

# Saliency of TCO- information in purchase situations

An eye tracking study

December 2022

# Contents

Introduction	1–6
About the study	7–9
Actual purchasing behaviour <i>Study baseline</i>	10–13
Actual purchasing behaviour <i>With information on total cost of ownership</i>	14–19
Consumer experience	20–31
Recommendations	32–34

# Introduction

Purpose of and approach to the report



# Purpose



**To test and investigate  
the application of  
information on total cost  
of usage and ownership  
in purchase situations for  
electrical appliances**

## **About the report**

The following report presents the results of an eye tracking laboratory study conducted by Operate A/S.

The study tested the application and use of information on total cost of ownership in an electrical appliances purchase situation in an online shopping environment.

The report consists of test results from 61 respondents, as well as recommendations for further work on developing information and labelling on the total cost of ownership of electrical appliances.

Definition of concepts

## **Cost of usage and ownership**

There is a growing interest in and use of labels to guide consumers in making rational decisions in a purchase situation.

Labels containing information on the cost of usage and ownership can support consumers in decoding and considering the energy efficiency and consumption of electrical appliances over the service life of the product.

This study focuses on total cost of ownership and cost of usage relative to respondents' search behaviour and product selection.

### **Cost of usage**

Includes the expected cost of electricity over the expected service life of the product, which is 9 years for washing machines, 12 years for tumble dryers and 15 years for refrigerators.\* The cost is calculated based on a modelled price until 2030 of DKK 2.14 per kWh, with an annual consumption figure taken from the European Product Registry for Energy Labelling (EPREL) database.

### **Total cost of ownership (TCO)\*\***

The total cost of ownership is the overall cost of electricity (and water) during the use phase plus the purchase price of the product.

\* Danish Energy Agency "Consumers: How you as a consumer can use the energy requirements of different products". [In Danish only] *Ens.dk*, <https://ens.dk/ansvarsomraader/energikrav-til-produkter/forbrugere>. Accessed on 09/01/2023

\*\* *The usual English term for "lifetime costs" in this context is total cost of ownership (TCO).*



# About Operate Lab

Operate Lab consists of a computer setup with iMotions software. In addition, Operate Lab contains:

- A webcam that measures facial expressions
- An eye tracker that measures eye movements

Recruitment for the study took place through an external supplier, and respondents have been financially compensated for their time. The respondents were recruited based on a number of inclusion criteria\* and were randomised in the study to improve its reliability.

The study duration was limited to a maximum of 45 minutes per person and uses simulated purchase situations.

## Inclusion criteria

Gender and age are balanced and spread, and respondents are either primary or shared decision-makers at home, e.g., purchasing white goods. Respondents should not wear glasses.

Studies conducted at Operate Lab triangulates data collection methods



### Subjective data

Subjective data are typically smaller surveys carried out before and during the study that ask questions to capture respondents' self-reported behaviour and experience, such as "On a scale of 1 to 5, how confident are you that you've completed the task correctly?"



### Objective data

Objective data are respondents' responses to task-based studies, as well as the time spent on each task, e.g. whether respondents can find the product with the lowest TCO.



### Neurophysiological data

Neurophysiological data are eye tracking and facial expression analysis (FEA).

**Eye tracking data** show where, when and for how long respondents are looking at specific stimuli, such as whether they are looking at information on TCO.

**Facial expression analysis** collects data on the facial expressions of respondents, which provides insight into the respondents' emotions during the test, e.g. if they experience frustration in the purchase situation.

# Note from Operate A/S about the study



The study was conducted between November and December 2022 when Denmark and the rest of the world were facing a situation in which energy and energy prices received a lot of attention in the media and from the Danish population. Among other things, the substantial media coverage of the energy situation has prompted people in Denmark to use energy price monitoring apps more and to change their habits.

The increased energy awareness is assumed to have impacted this analysis, with many respondents demonstrating a high level of awareness and a *preference* for low energy consumption, possibly because they know that energy consumption is closely linked to everyday finances. 2022 saw consumers experiencing huge fluctuations in electricity prices, which is why electricity consumption may have suddenly become a significant and negative unforeseen expense in private households.

Based on Operate's experience in conducting studies of consumer behaviours and energy, this is a unique situation. In the past, consumers have shown a preference for the purchase price, as the cost of the use phase has been perceived in more abstract terms by consumers. This increased energy awareness is not expected to be permanent, which is why consumer behaviour will in the future probably return to a level seen before the energy crisis. Therefore, this has not been a data point in the analysis and is Operate's professional opinion.

# About the study

Data collection, respondents and study design



# About the study



## Purpose

Study of the application and use of information on TCO in a purchase situation.



## Method

Task-based eye tracking and biometric testing in the Operate lab, through simulated purchase flows and a self-reported questionnaire.



## Respondents

61 respondents with a mean age of 40.5. All participants live in an owner-occupied flat or house and are the primary decision maker at home.

# Study design

Through task-based purchase situations, respondents were asked to choose from a range of products in a simulated online shopping environment.

In order to provide a realistic and natural test environment, the products, as well as prices and the visual layout of the purchasing environment, were copied from major Danish retailers that sell white goods. In addition, the products' energy class, price, and TCO vary, just as they do in real shopping situations.

Selected products used in the product categories (refrigerators, washing machines, and tumble dryers) are constant in order to measure changes in selection.

## Control test

All respondents are first asked to purchase products that they would normally choose if they had to buy the product in real life. The purchase situation is one without information on the TCO. This task is the study's control test, which is used as a baseline for the participants' choices.

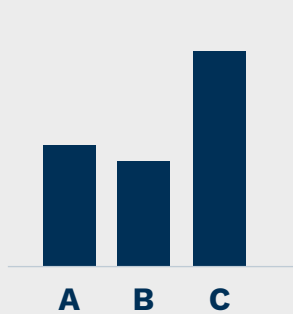
The screenshot displays the ELGIGANTEN website's product page for tumble dryers. At the top, navigation links for 'Kundeservice', 'Privatkunde', and 'Erhvervskunde' are visible. The ELGIGANTEN logo and a search bar are prominently featured. A breadcrumb trail indicates the current location: 'Hvidevarer > Vask & Tør > Tørretumbler & tørreskab > Tørretumbler'. The main heading is 'TØRRETUMBLER'. Below this, a promotional text states: 'Stort udvalg fyldt med gode tørretumbler tilbud. Vi fører både kondensørretumblere og tørretumblere med tørretumbler i den bedste energiklasse. Vi har også vaskemaskiner med tørretumblere.' A checkbox option 'VIS MIG KUN PRODUKTER DER ER PÅ LAGER I MIT VAREHU' is present, with a sub-option 'Vis kun mit varehus (Vælg varehus)'. The product grid shows three items: 1. Electrolux Inspiration tørretumbler EDE1072PDW, marked with an orange 'C' energy class label, priced at 2499:- with a 4.3 star rating (32 reviews). 2. Hisense tørretumbler DCGE801, marked with a yellow 'B' energy class label and a green 'VI ANBEFALER' badge, priced at 3297:- with a 4.7 star rating (11 reviews). 3. AEG tørretumbler, partially visible, priced at 3999:- with a 4.5 star rating (11 reviews).

# Actual purchasing behaviour

Study baseline

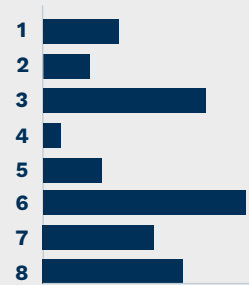


# How to read study graphs and figures



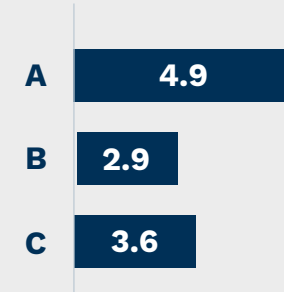
**A B C**

When reference is made to “A”, “B”, “C” or “control”, this means the different study conditions, which are illustrated and explained in more detail on page 15.



**1–8**

When choices are illustrated based on a ranking of 1 to 8, the products were ranked with 1 being e.g., the cheapest product and 8 the most expensive product.



