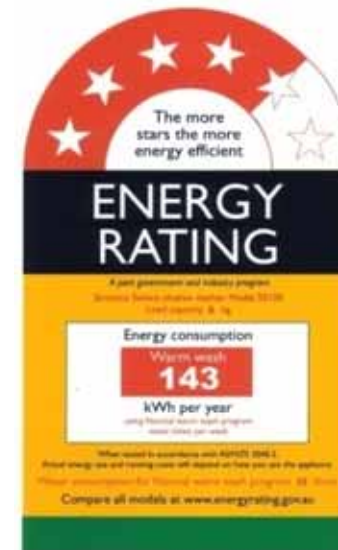
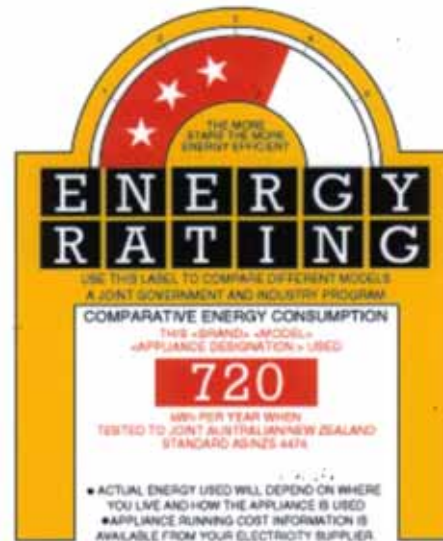
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Stakeholder Meeting - 4 August 2009

The Energy Label

The national label appeared in 1992 on refrigerators (late 1970s-early 1980s at state level).

Design has evolved and expanded to cover other products.



Purpose of this research

To guide communication of the introduction of the mandatory energy efficiency label for swimming pool pump units.

- Attitudes and behaviour about pools
- Pool pump use and concerns
- Pool pump replacement
- Role of energy use and efficiency
- Energy efficiency labels
- Communication conclusions

Method

- Four focus groups with 33 consumers in Sydney, Brisbane and Perth.
- 24 in-depth interviews with the trade in Sydney, Brisbane and Perth.

Undertaken May 2009

The Study Findings

A. Pool characteristics

Almost all are in-ground pools.

Around half installed by participants, the other half inherited.

Range from 25,000 litres to over 100,000 litres.

Most operate with salt rather than chlorine.

Most pools have sand rather than 'cartridge' filters.

Most people have a mechanical pool cleaner of some kind.

Few of the pools are currently heated.

B. Filtering behaviour

When and for how long people run their pool filters varies considerably from city to city and pool to pool.

Either one block usually from about four to eight hours and usually during the day, or

Two blocks, usually morning and evening, again for a total of around five to ten hours.

Some increase the total filtering time when the pool is being used heavily, and around half tend to filter for shorter times in winter than in summer.

C. Energy use and smart metering

Of the Brisbane pool pumps connected to off-peak:

It had occurred during the tenure of previous owners, and current owners were ambivalent about it (perceived dangers and limitations of hard wiring).

However, the reaction to 21st century smart metering is much more positive.

D. Opinions about pools

Some people really enjoy their swimming pools and can find little against having one.

Many others are far more ambivalent about them, with several planning to convert them to lawn or garden areas.

Perceived positive aspects of owning a pool include

Creating a relaxing environment

Entertaining friends

Keeping children occupied and happy

Enhancing property value

Negative aspects of owning a pool include

expensive to run (but energy costs rarely mentioned)

excess water use

time consuming

incompatible with trees and birds

incompatible with current lifestyle needs

environmental concerns

unwelcome visitors

E. Sources of advice and information

The local pool shop is by far the most often mentioned source of advice and information about swimming pools:

Good, friendly service

Reliable information

Can be trusted

BUT

Expensive

F. Pool pump purchase behaviour

Most pool owners had replaced a pool pump at some stage in the past few years, and/or expected to do so at some stage in the next year or so.

Main reason for replacement was an impending or actual failure of the motor and/or pump:

Noises (grunts, groans, squealing or grating sounds)

Fuses being blown (often several fuses or main fuse)

Pool becoming discoloured

G. Replacing a failing pool pump is urgent

Hence, most tend to refer to their favoured pool shop and take their advice as the most immediate and pragmatic solution.

Only around half the pool owners could recall the brand of their current pool pump, and few could nominate which brand they would purchase next time other than “same again”.

Most pool owners have little or no idea about the life expectancy of a pool pump, nor of how much it will cost to replace – few could recall what the last one cost.

