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## **Final Report**

[v.3]

**on a**

# **Non-Directive Consumer Group Discussion on Purchasing Major Household Appliances with Reference to TVs and ICT**

**Conducted for**



**Department of the Environment,  
Water, Heritage and the Arts**

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# Executive Summary

A non-directive group discussion with a cross-section of twelve consumers was conducted by Winton Sustainable Research Strategies (WSRS) on Wednesday 19 December 2007 in Melbourne, to explore the information needs of consumers when they are seeking to purchase various appliances including consumer electronics such as home entertainment systems, television sets and computers. Nine industry and government people observed the discussion from behind a one-way mirror.

## **A. Purchase Decision-Making Processes**

The purchase decision process in relation to a television set or a home computer is fundamentally different from the decision process for a refrigerator (and whitegoods in general) in a number of ways, and these differences need to be recognised and taken into account in the provision and communication of information about these appliances:

### **Consumer (lack of) confidence:**

Whereas consumers are very confident in their decision-making concerning the purchase of a refrigerator, they are less confident about purchasing a television set and far less confident about purchasing a computer. This is partly due to the perceived simplicity of a refrigerator versus the complexity of a computer and the changing environment regarding televisions.

It follows that whereas consumers are generally confident about making their own refrigerator purchasing decisions with perhaps a little help from family, friends and the retail salesman, they are far more likely to seek advice and to rely more heavily on the opinions of others in terms of televisions and computers and particularly air-conditioners. However, the variety of sources available, and the range of advice given, often serve to confuse consumers as much as to inform them.

### **Energy efficiency is not in the picture:**

Most consumers think about energy efficiency at some stage in the refrigerator purchase decision process, but almost none in our group do so in terms of televisions or computers. They are simply not aware of, or concerned about, the magnitude of power consumption of televisions or computers, generally assuming that as these appliances are operated only on for limited times and are relatively small, they do not consume much power at all. It is also generally assumed that there would be little difference in power consumption across different models of about the same size or across different technologies. Especially with plasma TVs (and to some extent LCDs), emotional needs often dominate the purchase decision, conflicting with practical considerations.

### **Information failure:**

The situation regarding consumers' lack of knowledge or understanding of issues to do with energy consumption and energy efficiency concerning television sets and home computers is similar to that which existed with refrigerators (and all other household appliances) several decades ago before energy efficiency labelling was introduced.

### **Education changes this:**

At an appropriate point later in the group discussion, an information sheet (see Appendix 1) was provided to participants which indicates that (a) the energy consumption of new technology televisions and their peripherals is likely to result in a marked increase in the energy consumption of televisions, (b) that there is a factor of 2 or 3 (or more) between the lowest and highest energy models of the same technology and size of TV, and (c) some models consume more than a small family-sized refrigerator. Most participants expressed surprise and concern, with discussion leading to the consensus that consumers should be made aware of this information before purchase, with general agreement that energy labelling would be appropriate in this situation.

## **B. Information Sources and Needs**

As discussed earlier, consumers generally look at a broad range of factors when purchasing major appliances, with the factors differing somewhat both in nature and order of importance across appliance types. They search for this information in diverse ways, ranging from conversations with family and friends, looking at newspaper and magazine ads and articles, searching (“Googling”) the internet, visiting retailer showrooms, talking to tradespeople or other specialists, seeking out other expert advice, etc.

### **Diverse information and sources lead to confusion and indecision:**

Whereas people are fairly confident about making good decisions when buying a refrigerator or other whitegoods, they are less confident about buying televisions and not very confident at all about buying computers. Thus, the sheer quantity of diverse information from many diverse sources can often lead to confusion and indecision. Importantly, except where the purchase is urgent (eg, an existing appliance fails or gives signs of failing), the search process often takes place over an extended period of several weeks or more, with consumers tending to need different pieces of information at different times as they proceed through the various stages in the search and decision process.

### **Information where and when needed:**

At any one time there are many people at each stage in the process. Hence in order to reach anyone at the right time for them, all information needs to be available at all points at all times. Once-off or short-term campaigns will reach only those people who are ready to receive and process that particular piece of information at that particular time.

### **A credible centralized source is needed ... :**

Although it is appropriate to provide information that people are expecting and wanting to find via the usual methods and media, this had created a plethora of individual sources and pieces of information. After much discussion in this group, the consensus emerged for some form of centralized, simple (plain English), credible and independent information source that would most likely be internet-based and/or information shopfront-based, and likely to be run by the government or an independent entity. If well-promoted, it was thought that this kind of resource could also be an effective vehicle for communicating important new information that people are not expecting and/or are not aware of, such as energy ratings.