**1–5**

When scales and numbers from 1 to 5 are illustrated, the result is the respondents' answers to a Likert scale in the survey, where e.g., 1=very difficult, 3 = neither nor and 5=very easy.

Baseline

## Energy classes are key to respondents' choices

Respondents were asked in the study which factors affect their choice of products. Respondents were able to choose from: price, brand, energy consumption, and design.

- **36%** of respondents indicated that energy consumption was the factor they gave the most consideration to when choosing a new product. Energy consumption is the factor that most people considered to be the most important.
- **80%** of respondents indicated prior to the study that they thought energy class was important or very important when purchasing white goods.
- The fact that respondents value energy consumption is also reflected in actual behaviour, with **81%** of respondents choosing products in the two highest energy classes.

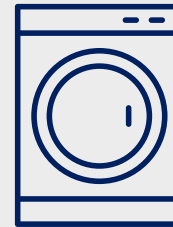


Respondents were asked to select the product they would normally choose from three product categories: washing machines, tumble dryers and refrigerators.

They were then asked which factors influenced their choices.



**70%**  
opt for refrigerators in the top two energy classes



**82%**  
opt for washing machines in the top two energy classes



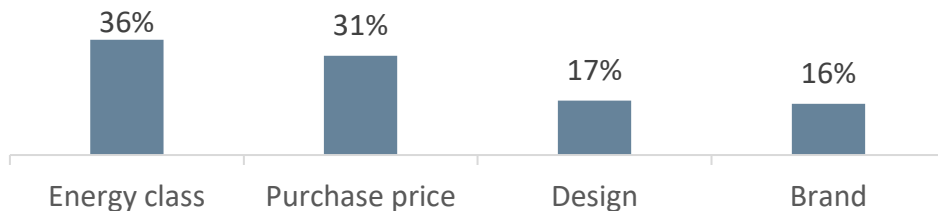
**90%**  
opt for tumble dryers in the top two energy classes

Baseline

## Purchase price is of secondary importance

- In addition to energy consumption, **31% of respondents thought the product purchase price was important** when choosing the product, which is the second most common reason selected.
- The fact that respondents value energy consumption above purchase price is also shown in their actual behaviour, with **78% making their choice from the four most expensive products.**

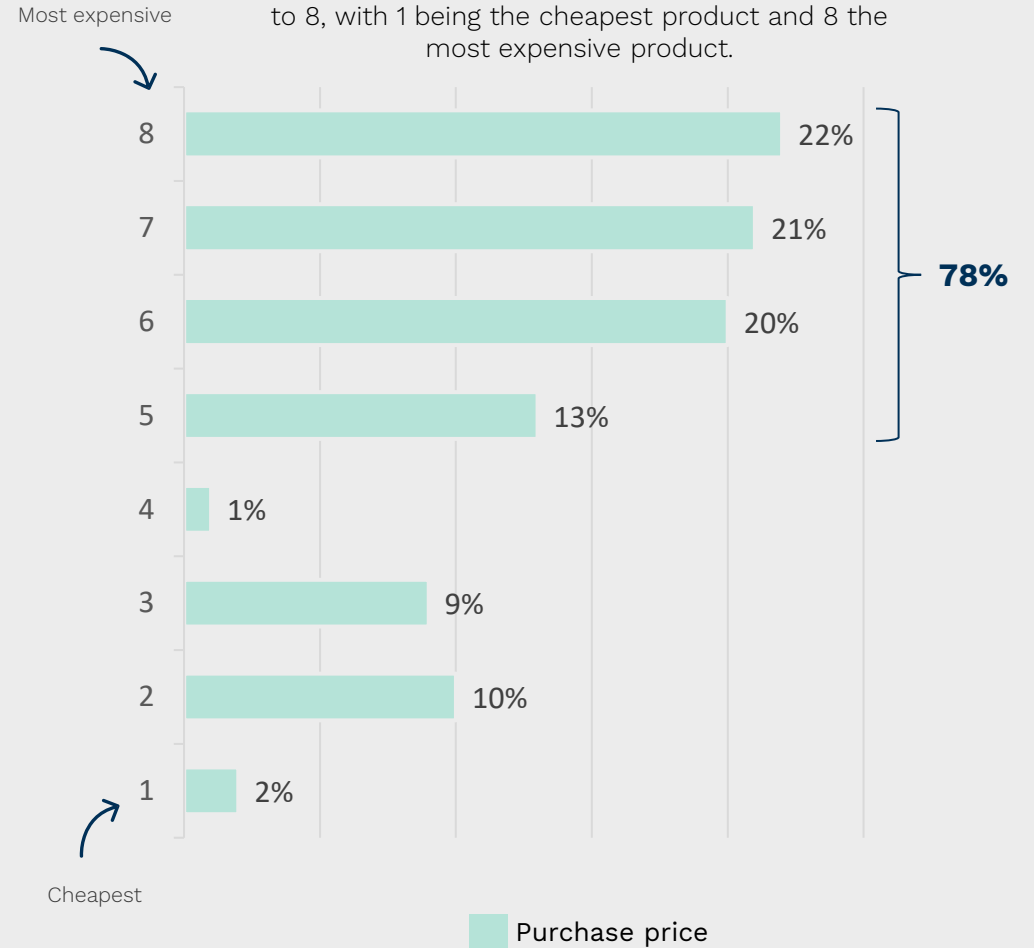
Design and brand were only selected as the reason for selecting a product in a few cases. There was no correlation in choice of colours (design) or brand across the respondents' choices in categories in their actual behaviour. In other words, respondents do not select the same brands across their choices, which means the data analysis shows that this does not influence their choices.



Reasons selected by respondents

### Selected products

The purchase price of the products is ranked from 1 to 8, with 1 being the cheapest product and 8 the most expensive product.



Baseline

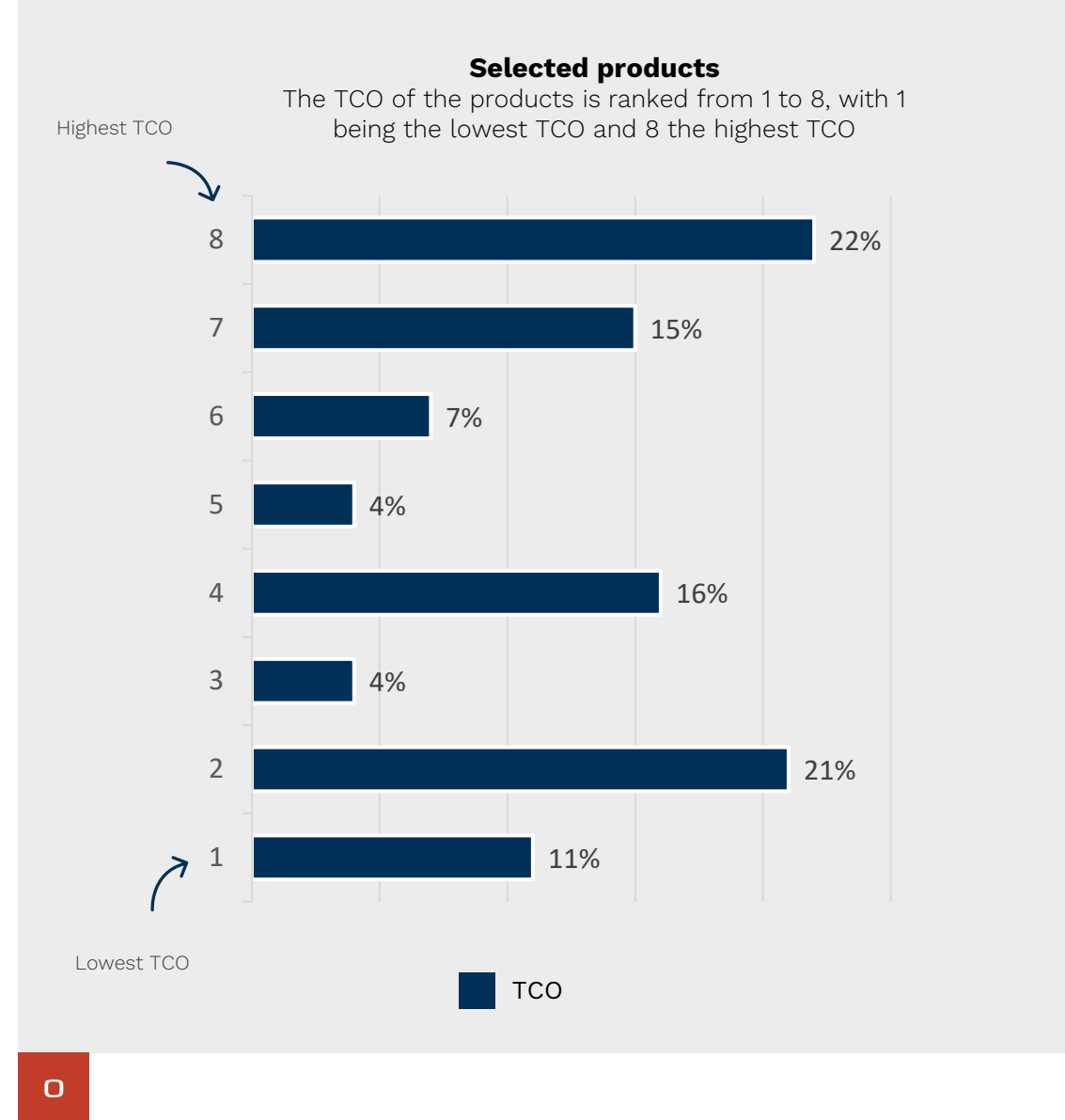
## Choices according to TCO though information not given

