CHOICE

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WATER EFFICIENCY STANDARDS AND LABELLING (WELS)

Submission to the Independent Review of the Water Efficiency Labelling and Standards (WELS) Scheme

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About us

Set up by consumers for consumers, CHOICE is the consumer advocate that provides Australians with information and advice, free from commercial bias. By mobilising Australia's largest and loudest consumer movement, CHOICE fights to hold industry and government accountable and achieve real change on the issues that matter most.

To find out more about CHOICE's campaign work visit www.choice.com.au/campaigns

Introduction

Water efficiency labels need to better reflect how people actually use their appliances to help people find products that best meet their needs. We also need to discourage products that use excessively high amounts of water from being sold in the Australian market, where water usage matters by the litre for some families.

When CHOICE asked Australians about water efficiency they told us that they find the Water Efficiency Labelling and Standards (WELS) scheme useful when making decisions about which appliance to buy. The current five-year statutory review of WELS is an opportunity to make changes to this widely recognised and well understood scheme so that it better reflects people's use of appliances, especially clothes washing machines and combined washer/dryers.

From our experience of testing washing machines, researching consumers' use of appliances and providing information to consumers, CHOICE has identified that improvements are most needed to the way that washing machines are tested and labelled. Small improvements to the information provided on dishwashers labels would allow consumers to make better informed decisions.

Changing WELS to measure the water used in partial loads would better reflect people's day to day usage. CHOICE research has shown that the average washing machine load is 3.6kg[1] which is substantially less than the maximum load that is used to establish a product's WELS rating. The cycle selection and water temperature that is used in WELS testing also does not reflect the choices people make when doing their washing.[2] It's particularly important to get the right information across to people at the point of sale as when they get back home only 21% of people

[1] 60 Voice Your Choice members filled in the recruitment questionnaire. A copy of the study questions, a scale to measure their laundry load and a bag were mailed out to the 60 members between 21 - 24 April, 2015. The survey was closed on 30 May, 2015. We received 45 completed surveys.

[2] CHOICE Washing Machine Product Use Survey 2016. The research was completed by 2473 people on the Voice Your Choice mailing list in 2016.

believe they know how much water their washing machine uses in a typical wash.[3] Establishing new minimum water efficiency standards for the drying cycle of washer dryers would also discourage machines that use excessive amounts of water, like 149L of water to dry 3.5kg of clothes,[4] from being sold in Australia.

Our recommendations, detailed later in this submission, are:

- That WELS moves to incorporate partial load testing when assessing star ratings for clothes washing machines and washer/dryers
- That the maximum amount of water that can be used for washing is also included on the WELS labels for washing machines and washer dryers
- That minimum water usage standards be established for drying cycles on washer dryers
- That IEC 60456, which assess water use in partial loads, is used as the basis for the development of a new international standard through the ISO
- That the water usage of eco modes is included on WELS labels for dishwashers

We would be happy to provide additional information or data to help inform changes to the scheme that would help consumers make better informed decisions when purchasing water using appliances.

[3] TEG Omnibus, n=1,000 adults (18-69 years old) representative of the Australian population, Quota controls are applied to achieve a nationally representative sample. Data weighted to ABS 2016 Census data on age, gender and location. Fieldwork was conducted between 14 and 21 January 2020

[4] Samsung washer and dryer - Shonkys 2017

WELS should reflect people's real-world use of appliances.

Consumers know the scheme and use it when making purchasing decisions

CHOICE asked our supporters what they know about the WELS scheme. 4,380 people completed our survey over February.