### **... And so is a label:**

However, most thought that the basic information (eg, price, brand, dimensions, features, and particularly the energy rating) still needs (also) to be displayed on the product or at least prominently displayed at the retail store. In fact several participants suggested that a label was the most important mechanism of all, being one of the last things a customer sees before committing to the purchase.

# **1. Introduction**

## **1.1 Background and Objectives**

Much of the other work we do involves using focus group discussions to investigate specific objectives based on existing knowledge, and then attempting to find solutions, solve problems or choose among a number of pre-defined options.

Sometimes, as with this group, we go back to basics and revisit a situation afresh, in this case in exploring the information needs of consumers when they are seeking to purchase various appliances including consumer electronics such as home entertainment systems, television sets, computers and so on. More specifically, we covered:

- a. the purchase decision-making process that consumers follow concerning these appliances;
- b. the kinds of information that consumers look for and should be looking for;
- c. how best this information might be presented to accommodate their needs;
- d. who should provide this information and under what conditions; and
- e. where, when and in what formats should this information be made available.

## **1.2 The Research Approach**

A non-directive discussion approach was used in which the moderator simply triggered things off and then allowed proceedings to take a fairly free course. So while the moderator chaired the discussion in order to encourage participation from all the consumer participants and to bring it back to the core subject if it strayed too far or for too long, discussion was not deliberately steered in any particular direction, nor deliberately guide towards any particular conclusion.

The group discussion was chaired by Les Winton, Managing Director of Winton Sustainable Research Strategies Pty Limited, and held at 6.30pm on Wednesday 19 December 2007 at the Viewpoint Centre in St Kilda, Victoria, with nine industry and government people observing the discussion from behind a one-way mirror.

A cross-section of twelve consumers was rigorously selected to take part in the discussion, covering both males and females, with an age spread between around 25 and 55 years, from a good cross-section of Melbourne suburbs. All participants were chosen on the basis that they had been and/or would be a primary decision-maker concerning the selection and purchase of a television set and/or home computer – they were therefore typical of all consumers of these products, rather than restricted only to recent and/or intending purchasers.

In line with industry privacy principles the consumers were informed that they were being recorded and also being observed by industry and government colleagues, and were identified only by their first names.

The findings reported in this study are based on one group of twelve carefully selected people comprising a good cross-section of consumers. While the findings are in line with those uncovered in many other research studies by the author and others, the coverage is not intended to be projected to represent the population at large, for which a different research approach would be employed. Rather, it reveals much about the nature, range and scope of consumer awareness, attitudes, professed behaviour and needs on the subject.

## 2. The Study Findings

### 2.1 Purchase Decision-Making Processes

How do consumers go about purchasing appliances?

The ways in which consumers go about purchasing items used in the home, such as television sets, computers and air-conditioners, their motivations for purchase, the factors they take into account, and their levels of confidence in making such decisions are all significantly different from those prevailing with whitegoods. These differences need to be recognised and taken into account in the provision and communication of information about these appliances.

The following table provides a short-hand summary of the main points of difference:

	<b>Refrigerator</b>	<b>Television</b>	<b>Computer</b>	<b>Air-conditioner</b>
Consumers' level of confidence in own decision-making	<ul style="list-style-type: none"> <li>High to very high</li> </ul>	<ul style="list-style-type: none"> <li>Medium to high</li> </ul>	<ul style="list-style-type: none"> <li>Low to medium</li> </ul>	<ul style="list-style-type: none"> <li>Very low to low</li> </ul>
Perceptions of technologies	<ul style="list-style-type: none"> <li>On 24/7, no need to operate</li> <li>Reliable/ predictable – rarely need maintenance</li> <li>Looks and technology barely change over time</li> </ul>	<ul style="list-style-type: none"> <li>New technologies to choose from</li> <li>Impending change to digital</li> <li>Screen size increase</li> <li>More channels</li> <li>Changing peripherals</li> </ul>	<ul style="list-style-type: none"> <li>Many different factors to consider</li> <li>Can expect problems</li> <li>Rapidly changing technology</li> <li>Difficult to get expert guidance</li> </ul>	<ul style="list-style-type: none"> <li>Unfamiliar purchase</li> <li>Many factors to consider</li> <li>Every house different</li> <li>Mixed messages, confusing advice</li> <li>May be expensive</li> </ul>
Where go/ search	<ul style="list-style-type: none"> <li>Internet – Google; manufacturer; on-line stores</li> <li>Retail store</li> <li>Info on appliance</li> </ul>	<ul style="list-style-type: none"> <li>Retail store</li> <li>Internet – Google; manufacturer</li> </ul>	<ul style="list-style-type: none"> <li>Internet – Google</li> <li>Retail store</li> <li>Specialist store</li> </ul>	<ul style="list-style-type: none"> <li>Specialist store; specifier</li> <li>Retail store</li> <li>Internet – Google</li> </ul>
Who ask/ rely on	<ul style="list-style-type: none"> <li>Previous experience</li> <li>Family, friends</li> <li>Salesman</li> <li>Choice</li> </ul>	<ul style="list-style-type: none"> <li>Salesman</li> <li>Family, friends</li> </ul>	<ul style="list-style-type: none"> <li>Previous experience</li> <li>Family, friends</li> <li>Salesman</li> </ul>	<ul style="list-style-type: none"> <li>Salesman and/or specifier</li> </ul>
Factors considered	<ul style="list-style-type: none"> <li>Price – can we afford it</li> <li>Dimensions – will it fit the space</li> <li>Capacity – is it big enough for our needs</li> <li>Features – top or bottom; 2 or 3 door; internal layout</li> <li>Brand/origin – do we trust this brand; reputation;</li> <li>Appearance – have to look at it every day</li> <li>Warranty/service – 2 or 5 years</li> <li>Energy label – is it efficient</li> </ul>	<ul style="list-style-type: none"> <li>Emotional appeal, esp. plasma – “just want one”</li> <li>Type – plasma; LCD; CRT</li> <li>Size – 42” catchcry</li> <li>Picture – quality; resolution; brightness clarity; refresh rate</li> <li>Appearance – styling; looks</li> <li>Brand – reputation</li> <li>Price – can we afford it</li> <li>Compatibility with peripherals; video, DVD; set-top box; etc</li> </ul>	<ul style="list-style-type: none"> <li>Type – PC vs Apple; desk-top vs laptop; tablet vs screen, etc)</li> <li>Intended use (home office, games, internet, design, correspondence, etc).</li> <li>Speed</li> <li>Memory</li> <li>Price</li> <li>Screen/image quality</li> <li>Warranty</li> <li>Brand</li> <li>Peripherals</li> </ul>	<ul style="list-style-type: none"> <li>Type – ducted or single room(s); evaporative vs refrigerative; cool only or reverse cycle</li> <li>Size/capacity – will it do the job</li> <li>Price – can we afford it</li> <li>Brand</li> <li>Appearance – is it unsightly</li> <li>Energy efficiency – does it have a good rating</li> </ul>
Factors less often or not considered	<ul style="list-style-type: none"> <li>Consumption vs efficiency – would a smaller fridge that uses less energy still do the job even if it's not as efficient?</li> </ul>	<ul style="list-style-type: none"> <li>Stand-by power</li> <li>On-mode power</li> <li>Cost of running</li> <li>Energy efficiency</li> </ul>	<ul style="list-style-type: none"> <li>Stand-by power</li> <li>On-mode power</li> <li>Cost of running</li> <li>Energy efficiency</li> </ul>	<ul style="list-style-type: none"> <li>Running costs – would a smaller model do the job.</li> </ul>

The purchase decision process in relation to a television set or a home computer is fundamentally different from the decision process for a refrigerator (and whitegoods in general) in a number of ways, and the decision regarding air-conditioners is different again:

Whereas consumers are very confident in their decision-making concerning the purchase of a refrigerator, they are less confident about purchasing a television set and far less confident about purchasing a computer – with air-conditioners they tend not to be confident of their own judgement. This is partly due to the perceived simplicity of a refrigerator (it is on 24/7, it rarely if ever needs any adjustment or maintenance, technology and looks barely change over time, they are generally very reliable and predictable appliances, etc), versus the complexity of a computer (so many different factors to take into account, most people have experienced problems with them, rapidly changing technology, difficult to find expert guidance) or the changing environment regarding televisions (new technologies to choose from, changing from analog to digital, screen sizes getting bigger, ever-widening range of channels, changing peripherals such as players, games, computer connections, on only a few hours a day, etc)

#### The fridge:

*You'd also look at the price range to get a rough idea of what you want to spend and what's available for that price ...*

*I knew which fridge I wanted and when we moved in we did the measurement I couldn't have the fridge I wanted because it wouldn't have fitted so I had to go for something else ...*

*With a family, size is important, what you need in a fridge, how big the freezer is and what you can fit into it, the litre capacity ...*

*The features and usability of the features. How wide the shelves on the door are, are they going to be able to fit an orange juice bottle. Some of them are really narrow ...*

*With a fridge, I'd also make sure it fits in the existing space, that's pretty important, or the way the doors open, which side the doors open, that all fits with what you've currently got. Doors are really important, left or right opening, top freezer or bottom. Some of them have adjustable shelves, too, which is good.*

*Brand is important. I think if you're going to make a major purchase of something like a fridge, which you're going to have for years and years ...*