The respondents only have the design, brand, purchase price, and energy class of the products available in the purchase situation and in the subsequent survey question. In other words, there is no information on the TCO of the products in this part of the study. Data on this page, therefore, do not report on the respondents' conscious choices but are included here, as this provides a baseline for the analysis.

- **52%** make a choice, by chance, between four of the products with the lowest TCO, of which **11%** opt for the product with the lowest TCO.
- In contrast, **90%** of respondents unconsciously select four of the products with the lowest cost of usage, of which **36%** opt for the product with the lowest cost of usage. This is because the products in a higher energy class, something which is key to the choice made by respondents, had a lower cost of usage.



The respondents were not asked to select the lowest TCO, nor were they given information on this. The data therefore only reveal the respondents' unconscious choices.



# Actual purchasing behaviour

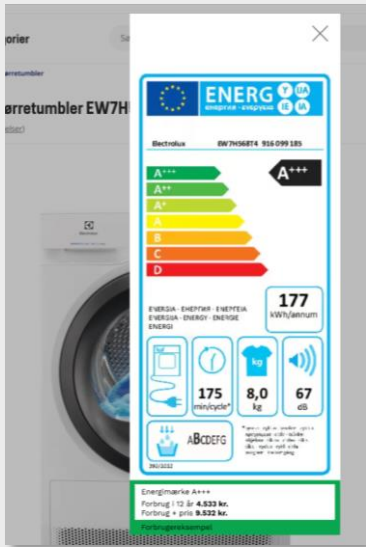
With information on TCO



# Information in three different places

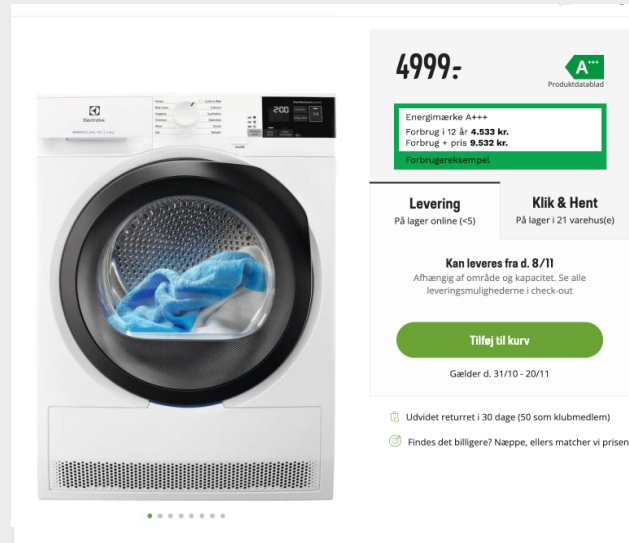
Three locations for the TCO information were tested in the study to investigate whether the location affected how respondents applied the information. Locations were varied by prominence (**saliency**).

The information was constantly visualised using a label of the same colour as the product's energy arrow, to link price information that guides consumers in energy efficiency.



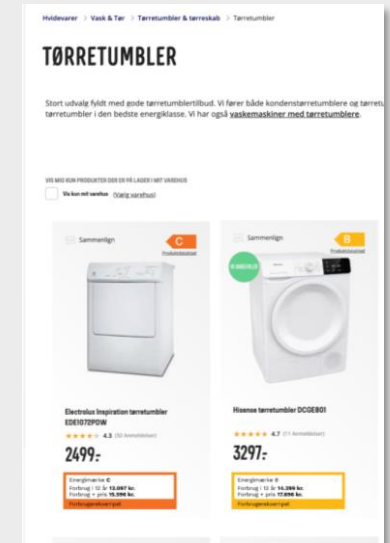
## Condition A

The information is placed in accordance with and below the energy label



## Condition B

The information is placed on the product page



## Condition C

The information is placed in the product overview.

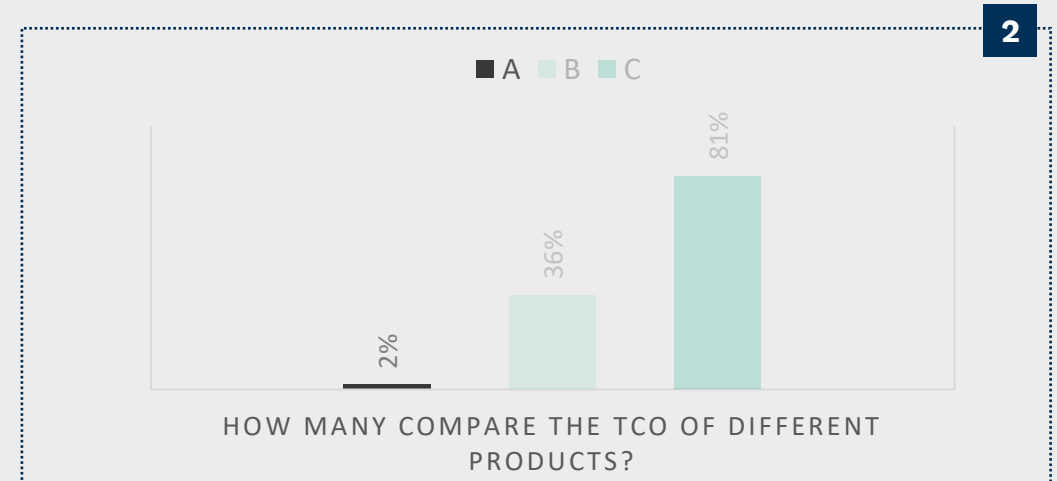
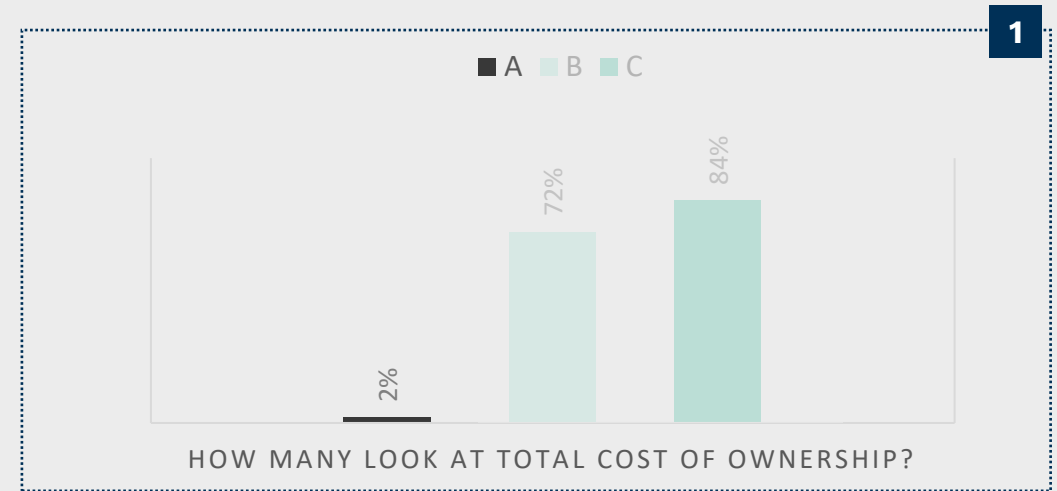
# Respondents do not open the energy label

→ Only **one in 61 respondents open the energy label**, which is why there is very little attention given to the TCO when it is placed below the energy label.