- 41% told us water efficiency is the most important factor when deciding which appliance to buy, with another 56% of people saying it was an important factor
- 62% find the WELS labels very easy to understand, while another 31% of people find it somewhat easy to understand
- 93% recognised the WELS label[5]

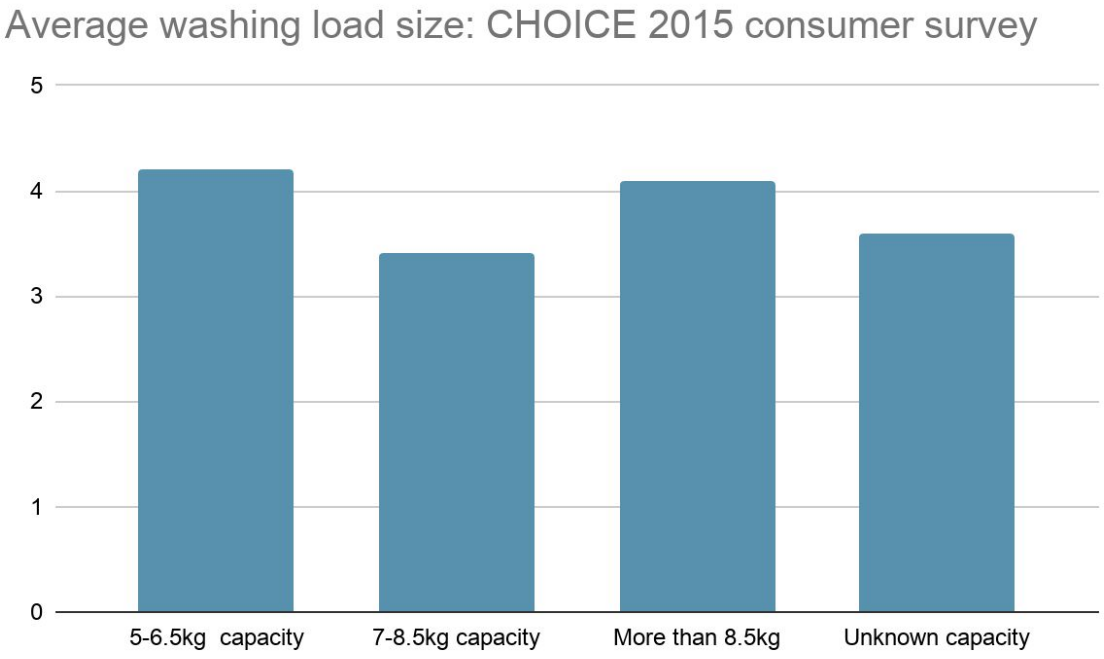
These results are very positive, suggesting that the current WELS scheme is highlighting water efficiency to consumers and making it easier for consumers to make informed decisions. However, people don't have a good understanding of how much water their washing machine uses at home. Only 21% of people believe they know how much water their washing machine uses in a typical wash.[6] This highlights the importance of getting the WELS scheme right at the point of sale, and making sure that the star rating reflects the way that people are likely to use the machine once they get it home.

[5] 2021 CHOICE survey. 4380 supporters filled out the survey between 3 February 2021 and 23 February 2021.
[6] TEG Omnibus, n=1,000 adults (18-69 years old) representative of the Australian population, Quota controls are applied to achieve a nationally representative sample. Data weighted to ABS 2016 Census data on age, gender and location. Fieldwork was conducted between 14 and 21 January 2020