*I think it's a combination [of factors]. Personally it's a combination of features, price, brand, the aesthetics of it. With a washing machine it doesn't matter so much but a fridge you've got to look at it every day of your life...*

*The guarantees, too, the guarantee period or whether there's an extra price for extending the warranty.*

*Once we'd narrowed the field down, it was the energy rating that decided us in the end.*

*The energy rating is part of it but it's not my main concern until I have listed a few to choose from. I'd probably look at the size vs the price but it would be part of it. If it came down to choosing between two or three models, the energy label would become important then, in fact it may become the number one factor in deciding ...*

*I spent a little bit extra to get the better energy rating, thinking the extra \$70 or whatever it was, over ten years or so would be a lot less than the electricity we'll save. ...*

#### The television:

*It's got to be flat screen. You wouldn't buy anything else.*

*I think it's a matter of taste. Sometimes you're limited with fridges by the space, but anybody can buy any size TV that they want, that they fancy, as long as they've got the money ...*

*I've also heard that one of them you get a better picture on plasma than the other one ...*

*I don't think of brands in terms of reliability, but how well-known they are. Sony, Toshiba, all those brands that are household names you'd think would be fairly reliable.*

*We're just due to buy several new TVs because all ours are old TVs and we'll just go with the latest technology, basically, because it changes so quickly. You want to keep up and that's a decision maybe the kids will be involved in as well ...*

*The computer:*

*Hard disk capacity ...*

*There are so many choices, the technology goes out the window every day, so it's very hard.*

*What you're going to use it for, how much technology you need ...*

*I'm not happy with mine because I underestimated the size of the storage I'd need, I'm constantly deleting things because I'm running out of space, plus it's not fast enough. It's two and a bit years old.*

*Size and resolution of the screen, can I see or read things clearly ...*

It follows that whereas consumers are generally confident about making their own refrigerator purchasing decisions with perhaps a little help from family, friends and the retail salesman, they are far more likely to seek advice and to rely more heavily on the opinions of others in terms of televisions and computers and particularly air-conditioners. However, the variety of sources available, and the range of advice given, often serve to confuse consumers as much as to inform them.

*(Buying a refrigerator is) all pretty simple, really, you know what you are looking for, they are well-displayed in the stores, download material off their website, you can pick up pamphlets or brochures to read when you come home, just to reinforce what we've seen and then actually read it at leisure and go through it in a bit more detail, maybe ask a few friends ...*

*We've been married for seven and a half years and we never bought a TV. My mother-in-law gave us one of her spare ones. We wanted to take our time to furnish our home and now we've got to the TV stage now we need a new home, and that's the reason we're not going to buy one because which one are you going to buy, to move into a home, what happens if it doesn't suit our home. We don't know and we don't know who to trust.*

*I think buying a computer is a lot more difficult because if you're a technophobe like I am and all the definitions and terms and when someone's talking to you about the computer and they talk in all the computer lingo, you have no idea what they're talking about, so I wouldn't necessarily go to a retailer because I wouldn't necessarily know what they were talking about. I think I would get on the web – no, I wouldn't, I would talk to people I know who know about computers. Getting on the web I guess you'd be getting the same information as you would in a store and you still wouldn't necessarily understand it ...*

Most consumers think about energy efficiency at some stage in the refrigerator purchase decision process, but almost none in our group do so in terms of televisions or computers. They are simply not aware of or concerned about the magnitude of power consumption of televisions or computers, generally assuming that as these appliances are operated only on for limited times and are relatively small, they do not consume much power at all. It is also generally assumed that there would be little difference in power consumption across different models of about the same size or across different technologies. Especially with plasma TVs (and to some extent LCDs), emotional needs often dominates the purchase decision, conflicting with practical considerations.

*I think a TV, no one worries as much as with white goods. A fridge is necessary but because you know it's going to be on 24 hours a day you think about the energy rating, whereas a TV you probably think it's a luxury, you probably don't really care as much, and you know it's not going to use much power, anyway.*

*I just want a plasma, the biggest one I can get for my lounge room, I have to have one for the footy and Foxtel, I just have to have one.*

*I've got a plasma now, I bought it a couple of years ago, and I just wanted one – OK, I had to have one – so I just went out and bought one, I didn't do much research, I just went in and bought one. It isn't that good, it's just got standard definition, it's been quite good, but now the new technology is out with bigger ones and I understand the technology a bit better. Now I want another one because I want a bigger one, but now I know a little bit more about it and which is the right one to go for.*

*I know they do pump out a lot of heat because I put my hands on my plasma and felt how much heat does come out of it, but I can't say I've noticed my electricity bills increasing significantly, so it wouldn't be from the electricity.*

*If you went on size you would assume that even a very large TV would use less than half of what a large fridge would use, probably much less.*