Although respondents consider the information and select based on energy classes shown in the product overview and on the product page, they do not use the energy label containing detailed information on the product's energy efficiency, energy consumption, and other product data.

What is displayed in product overviews and on product pages in online stores is the energy arrow showing the energy class of the product and, for some product groups, the range of available energy classes. The energy arrow links to the full energy label that features more detailed information on the product's energy efficiency etc.

The high level of interest in the energy arrow but not the energy label may be because consumers have learned to use energy classes but not the energy label itself when navigating online stores – and in some cases, they are unaware that the energy class links to the energy label. At the same time, behavioural research shows that the more obstacles there are, such as the number of clicks on a website, the lower the likelihood of consumers seeing and applying the information.

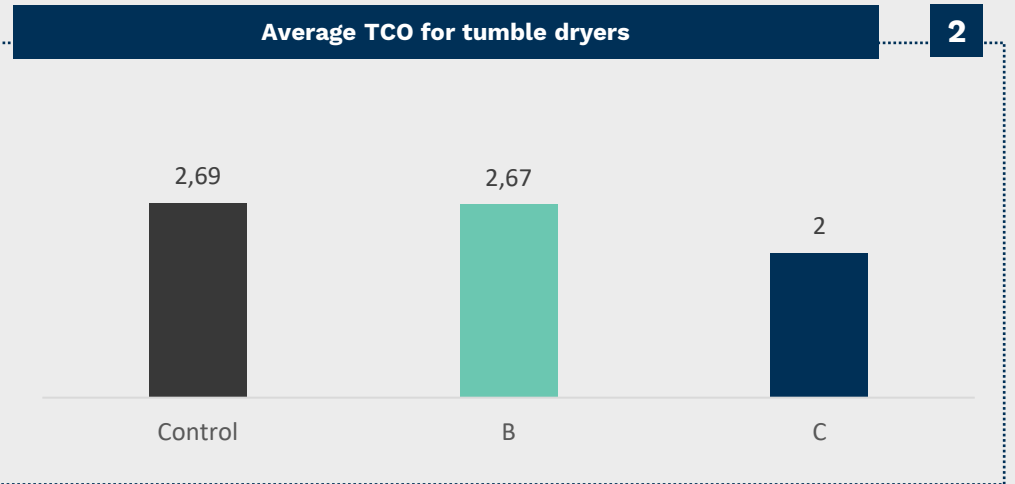
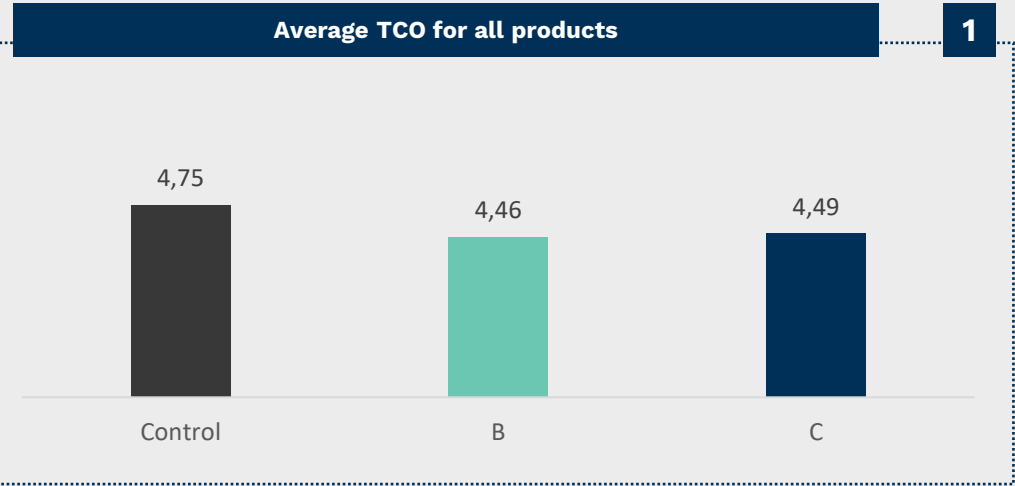


# The more prominent (salient) the information is, the better the behaviour

- In general, respondents opted for a product that had a lower TCO when this information was part of the purchase situation, but there is no statistically significant difference here (Figure 1).
- There are more respondents who change their choice under the tumble dryers product category (Figure 2). This could be because the tumble dryers with a low TCO are also in the highest energy classes, which is not the case for the other two categories (see Appendix).
- Specifically for *condition C*, **34%** of respondents changed their choice of product from the control purchase situation, of which **2 in 3** on average changed to a product with a lower TCO.



The figures here illustrate the average of products selected based on their TCO ranking, where the product with the lowest TCO had a rank of 1 and the product with the highest TCO had a rank of 8. The reason for the value 4.75 is that respondents chose the fourth or fifth “most expensive” product on average, measured according to TCO.



# Energy classes remain key to respondents' choices

- The respondents continue to attach a lot of importance to energy classes when information on TCO is available – with certain statistically insignificant differences between the two conditions
- In other words, there is a minority of respondents who change their choices but there is a strong correlation between their choices in the two simulated purchase situations – with and without information on TCO
- **84%** of respondents cite energy consumption as the reason for their choice of product when they have been exposed to TCO information in the product overview (Figure 2). This is a significant increase from the control test, in which **72%** mentioned energy consumption.
- This confirms that information on TCO makes consumers more aware of energy consumption and efficiency in the purchase situation.

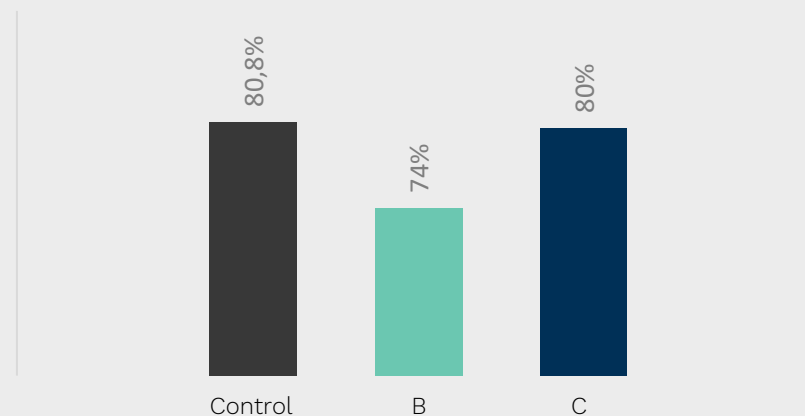


Once again, respondents were asked to select the product they would normally choose in the three product categories. This time, however, information on the TCO was presented, but the respondents were not told about this in advance.

They were then asked again which two elements they prioritised in their choice: price, design, brand, or energy consumption.

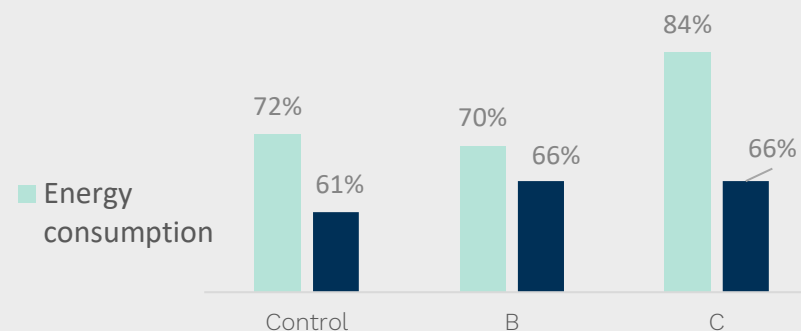
1

Products chosen in the top two energy classes



2

On average, how many times was energy consumption and purchase price mentioned as the reason why they chose the product they did?