Consumers don’t use the cycles that companies use for WELS compliance

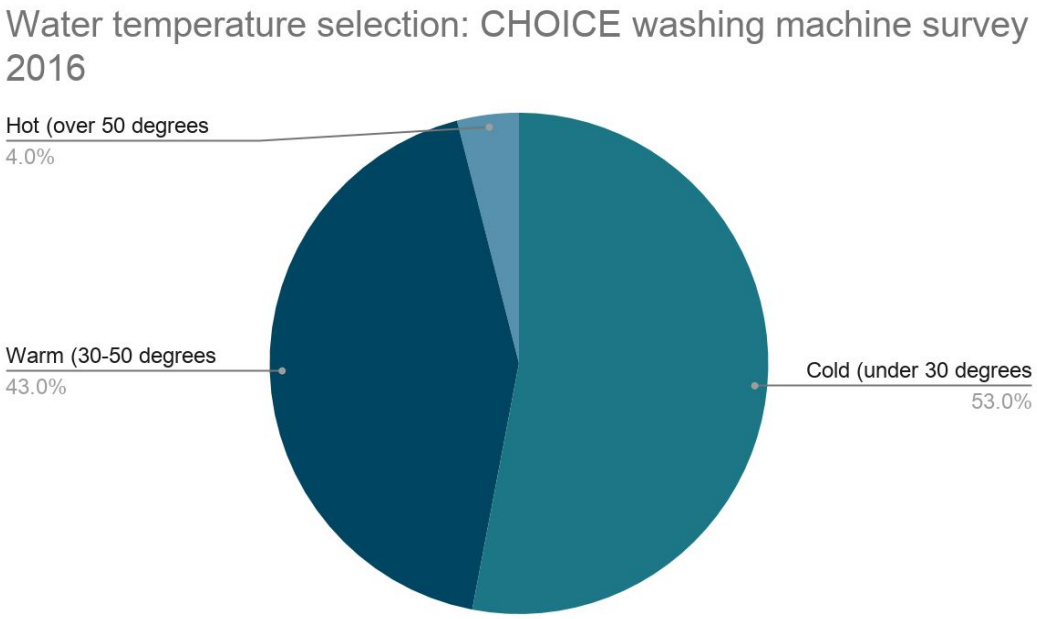
WELS uses *Australian Standard 6400:2016 ‘Water efficient products — Rating and labelling’* (AS6400) to set its benchmark to establish water usage and star ratings. AS6400 requires at least a 40 degree cycle that cleans clothes to specified criteria when washing a full load. The cycle is often a cotton, normal or water saving cycle. Yet research CHOICE has undertaken in recent years shows that these cycle selections are not what people always chose and that loads are rarely full.

In 2015 CHOICE recruited research participants to update our knowledge of how people use their washing machines. We sent scales to the participants and asked them to do their washing as normal, but to weigh their loads beforehand. Consumers' average washing machine loads were



3.6kg.[7] Surprisingly this was fairly consistent across washing machines regardless of their maximum capacity. Of the loads that we measured, machines that have a maximum load of 7-8.5kg had the lightest average load coming in at 3.4kg and consumers with machines that have a maximum load of 5-6.5kg had the heaviest loads at 4.2kg.

CHOICE research in 2016 looked into what cycles and water temperature use when using their washing machines. From this research we found out a number of key points about water usage and the settings people choose when using their washing machines. The majority of people, 53%, use cold water (under 30 degrees) when washing, whereas 43% of people choose a warm wash (30-50 degrees) and only 4% use hot water.[8] This is not reflected in AS6400 which requires the wash to be a warm load.



[7] 60 Voice Your Choice members filled in the recruitment questionnaire. A copy of the study questions, a scale to measure their laundry load and a bag were mailed out to the 60 members between 21 - 24 April, 2015. The survey was closed on 30 May, 2015. We received 45 completed surveys.
[8] CHOICE Washing Machine Product Use Survey 2016. The research was completed by 2473 people on the Voice Your Choice mailing list in 2016.

The top three program selections were:

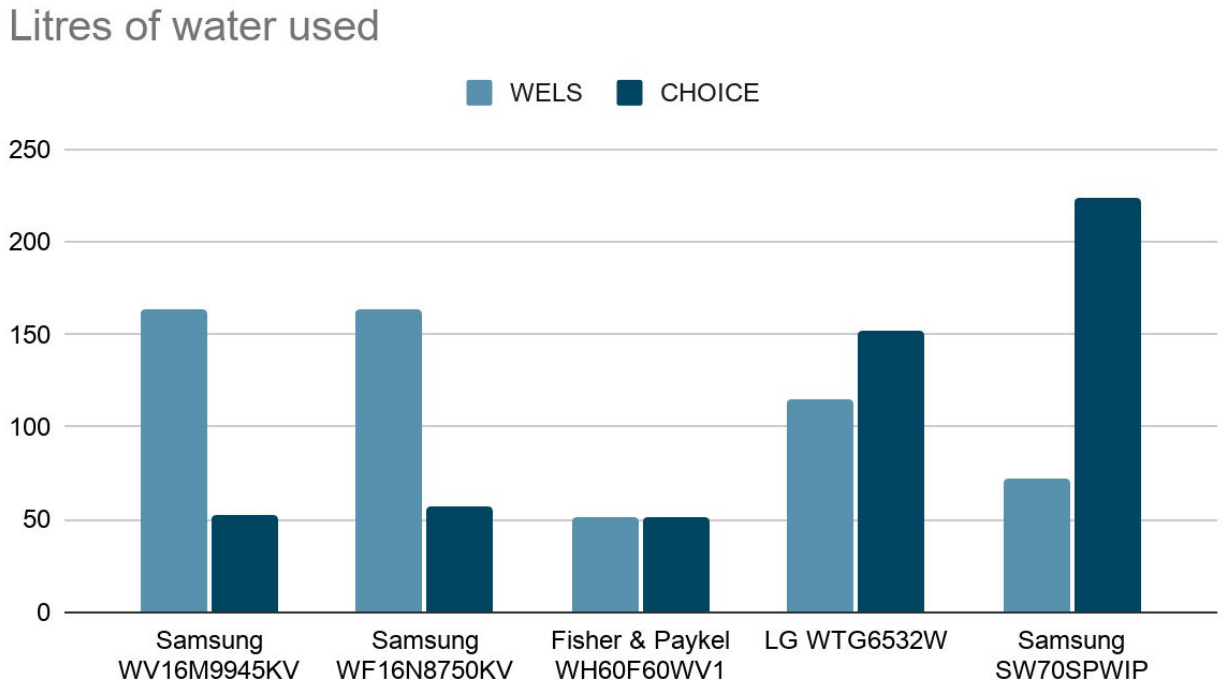
- Normal/regular wash was used by 33% of people
- Fast/quick programs were chosen by 17% of people
- Cottons was chosen by 11% of people[9]

We also found out that 52% of people select options or additional features for their cycles with the most common changes being 17% of people choosing a different water level and 17% changing the spin speed.[10] This research was also run three years prior and there were not any major differences in these selections that consumers were choosing when using their appliances.

All of this research resulted in CHOICE changing the way that we test washing machines and washer dryers. If we tested to AS6400 it would be great compliance testing for the WELS scheme, but it would be counter-intuitive for consumers who are unlikely to use the programs that the standards utilise.

For this submission we looked at the data we have on 275 washing machines and washer dryers. We compared our testing results with the WELS water use rating and looked at the differences. If WELS testing utilised the CHOICE testing method and better reflecting consumer use of appliances, the impact overall would not be that large. The average change would be a 1-2% improvement in overall scores. However this change in score is not consistent between machines. The results varied from one machine in our test that used only 32% of the water measured in the WELS cycle, through to another that used 311% of the water in our test when compared to the WELS test. This change in results for individual machines would make the decisions that consumers make when purchasing a new machine even more helpful as they reflect the usage they are likely to experience in their own home.

[9] CHOICE Washing Machine Product Use Survey 2016. The research was completed by 2473 people on the Voice Your Choice mailing list in 2016.
[10] CHOICE Washing Machine Product Use Survey 2016. The research was completed by 2473 people on the Voice Your Choice mailing list in 2016.



The table above shows two machines that would see their score improve the most, one machine that wouldn't change and two machines that would see their score decrease the most, giving a range of change that would happen if WELS better reflected average consumer usage. This graph also demonstrates the importance of the WELs scheme incorporating the maximum possible water usage for appliances (see section below).

International standardisation should focus on consumer usage and test water efficiency based on partial loads

The *Third Independent Review of the WELS Scheme: Discussion paper* outlines that part of this review is considering the impact of the development of an international standard for rating and labellings the water usage and efficiency of appliances through the International Organisation for

Standardization (ISO). CHOICE is not aware of the specifics of the drafting of that standard, but would urge the Australian Government to look at *IEC 60456 Clothes washing machines for household use – Methods for measuring the performance* (IEC60456) as the basis of this new ISO standard. IEC 60456 contains ways of measuring partial loads and changing WELS to use a standard that measures water efficiency based on partial load testing would be one change that ensures WELS better reflects consumers' use of washing machines.