*Compared to a fridge, even a plasma TV would use only half of the electricity, not even half the electricity a fridge uses ... how could it, it's only on for a few hours a day.*

*What is there in a computer to use power? It's only transistors and motherboards and a little fan, nothing to use much power.*

*The modern flat screen monitors have no circuitry, just the connections, and they are much smaller than a TV, so surely they use almost no power at all?*

*No, you don't buy a Porsche and then worry about its fuel consumption – same with plasma TVs.*

*If you go in the store the energy rating stickers are all on the front of appliances and prominently displayed, but not on TVs ... so I assume that if TVs used much power the government would have already labelled them.*

The situation regarding consumers' lack of knowledge or understanding of issues to do with energy consumption and energy efficiency concerning television sets and home computers is similar to that which existed with refrigerators (and all other household appliances) several decades ago before energy efficiency labelling was introduced.

*I'm not sure if it (energy consumption information) is available. I wouldn't know. It's probably out there if you search for it, look for the specifications, if it comes up, I'm not sure, I've never seen it, but then I haven't been looking so far, I didn't think it mattered with TVs.*

*Especially if it's 24 hours compared to maybe six hours a day. Although I wouldn't be surprised if, say, a 42 inch plasma does use just as much as a fridge, but you just can't tell.*

*The TV is not on all the time so I don't know how it would impact greatly compared to a fridge or something that's on all the time in comparison ...*

*How could it use much power, it has no motors, no fans, no valves, and it's only on for a few hours a day.*

*My calculator is LCD and it takes a year to run down on one AAA battery.*

*I've just installed LCD down lights because they use a fraction of the power of the old down lights, so surely an LCD TV would use much less power than the old tubes, not more?*

*The salesman said the plasma TV is just like the new CFLs, much more frugal on electricity.*

*There's never been energy ratings on TVs. So I don't think it's a thing a lot of people have even thought of ...*

*I think TVs are like microwaves, they don't use much power and so they are not labelled, either.*

*Surely if televisions used a lot of power they would have put energy labels on them by now?*

*BUT:*

*You've only got to feel the heat coming out of one to know that they are using a lot of power, my concern is just it will probably make the air-conditioner run harder, too, so it's a double whammy on power use.*

At an appropriate point later in the group discussion, an information sheet (see Appendix 1) was provided to participants which indicates that (a) the energy consumption of new technology televisions and their peripherals is likely to result in a marked increase in the energy consumption of televisions, (b) that there is a factor of 2 or 3 (or more) between the lowest and highest energy models of the same technology and size of TV, and (c) some models consume more than a small family-sized refrigerator. Most participants expressed surprise and concern, with discussion leading to the consensus that consumers should be made aware of this information before purchase, with general agreement that energy labelling would be appropriate in this situation.

*Yes, I've heard in the media they're trying to put energy ratings on plasma, more so than on LCD. They do use more energy and they're trying to get energy ratings for them so they can ban plasmas that aren't as good as some of the others.*

*It's a bit of a concern if there's a lot of difference in energy use among different models, I had no idea, I assumed being the same technology, all plasmas of the same size would use the same power.*

*Most households have at least two and possibly three or more TVs, that's the difference, you have one of other things but with TV you have a number, and often they are left on even if you're not in the room.*

*You're only comparing each model with each model, so it's all the same comparison. I can't see why you wouldn't do that with TVs. Just try and make it as easy as you can with the stars. If you know it's got a rating of three against another TV with five ...*

*Yes, articles like this are OK in a general sense but when you go to buy something, you want the precise data about the units you are interested in so you can compare them directly, and that's why the labels are so good in whitegoods.*

*It's getting serious if, as it says here, they use more power than a fridge, we should be told that!*

*Some people, if they want to investigate it more, that's fine, they'll go and look up a website, but I guarantee with fridges there's be a very, very small percentage who do more than compare the stars. They're completely happy with that system because it's simple, they know where they stand, it gives them all the information they really need, and it's accurate.*

*The best system is the simplest system. You can just compare four stars with one star so it's simple*

## 2.2 Information Sources and Needs

What kinds of information are people looking for, and where, when and in what formats should this information be made available?

As discussed earlier, consumers generally look at a broad range of factors when purchasing major appliances, with the factors differing somewhat both in nature and order of importance across appliance types. They search for this information in diverse ways, ranging from conversations with family and friends, looking at newspaper and magazine ads and articles, searching (“Googling”) the internet, visiting retailer showrooms, talking to tradespeople or other specialists, seeking out other expert advice, etc.