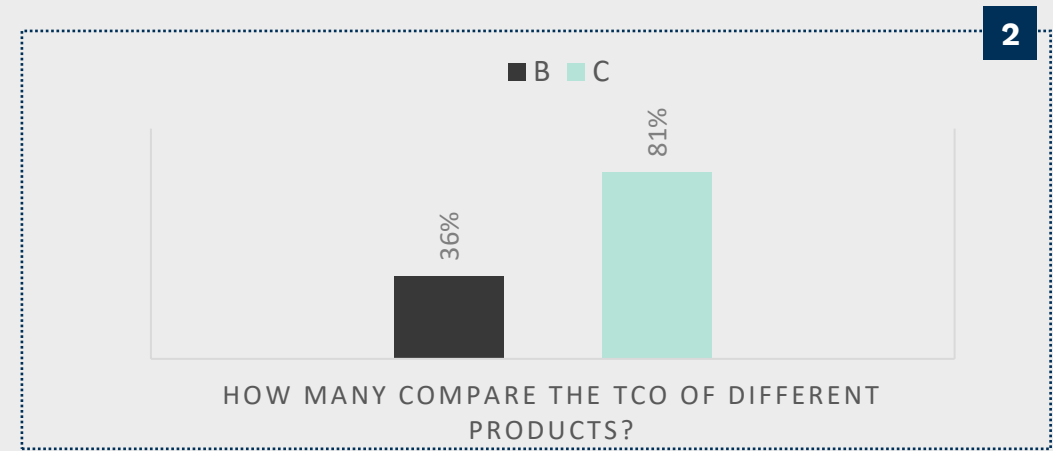
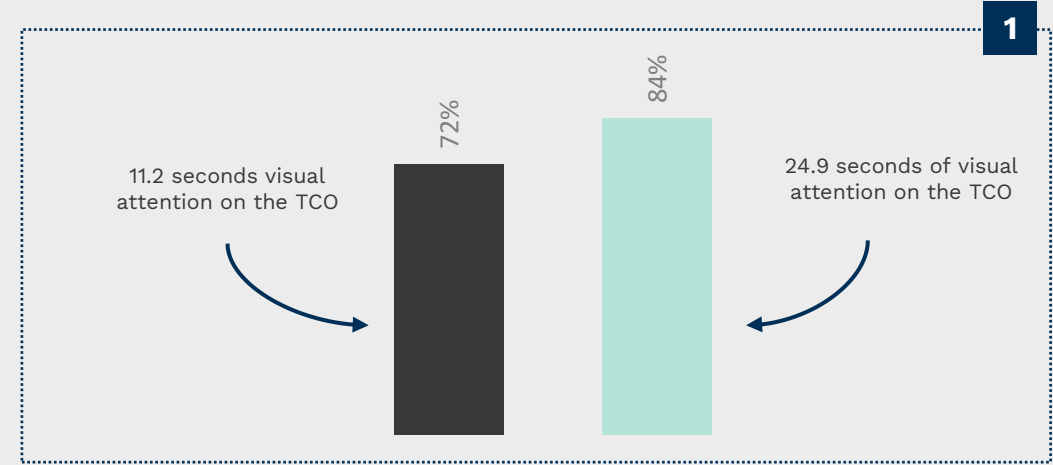
$p=0.02$ , in the comparison between control and condition C

O

# More compare products when information on the TCO is available

- Eye tracking data show that more respondents see the information on TCO when it is placed in the product overview (*condition C*) than when the information is on the product page (*condition B*) (Figure 1)
- In addition, the respondents from *condition C* gave twice as much visual attention, measured in time, to TCO than the respondents in *condition B*
- Similarly, there are more than **twice as many respondents** who compare all eight products when the information is placed in the product overview (Figure 2)

This means that information on TCO receives more visual attention and is used more actively when the information is placed in the product overview, given that this is the easiest way for consumers to compare and view different prices.

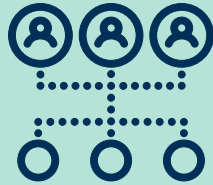


# Sub-conclusions 1



Energy classes and energy consumption are top of mind

*Prior to the study, respondents stated that energy classes and energy consumption play an important part in their choice of white goods*



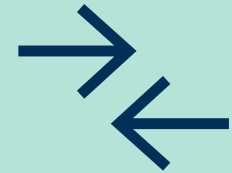
Energy classes are reflected in their actual behaviours

*Across the three product categories, most respondents opt for the products in the best two energy classes*



More attention is given to salient information

*Respondents devoted twice as much attention to the TCO if this information was placed in the product overview close to the price*



More respondents compare products that have salient information

*The respondents with information on TCO placed in the product overview use the information in their comparison of products to a much greater extent*

# Consumer experience

In the use of information on TCO

# How to interpret the consumer experience

With a simple and intuitive consumer experience, there is a greater likelihood of consumers applying the information in the decision situation. This is because consumers can easily experience cognitive overload, which is when an excess of information reduces rational thought, meaning that their decisions are therefore made based on gut feeling or fragments of information. This is called friction. It is therefore also essential for the information to be available and salient, rather than difficult for consumers to find.

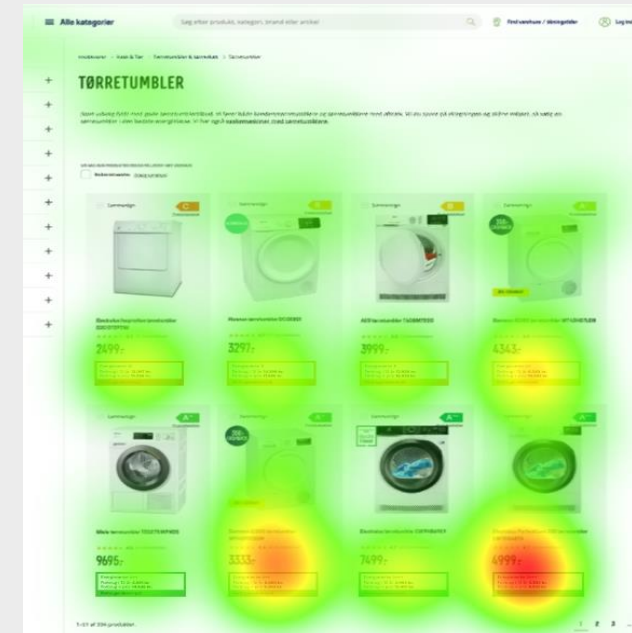
In short: the less friction there is in the form of time and cognitive load, the better the consumer experience – both in the lab and in a real-life choice situation.

The consumer experience is assessed below on the basis of four elements

1. **Time** spent on finding the product with the lowest TCO
2. **Frustration** measured via facial expression analysis, which demonstrates the respondents' emotions while completing the task
3. **Task solving** measured according to whether they are completing the task correctly and can use the available information
4. **Visual attention and visibility** measured by eye tracking data that show whether visual attention is given to the information and whether it influences the above parameters

## Visualisation of eye tracking data

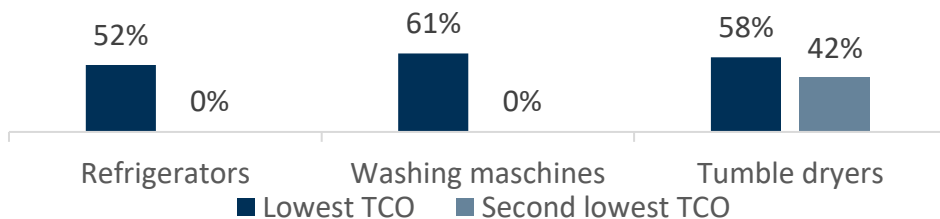
Heatmaps visualise the level of visual attention given to a visual environment – from green (low level of attention) to red (high level of attention). The data are average extracts from 61 respondents.