Better labelling will help consumers make better decisions

One cycle's water usage isn't enough - labelling should include maximum water usage of cycles.

The simplicity of the WELS scheme is appealing and useful for consumers making decisions when purchasing water using appliances. However, the scheme needs to balance this simplicity with the way that consumers use their appliances. Ensuring that additional information on the WELS sticker, outlining the maximum water usage when using different cycles would provide consumers with more accurate information when making important purchasing decisions. This information would also be helpful to people when operating their appliances, allowing them to make informed decisions about their water usage after the point of sale.

As an example, we can look at the Samsung SW70SPWIP. Using current WELS scheme data and CHOICE testing as the second source of information, the revised WELS label would contain the current 4 star rating and state that it used 72l of water for the test cycle. The new information that would need to be included is that this machine uses 224l of water during a different cycle. This shows the big differences in water usage between cycles on the same machine.

Dishwashers have become more water efficient and people use 'eco' modes more frequently

WELS is successfully driving the market to produce more water efficient appliances. This can be seen in the improvements in the average amount of water a dishwasher uses per cycle. Based on data from our testing, dishwashers currently use around 9-21L of water per wash. This is a positive decrease from only fifteen years ago when the minimum was 35L of water per load.

While we have seen an improvement in water efficiency in dishwashers over the past fifteen years, our research has also established that people are using their dishwashers differently. People are using ‘eco’ modes more frequently - close to equal with standard cycles. Providing an additional line of information on how much water a dishwasher uses on it’s eco (or equivalent) cycle, if it is not the testing cycle, would make it easier for people who predominantly utilise this cycle to compare machines. If the machine uses an eco mode for WELS testing then the water usage for a standard cycle should be included on the label.

Water guzzling appliances need to be banned

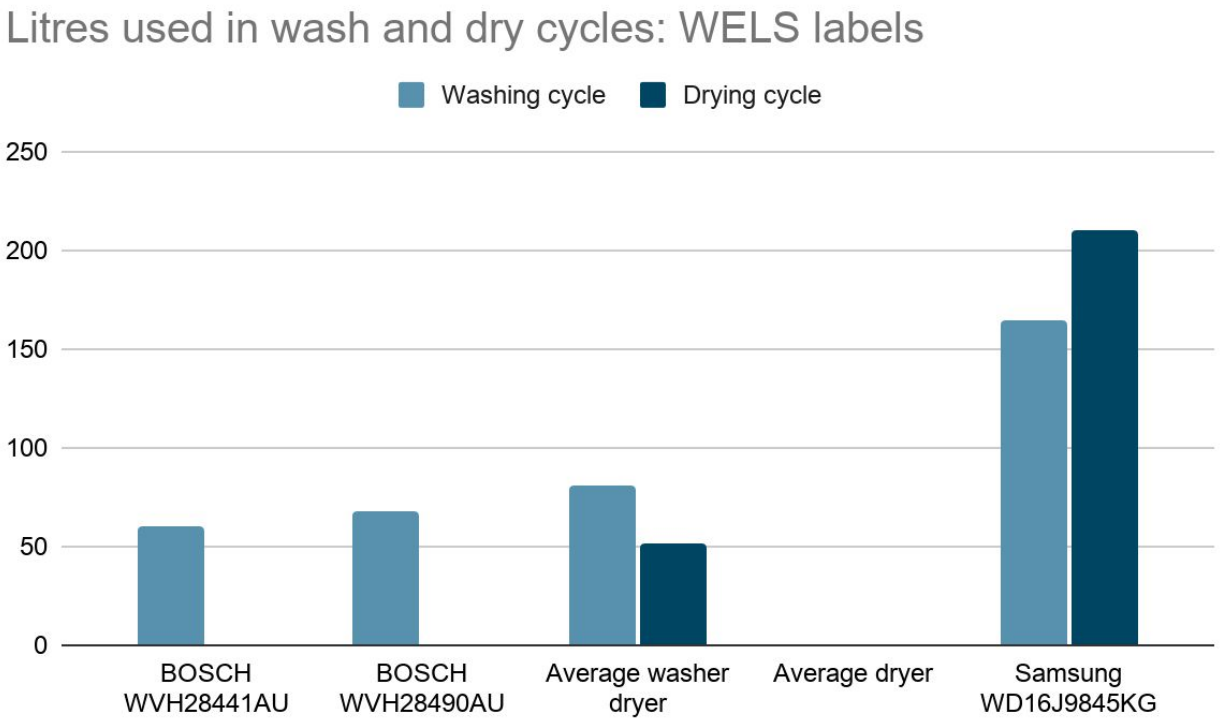
Drying cycles of washer/dryers need to have a minimum water usages standard.