*If you've got friends that are into TVs and technology, they're usually happy to share. I've got a couple of friends that are like that so I just get their guidance ...*

*Just ask people in general. Everyone's got televisions and a lot of people have bought new televisions recently.*

*It's something that everyone probably is involved in so most people have a pretty good idea, especially if they've bought something recently ...*

*The most powerful thing is word of mouth. There's no way you can control that ...*

*I start with the newspaper. That's number one. You have an idea; you want to buy a freezer or a fridge or a TV. The first thing I think you look at is prices in the newspapers*

*If you read the technology lift-outs in the newspapers, lots of reviews where people are reviewing as well, you're pretty sure they don't have a vested interest so that's another way.*

*Choice is good, although they charge for their reports, and there are now many more options on the internet. In fact there are probably too many, it's easy to be overwhelmed by it.*

*I just Google “comparison TVs” or whatever, and you get some websites and you start from there. Usually it turns up enough to go on.*

*I use the internet after I've got a short list because there's so much information out there, it's so daunting, so you get a short list from talking to the sales people and then individually assess ...*

*I'd look roughly at a couple that I thought would be of interest, and then go home and research more on the internet, then I'd probably go back two or three times just to confirm in my mind that what they're saying is the same thing ...*

*Ten years ago nobody had heard of Google, now everyone uses it ... I use it to search for everything.*

*When you're just having a general look, it gives you other ideas, you see what else is available, you might have a particular type in mind, you think that one's probably better than what I first thought, I prefer that one, so you just have a good look around and make a decision and learn as much about the product and what's on offer as possible ...*

*I ask the sales assistant to recommend – I just say I'm looking at these three, what do you think, what would you recommend? I get them to make a recommendation ...*

*I think it's the sales person reaffirming what you have already decided, it's important to get that confirmation.*

*The electricity and gas industries used to provide excellent service and advice on appliances, but they've been deregulated in the last few years and it's highly competitive, and so they don't bother with any of that now.*

*When it comes to things like computers and air-conditioners, I'm no expert so I always seek out expert advice from someone I feel I can trust.*

Whereas people are fairly confident about making good decisions when buying a refrigerator or other whitegoods, they are less confident about buying televisions and not very confident at all about buying computers. Thus, the sheer quantity of diverse information from many diverse sources can often lead to confusion and indecision.

*Too much information is just as confusing as too little information.*

*Buying a computer is not a simple thing to do. There's so much information out there, and when you start sifting through it, which of it do you believe?*

*It's similar with a TV, so many different types and sizes, and whether you should go for HD as it's not proven yet, and now there might be a new type coming, it's all very up in the air.*

*When you go to buy a new TV, suddenly everyone wants to tell you what to buy, there's so many options and they can't all be right.*

*That's also part of the reason, there are so many things to take into consideration, I can only speak for myself but why I'm likely to procrastinate about such a big decision like that, because you hear all those options and you think, it's a lot of research, and very easy to get quite confused.*

*Even my neighbour who's an IT expert thinks he made the wrong decision with his latest computer, so what chance have we got?*

*With the retail websites I've been to, when they put information on the product you're looking for, sometimes it just opens another window to the manufacturer's website so it's not so much their information, they provide a link to where that information is from the manufacturer ... It's just another step you have to go through to find the information and if you're looking for three or four products, you do that three times and then you go 'oh, enough' because you've gone through about six or ten websites to find the information, and you're getting confused.*

Importantly, except where the purchase is urgent (eg, an existing appliance fails or gives signs of failing), the search process often takes place over an extended period of several weeks or more, with consumers tending to need different pieces of information at different times as they proceed through the various stages in the search and decision process.

*When I start out, I'm basically looking for something that will meet my need, so I try to keep to the big picture and not let the specific detail bog me down. Once I know what I want, the detail becomes very important so I home in on that.*

*You never just waltz into a shop and buy the first model you come across, or at least I don't. it's a careful process, for example it took us over a month to decide on our last fridge.*

*It's like with the energy rating. It's very important to me, but not when I start out looking – I've got to know I'm picking the right make or model first, you know, one that's reliable and will suit my needs, then I'll worry about how efficient it is. Like I'm not going to buy one that doesn't suit me just because it's got the best rating. That's why the (energy rating) label is good, it's always there when I want it, or at least it is on fridges.*

At any one time there are many people at each stage in the process. Hence in order to reach anyone at the right time for them, all information needs to be available at all points at all times. Once-off or short-term campaigns will reach only those people who are ready to receive and process that particular piece of information at that particular time.