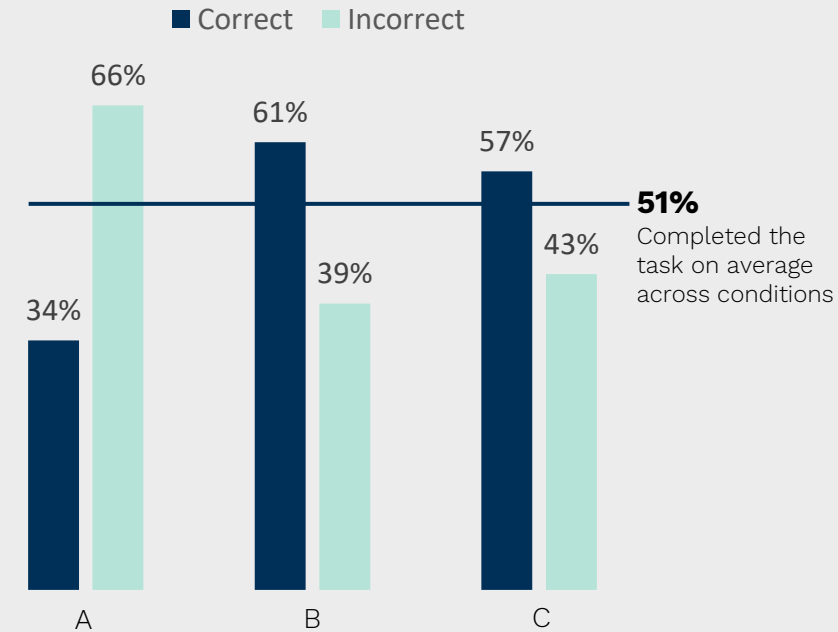
Can respondents find the lowest TCO?

## 51% chose the right product

- On average, **51% of respondents completed** the task correctly, across conditions and product categories, by selecting the products with the lowest TCO.
- Figure 1 shows that significantly more respondents complete the task correctly when the information on TCO is placed in the product overview (*condition C*) or on the product page (*condition B*).
- The results for the tumble dryer product category vary from those for refrigerators and washing machines. **100% of respondents** chose products with the two lowest total costs of ownership, with 58% choosing the one with the lowest TCO in *condition C* (Figure 2).
- The proportion that selects the product with the lowest TCO in *condition C* for refrigerators is **52%** and **62%** for washing machines. The difference may be because the 2 lowest lifetime costs for tumble dryers are only separated by DKK 138 over a lifetime of 12 years (see appendix)



Products with the lowest TCO selected



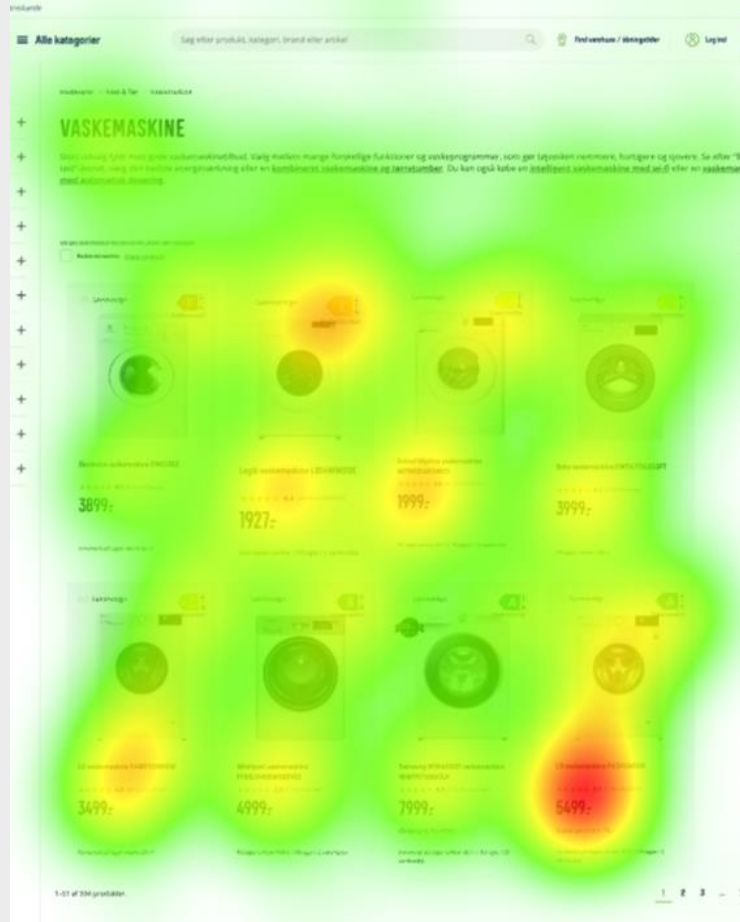
Variable behaviours and search patterns between conditions

# Increased focus on TCO with information in the product overview

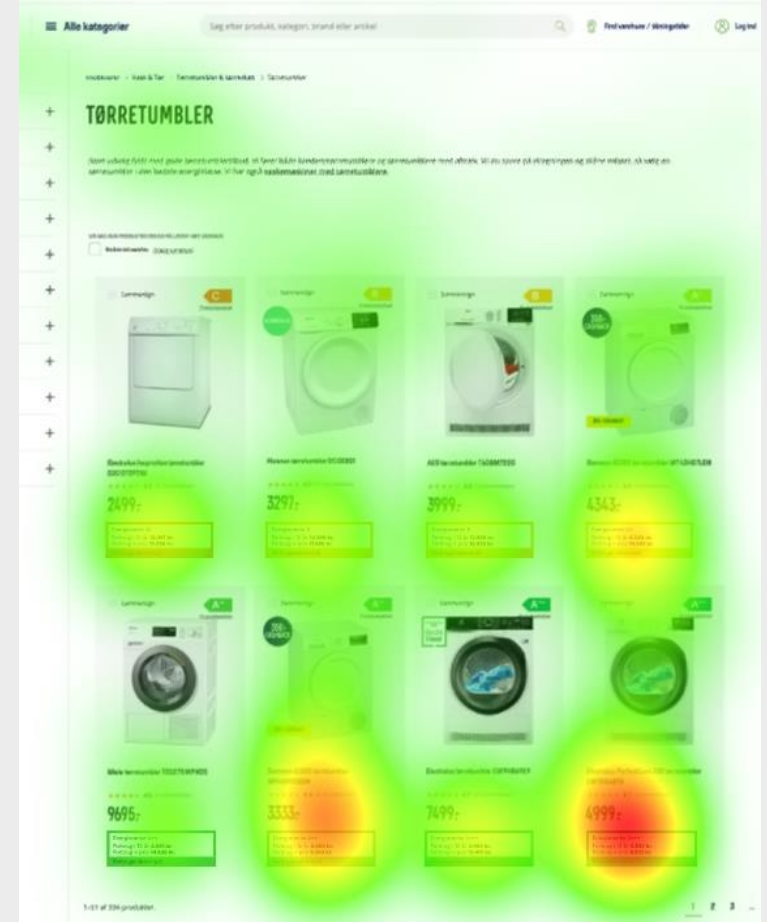
Without information on the TCO, visual attention is spread across the product overview, particularly focused on the purchase price and energy label (heatmap for *condition A*).

Information on TCO is below the energy label, but since few respondents opened the energy label, there is not enough data to provide a proper heatmap for the energy label.

With information in the product overview, attention is more focused on the relevant information and there is less spread (heatmap for *condition C*).



Heatmap for *condition A*



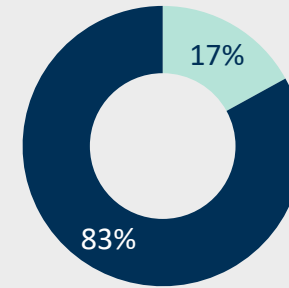
Heatmap for *condition C*

Condition A

## Very few open the energy label

- **33.4%** selected the product with the lowest TCO when the information was placed below the energy label, an increase from **11%** in the control test.
- The proportion of respondents who opened the energy label was **17%** (Figure 1). In comparison, there was only one respondent who opened the energy label in the test of actual behaviour, as presented in a previous section.
- Eye tracking data show that out of those who opened the energy label, everyone looked at the TCO, while **60%** of them compared the TCO for all eight products.
- In addition, 80% of those who saw the TCO chose the product with the lowest TCO.
- Respondents spent an average of **94 seconds** completing the task, with facial expression analysis showing that **18** seconds of this time was spent being frustrated (Figure 2).