Combined washer dryer machines are more popular now than when the WELS scheme was initially developed. Section 9.2 of AS6400 outlines minimum scores for washing machines, effectively banning machines that score lower than 3 stars for machines with a 5kg+ load and 2.5 stars for machines with a load capacity of less than 5kg. No such minimum standard applies to the water used during the drying cycle of washer dryers.

Washer dryers are unique as they are the only dryers that use any water in their drying cycles. Stand alone dryers and some washer dryers that CHOICE has tested also do not use any water during the drying cycle. Based on WELS labelling the average water consumption of the washer dryers we have tested is 51 litres. This average drops to 35 litres per dryer cycle when Samsung products are excluded.

For example, Samsung WD16J9845KG gets a four star water rating, using 164l for a full 16kg load of washing. It's rating is not affected by its use of 210l of water to dry its maximum dryer load of 8kg, even though this more than doubles the amount of water used in a combined cycle. This appliance is also an outlier amongst washer dryers, it is only one of two machines that uses over 100l of water to dry a full load of washing.

This is a shortfall of the current scheme that must be addressed by setting minimum scores in the standard used to assess WELS performance. This minimum should be set through consultation with consumers and using independent test data, like that produced in the CHOICE labs.



Poor performing appliances that highlight the difference between WELS testing and consumer usage of appliances.

CHOICE testing has identified a small number of appliances that use an unreasonable amount of water that highlight problems with the current system not reflecting people's actual usage of their washing machines. These appliances meet the minimum standards for water usage in the cycle that was tested for WELS accreditation, but this rating doesn't reflect the maximum amount of water the machine can use, it doesn't reflect the programs people most commonly use, and it doesn't adequately reflect the water used in drying cycles of combined washer/dryers.

The *Samsung WA13M8700GV* is a current model top loading washing machine with a capacity of 13kg. In it's WELS assessed cycle it received 4 stars for using 133 litres of water. In CHOICE

testing, we found that it used 214 litres of water. It scored 0% for water efficiency based on our tests. It's actual performance would have resulted in a negative score, but our system doesn't allow for negative scores. 214l is more water than the average South Australian uses in one day, which is 190.49l.[11]

The Samsung WD16J9845KG is a washer/dryer combo and its WELS registration will cease later this year. CHOICE testing found that it used 149 litres of water on a drying cycle to remove three litres of water from our 3.5kg test load. The WELS sticker states it will use a whopping 210 litres to dry a full load. While this information is disclosed, it does not affect the star rating. Stand alone dryers, along with some washer dryers, do not use any water when drying clothes. While this machine is an outlier, Samsung is also the only manufacturer of items CHOICE has tested that has washer dryers that use more than 66 litres when drying.

[11] SAWater - Average daily residential water use per person

Recommendations

The following recommendations would make the WELS scheme stronger, ensuring the scheme evolves with changes in the market and changes in the way that people use water using appliances. We recommend:

- That WELS moves to incorporate partial load testing when assessing star ratings for clothes washing machines and washer/dryers
- That the maximum amount of water that can be used for washing is also included on the WELS labels for washing machines and washer dryers
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