*How often have you seen something and thought "that's important, I must remember that", but when you do eventually need it, it's nowhere to be found.*

*That's why the internet is so good, you can access it from home or work and the information is there permanently.*

*That's what I like about the energy label, it's right there staring out at you from every fridge.*

Although it is appropriate to provide information that people are expecting and wanting to find via the usual methods and media, this had created a plethora of individual sources and pieces of information. After much discussion in this group, the consensus emerged for some form of centralized, simple (plain English), credible and independent information source that would most likely be internet-based and/or information shopfront-based, and likely to be run by the government or an independent entity. If well-promoted, it was thought that these kind of resource could also be an effective vehicle for communicating important new information that people are not expecting and/or are not aware of. However, most thought that the basic information (eg, price, brand, dimensions, features, energy rating, etc) still needs to be readily available on the product or at least at the retail store.

A dedicated website:

*The information is out there, but it's not necessarily easy to access from the internet as there are so many different places, and you're never sure of their credibility. If someone could bring them all together, it would be nice if it was all in one spot ... a one-stop shop on buying a TV, or a computer, or any other major appliance for that matter.*

*When I was researching my internet provider my brother put me on to a website that rated every single internet service provider and they rated the pros and the cons of each, then you made an informed decision as to which company you went for. Perhaps if they had something like that, it would need to be run by an independent body like the Government or Choice.*

*I'd like to see a reliable website that compared different models and prices, so the Government one with prices would be ideal, or some other website whose credibility had been established in some way, say Choice.*

*Yes, it has to be government, they've got nothing to gain by not telling the truth about something. They're giving you information to help you. They're not making any money out of it, they're just giving the facts ...*

*I would certainly like to think that a Government website was accurate and reliable and hopefully complete, whereas I would think that the other sites were not necessarily either accurate or reliable or complete. For example, the manufacturers' sites only include their own brands. And whilst I don't believe that any of the reputable ones would include dishonest statements, they are hardly likely to tell you things that disadvantage their products unless they have to, like that it's more expensive, or takes longer for a wash cycle or has a poor energy rating.*

*If I was looking at information in a store, in the back of my mind I'd be wondering are they trying to subtly hide information or push a particular brand. I'd be concerned about the objectivity of the information, whereas if you had a Choice website or a Government website that was updated daily as new models came in, that would be more like it.*

**BUT:**

*That's all very well, but how good can it be? I think the information from the major brands would be fairly reliable because they'd be shooting themselves in the foot if they were putting information out which wasn't accurate. But with other less reliable brands and foreign imports, who knows how reliable their information is? Whoever puts together this website will have to double-check everything and that may not be possible.*

*And what if some manufacturers won't cough up the info, there's only so much you can make them disclose, isn't there*

*I think if you approached a company to find something out and they couldn't or wouldn't provide the information, they could say that on the government website and you could make up your own mind whether or not to buy that brand.*

An information stall/stand:

*If there was a stand where you could go in and have a look and take a brochure. Like building information centres often have racks with lots of brochures from different suppliers of materials and appliances. The old Gas and Fuel Corporation used to have brochures in*

*their information centre that compared all makes and models, but I haven't seen any recently.*

*A computer in the store with this sort of independently developed info on it would be a useful guide – you could look it up right then and there in the store.*

However, most thought that the basic information (eg, price, brand, dimensions, features, and particularly the energy rating) still needs (also) to be displayed on the product or at least prominently displayed at the retail store. In fact several participants suggested that a label was the most important mechanism of all, being one of the last things a customer sees before committing to the purchase.

*On the product/in the store/at the point-of-sale:*

*All these other places are all well and good, but when you are actually in the store nothing beats having the information right there on the products so you can compare them directly, like price, brand, key features, dimensions, energy rating, and so on.*

*Yes, I'd like a guide or label that's placed on the actual item itself, that's quick and easy to read with the key points that you should be looking at.*

*It has got to be immediately available where you buy, even if it's just the basic information. It doesn't have to actually be on the TV or whatever appliance you are buying, although that would be preferable, but it has to be easily accessible somewhere close by in the store.*

*Computers have already got about five labels on them, but an energy label, even a miniature one would still be instantly recognisable, and by the sound of things, very informative.*

*If you went into a retailer and they had to give you a standardised information sheet like this from the Government [refer Appendix 2], it would be quite a build in your trust with them as well, to go back and buy from them. You'd say, 'I'm looking for a plasma, this is my first thing' – they'd give you that and say 'Read this, come back and we'll talk through any questions you've got'. There'd be more trust if every store gave out this same sheet ...*

*There should be a sheet like this for computers, too, it's all too confusing otherwise.*

*Yes, but it's still got to be on the product itself, the leaflet is general stuff, important, sure, but it has to also relate to each product if they are different.*

*The label is best, because it's only there at the point of sale, that you really focus on this sort of thing.*

# Appendix 1 – Trends in Television Energy Use

Information extracted from several AGO publications:

## Trends in Television Energy Use

- Most developed countries in the world now have television ownership levels approaching or exceeding 2 per household and this appears to be increasing. Even developing countries like China have an ownership of 1.33 televisions per household in urban areas. It is estimated that 1 billion televisions were installed world wide by 1996 and with annual production running at more than 200 million units a year, the world stock is already likely to more than 2 billion.
- Cathode ray televisions (CRT) form the bulk of the existing stock of televisions, but it is estimated that new technologies such as liquid crystal display (LCD) and plasma will become the majority of new sales by 2010. Increasing screen sizes and high on-mode energy consumption of new technology televisions and their peripherals is likely to result in a marked increase in the energy consumption of televisions.
- Analysis has shown that there is a factor of 2 or 3 (or more) between the lowest and highest energy models of the same technology and size (based on analysis of hundreds of models).
- Televisions are on sale which consume almost 700 kWh each year or almost twice the mandatory maximum allowance of a small family-sized refrigerator.

## Appendix 2 – Buying a Plasma TV

An entry downloaded from the NSW Government's Office of Fair Trading website on 17/12/07 at: <http://www.fairtrading.nsw.gov.au/shopping/shoppingtips/buyingaplasmav.html>

### Buying a plasma TV

Just about everyone, it seems, wants a new plasma TV. The desire to own the latest leap forward in home entertainment is more than just the need for a new television. It's a lifestyle choice, a break with the past, a yearning for a bright new future. The plasma TV will not only change the look of your home, it will become the symbol of who you are, what you can afford, how happy your life will be.

That's the message behind the glitzy advertising campaigns. And they must be working, because more Australians are buying more televisions than ever before.

#### Getting the right information

The problem is, the pace of change of new technology and the vast array of models available makes it harder and harder to make an informed choice about the right equipment to suit your needs. That makes it easy to make mistakes. You could end up with a screen that is actually too big for your home. Or you could find that buying a plasma screen actually means buying a whole lot of other equipment you hadn't bargained for, such as stands, brackets, tuners and speakers.

Buying a plasma screen is different from buying a conventional TV, so you may not even know what questions to ask. Before you rush ahead and buy the latest bargain on display, take the time to consider the points on the plasma buyers' checklist:

#### The plasma buyers' checklist

- Make sure the salesperson is aware of your situation. Tell them your budget, the size of screen you are after and also the size of the room where you intend to place the TV.
- Also, think about how the TV will be positioned in the room. Will you need to purchase a stand, or brackets for wall mounting?
- Ask about the price ranges of the current products and the differences in the brands on offer in terms of picture quality, sound and styling.
- Make sure to ask what components are needed to make the TV operational (tuners, speakers etc) and whether these are at an additional cost.
- Find out if there are any special care instructions. For example, how to handle the screen and how to avoid damage. Ask about the correct way to keep it clean.
- Ask to be shown the functions that the TV has. Make sure that you use the remote control yourself. (Don't just watch what the salesperson does.)
- Ask about the possibility of "burn in" and how to avoid it.
- Find out what the warranty says about pixel loss.
- What are the other provisions of the warranty? Ask about the period it covers and what else it contains.
- Are there any costs for delivery?
- How will the TV be installed? If you have to do it yourself, what instructions are provided?
- If there is a problem, who will fix it? Remember, your contract is with the retailer, not the manufacturer.

## **Size does matter**

Like all television sets, plasma monitors are measured diagonally across the screen, usually shown in inches (with a centimetre measurement in brackets). They generally start from 32" (81cms) and increase in size up to 63" (160 cms). It is important to make sure you have enough viewing space between you and the TV. While you may be tempted to get the largest screen you can afford, you should be aware of the optimal viewing distances for each size range. You should allow at least three metres for screens between 32" and 37". A 42" (107cm) screen is best viewed from four metres away. Screens up to the maximum size (160cms) are best viewed from around five metres.

## **How does plasma work?**

A plasma screen is made up of thousands of pixels, or dots, filled with special gases. When an electrical impulse activates the gases they produce the colour and light we see on the screen. Because they do not need to take up the same amount of room as standard electrical components the screens can be very thin and sleek.

## **What is burn-in?**

Plasma TVs can be prone to burn-in when static images are left on the screen too long and damage the pixels. Images from video games, or station identification logos in the corner of the screen that stay there too long could leave a permanent ghostly impression behind. Plasma screens are more prone to burn in during the first 200 hours of use, when the phosphors are new. There are ways to minimise the chances of burn-in but the simplest advice is to turn off your TV when you are not using it and do not pause DVDs for more than a few minutes at a time.

## **How long do plasma screens last?**

The brightness of plasma screens will eventually fade as the gases inside dissipate but you can generally be assured of around 30,000 hours of use before that happens. Even if you watch TV for ten hours a day that converts to more than eight years of viewing.