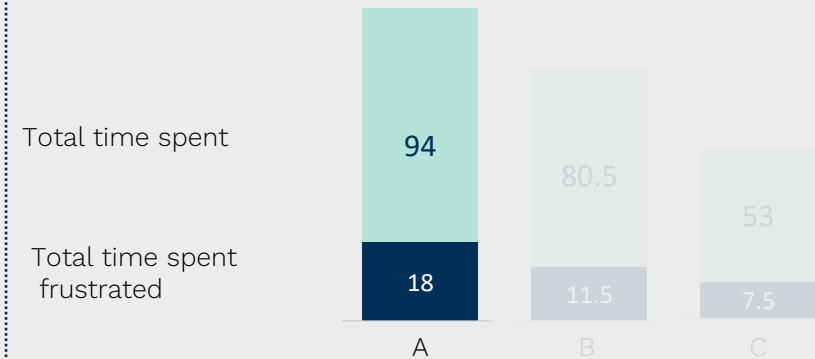
1



■ Opened energy label ■ Did not open energy label

2

Time to complete the task measured in seconds



Condition B

## Respondents take a long time to complete the task

- **60.7%** selected the product with the lowest TCO when the information was placed on the product page.
- Eye tracking data show that **86%** of respondents saw the information on TCO.
- Of this figure, an average of **44%** compared all eight products before making their choice. An increase of **41%** from the actual purchasing behaviour, as presented in a previous section.
- **71%** of all those who saw the TCO completed the task and chose the product with the lowest TCO.
- On average, respondents spent **80.5 seconds** completing the task, with **11.5 seconds** of this time spent being frustrated (Figure 2).

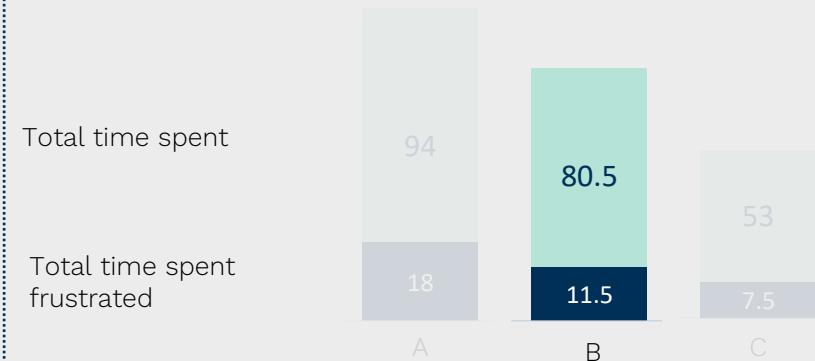
1

Heatmap of product page for tumble dryers (condition B)



2

Time to complete the task measured in seconds



0

Condition C

## Respondents are faster and less frustrated

- **58%** selected the product with the lowest TCO when the information was placed in the product overview.
- 42% respondents from *condition C*, when choosing a tumble dryer, opted for the product with the second lowest TCO, while the remaining 58% opted for the product with the lowest TCO. There is a price difference of only DKK 138 between these two products, which is why this may affect the result.
- The proportion of respondents who saw the information on TCO was **95%**.
- Out of those who saw the TCO, **58%** chose the product with the lowest TCO.
- Of this figure, an average of **62%** compared the information for all eight products before making their choice. An increase of 13% from actual purchasing behaviour, as presented in a previous section.
- On average, respondents spent **53 seconds** completing the task, with **7.5 seconds** of this time spent being frustrated (Figure 2).

1

Heatmap of product page for tumble dryers (condition C)

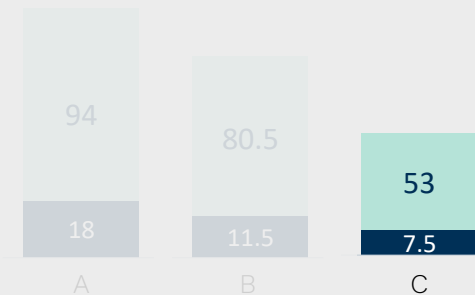


2

Time to complete the task measured in seconds

Total time spent

Total time spent frustrated



O

# Consumer experience

Comparative takeaway conclusions between the three conditions

# More right choices with prominent (salient) information

- There were **significantly more respondents who chose correctly** when the TCO was in the product overview or on the product page (*conditions B and C*), compared to when the TCO was below the energy label (*condition A*).
- Across conditions and product categories, the average for correct answers when selecting the TCO is 52%, with the average significantly higher for cost of usage.

## Interpretation of analysis

It is possible that the respondents may have looked at the information on cost of usage rather than TCO when selecting a product, **as significantly more people find the product with the cheapest cost of usage.**

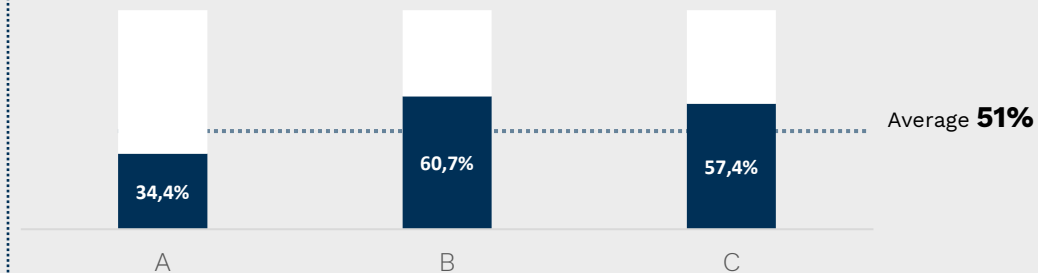
This may be due to the way in which the information is presented, as illustrated below. In addition, several respondents self-reported that they give priority to energy consumption and price, which is why they might interpret lower cost of usage over the lifetime of the product as being the correct answer.

Information on  
cost of usage

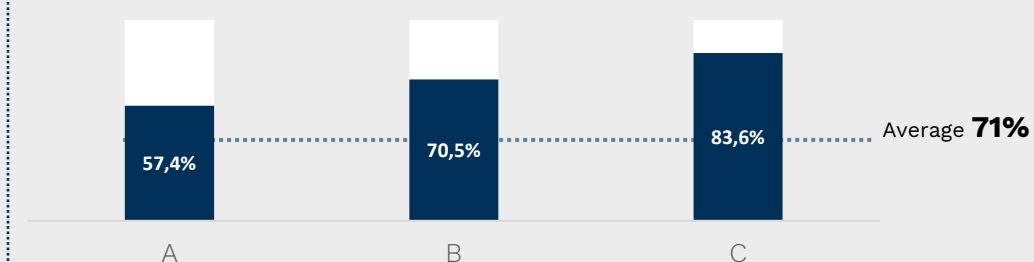
Energy label **E**  
Consumption for 10 years **DKK 5,513**  
Consumption + price **DKK 9,012**  
Consumer example

Information on  
TCO

1  
Proportion of respondents who correctly find the product with the lowest TCO



2  
Proportion of respondents who find the product with the lowest cost of usage



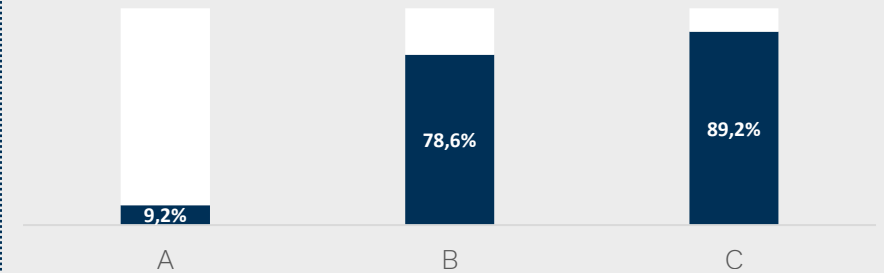
# The more people who see the information, the more people that use it

- The proportion of respondents who saw the information when it was placed on the product page was **89%**, which is significantly more than in *condition A* and an increase on *condition B* (Figure 1).
- In addition, **87%** of respondents in *condition C* also compared all eight products, which is significantly more than in the other two conditions (Figure 2).