And there isn't much time to do a search anyway.

So most tend to trust their **pool shop** and hence do not take a very active role in the purchase decision.

In turn the decision the pool shop will make tends often to be heavily influenced by the make and size of the current pool pump unit.



The logical 'same again' purchase – it was OK, so get another one.

The insurance-dictated 'same again' purchase – 'fusion clause'

The plumbing quandary 'same again' syndrome – less changes to plumbing, wiring.

H. Pool pump purchase factors

It's like pulling teeth, but eventually less than half our pool owners could think of factors they might consider, that is, if they weren't going to leave it up to the pool shop anyway.

- Brand/quality/warranty/origin ... *"Same again."*
- Size/flow rate ... *"Will it run my Barracuda properly?"*
- Noise in operation ... *"Can I run it overnight?"*
- Purchase price of pump ... *"Not another expense."*
- Cost of running ... *"Chemicals cost a fortune."*
- Ease of fitting ... *"I hope the plumbing's not difficult."*
- Availability ... *"I need it before the pool goes green."*

I. Energy cost is currently a non-issue

When the matter of the cost of pump operation is raised, people tend to regard it as relatively minor compared to the other costs of running and maintaining a pool – few can even guess at actual energy costs.

A few have fleetingly wondered about energy efficiency, but say they have no basis for knowing or finding out.

None have considered any effective action they might take to run their pools more efficiently – installing a more efficient pump is never mentioned.

= market or information failure.

J. The pool pump label
5-star only

The more stars the more energy efficient

ENERGY RATING

A joint government and industry program

ABC Pump, Model I23
Single Speed

Efficiency (l/Wh)	Flow Rate (l/min)	Head (m)	Power (W)	Noise (dBA)
23.1	174	5.4	450	55

Energy consumption

788

kWh per year

To pump 50,000 litres/day

When tested in accordance with AS 5102.2.
Actual energy use and running costs will depend on how you use the appliance.

Compare models at www.energyrating.gov.au

J. The pool pump label – a range

The more stars the more energy efficient

ENERGY RATING

A joint government and industry program
ABC Pump, Model 123
Single Speed

Efficiency (l/Wh)	Flow Rate (l/min)	Head (m)	Power (W)	Noise (dBA)
10.3	296	15.7	1725	74

Energy consumption
1776
kWh per year
To pump 50,000 litres/day

When tested in accordance with AS 5102.2.
Actual energy use and running costs will depend on how you use the appliance.

Compare models at www.energyrating.gov.au

The more stars the more energy efficient

ENERGY RATING

A joint government and industry program
ABC Pump, Model 123
Single Speed

Efficiency (l/Wh)	Flow Rate (l/min)	Head (m)	Power (W)	Noise (dBA)
23.1	174	5.4	450	55

Energy consumption
788
kWh per year
To pump 50,000 litres/day

When tested in accordance with AS 5102.2.
Actual energy use and running costs will depend on how you use the appliance.

Compare models at www.energyrating.gov.au

SUPER EFFICIENCY RATING

The more stars the more energy efficient

ENERGY RATING

A joint government and industry program
ABC Pump, Model 123
Single Speed

Efficiency (l/Wh)	Flow Rate (l/min)	Head (m)	Power (W)	Noise (dBA)
48	120	2.6	150	54

Energy consumption
380
kWh per year
To pump 50,000 litres/day

When tested in accordance with AS 5102.2.
Actual energy use and running costs will depend on how you use the appliance.

Compare models at www.energyrating.gov.au

A very positive response

When shown a mock-up of the 5-star version of the proposed energy efficiency label for swimming pool pumps, **response is immediate and almost universally positive** in each of the four focus groups.

People are **very familiar** with the format and nature of the label from other appliances.

The star ratings (even the unfamiliar 8 star label) are **easy to read and understand** in terms of more stars meaning more efficient.

The principle of the energy consumption figure is also understood.

However, several concerns about specifics emerge:

Basing the energy consumption figure on 50,000 litres per day is confusing to many people because they think in terms of the numbers of hours their pump is on each day, not the volume of water it pumps during that period.

Some of the information in the boxes, although informative to some people, confuses and even misleads many others.

The number of boxes is also seen by some as overwhelming the simplicity and familiarity of the other features of the labels.

The boxed information is important to some, distracting to others – so is the label the right place for it?

K. Communications Conclusions

Consumers think the label is a good idea and understand the concept.

Consumers want the label to be easy to understand.

We need to think about how to communicate the label information to consumers.

Thank you!