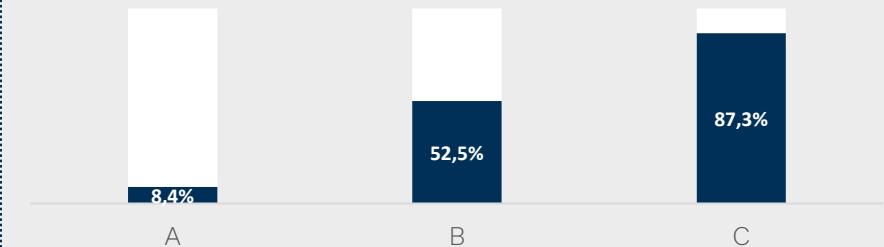
The eye tracking data prove that the information placed in the product overview helps and increases the likelihood of more consumers seeing the information and then using it to compare products.

This is because the information is easier to use for comparison and is directly available, which is why all respondents will see the information. This facilitates the cognitive process and reduces the potential overload that may occur when comparing products.

1 Proportion of respondents who see information on TCO



2 Proportion of respondents who compare TCO for other products



# A better consumer experience with prominent information

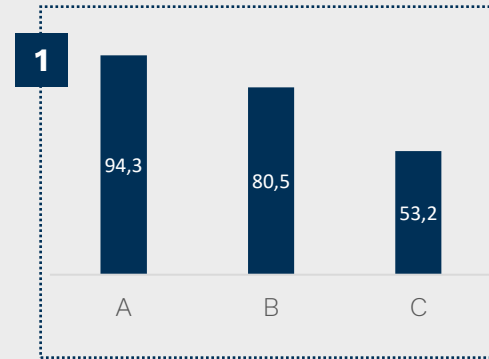
- The respondents took significantly less time to complete the task in *condition C* than in the other two conditions (Figure 1).
- In addition, respondents also spent less time getting frustrated, the more prominent the information was, which is why the least amount of frustration was measured when the information was in the product overview (Figure 2).
- Respondents also self-reported greater confidence in their response in *condition C*, and it seems that it was easier for them to complete the task (Figure 3).

The assessment is that respondents' overall experience was better when the information was easy to find. Data from eye tracking confirm this, revealing that there is greater application when information is placed in the product overview.

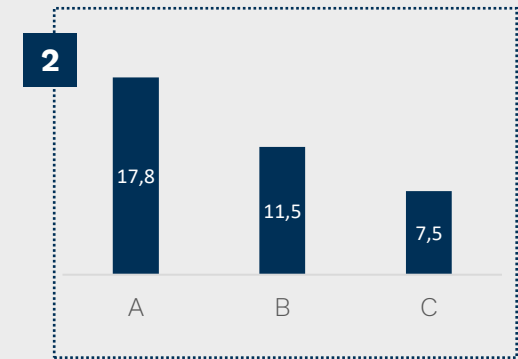


Time and frustration are two vulnerable elements of the consumer experience whose inclusion is relevant when developing processes designed to moderate behaviours. In cases of greater frustration and more time spent, there is also an increased likelihood of consumers in a real purchase situation giving up and relying on gut feelings or other factors.

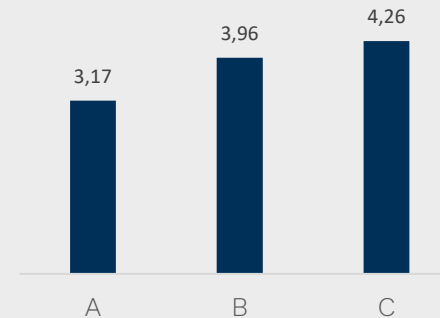
Average time spent (sec)



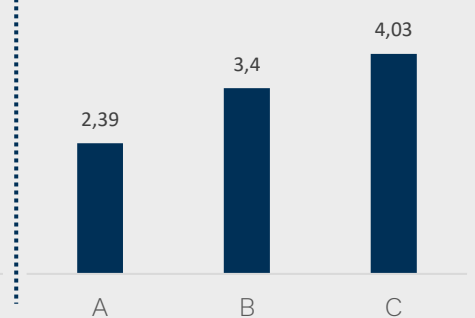
Average time frustrated (sec)



How confident are you?



How easy was it?



From 1 to 5, where 5 is very confident/easy and 1 is very unconfident/difficult

# Sub-conclusions 2



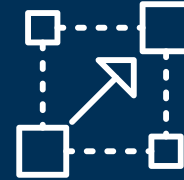
The information is not intuitive

*Respondents find it difficult to decode the information on TCO but do better than when selecting at random*



Information on TCO dominates

*More respondents select products with the lowest TCO, so whether to present both pieces of information should be considered*



Salient information influences choice

*There were significantly more correct answers and more visual attention when information is placed in the product overview and on the product page*



Better consumer experience

*Respondents spent less time, experienced less frustration, and felt more confident when the information was in the product overview*

# Recommendations

For further work on developing information on TCO

Recommendation

## Four specific recommendations

1

### Communicate close to the price

The closer to the price the information on TCO is communicated, the more logical it is for it to be part of the purchase situation for cost-aware consumers.

2

### Make it easy to compare products

By presenting information on TCO in the product overview, makes it easier and clearer for consumers to compare.

3

### Do not introduce the information in the energy label

There is already a high cognitive load involved in white goods purchases, which is why consumers will be less likely to click the energy label to find additional information.

4

### Link the information on TCO to the energy label via colour choice

By using the same colour as the energy arrow in the consumer example for TCO, there will be a more intuitive link between the energy class and energy efficiency.

5

### Place TCO in the product overview and on the product page

There is a significantly greater application and visibility when placed in the product overview or on the product page. If the information is put in both places, visual attention and priming will be enhanced.

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# Appendices

Product overviews



Product overview for  
**Washing machines**

Ranking for Product	Ranking for Energy class	Ranking for Purchase price	Ranking for Cost of usage	Ranking for TCO
Product 1	1	7	2	7
Product 2	1	8	1	8
Product 3	2	6	3	6
Product 4	3	3	4	3
Product 5	4	2	7	1
Product 6	4	5	5	5
Product 7	5	1	6	2
Product 8	6	4	4	4

*Ranking on a scale from 1 to 8*

**Energy class**

*1 indicates highest energy class, e.g. A, while 8 indicates the lowest energy class, e.g. F*

**Purchase price, cost of usage and TCO**

*1 indicates lowest price/cost and 8 indicates the highest price/cost*

*The difference between the lowest and highest TCO for washing machines is DKK 4,983 and the difference between the two lowest total costs of ownership is DKK 352.*

Product overview for  
**Refrigerators**

Ranking for Product	Ranking for Energy class	Ranking for Purchase price	Ranking for Cost of usage	Ranking for TCO
Product 1	1	8	1	8
Product 2	2	5	2	4
Product 3	2	7	3	6
Product 4	3	2	4	2
Product 5	3	3	6	3
Product 6	3	6	5	7
Product 7	4	1	7	1
Product 8	4	4	5	8

Ranking on a scale from 1 to 8

**Energy class**

1 indicates highest energy class, e.g. A, while 8 indicates the lowest energy class, e.g. F

**Purchase price, cost of usage and TCO**

1 indicates lowest price/cost and 8 indicates the highest price/cost

The difference between the lowest and highest TCO for refrigerators is DKK 4,448 and the difference between the two lowest total costs of ownership is DKK 800.

## Product overview for **Tumble dryers**

Ranking for Product	Ranking for Energy class	Ranking for Purchase price	Ranking for Cost of usage	Ranking for TCO
Product 1	1	6	1	2
Product 2	1	7	3	4
Product 3	2	3	4	1
Product 4	2	8	2	5
Product 5	3	5	5	3
Product 6	4	2	8	8
Product 7	4	4	6	7
Product 8	5	1	7	6

*Ranking on a scale from 1 to 8*

### **Energy class**

*1 indicates highest energy class, e.g. A, while 8 indicates the lowest energy class, e.g. F*

### **Purchase price, cost of usage and TCO**

*1 indicates lowest price/cost and 8 indicates the highest price/cost*

*The difference between the lowest and highest TCO for tumble dryers is DKK 5,232 and the difference between the two lowest total costs of ownership is DKK 138.*