



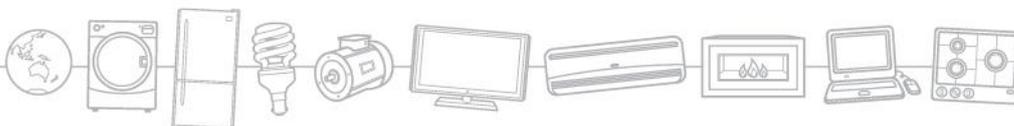
# E3

Equipment Energy  
Efficiency

## Verification Testing Selection Criteria

**Criteria for conducting verification testing under  
the Equipment Energy Efficiency Program**

**May 2012**



**A joint initiative of Australian, State and Territory  
and New Zealand Governments.**

---

© Commonwealth of Australia 2012

This work is copyright. Apart from any use as permitted under the Copyright Act 1968, no part may be reproduced by any process without prior written permission from the Commonwealth.

Requests and inquiries concerning reproduction and rights should be addressed to the:

Commonwealth Copyright Administration  
Attorney General's Department

Robert Garran Offices, National Circuit Barton  
ACT 2600

or posted at:

<http://www.ag.gov.au/cca>

This Report is available at

[www.energyrating.gov.au](http://www.energyrating.gov.au)

Mark Ellis & Associates, a consulting firm with extensive experience in compliance activities within standards and labelling programs around the world, assisted Departmental staff by providing expert views and comments on this publication.

While reasonable efforts have been made to ensure that the contents of this publication are factually correct, E3 does not accept responsibility for the accuracy or completeness of the content, and shall not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance on, the contents of this publication.

# Contents

<b>CONTENTS</b> .....	<b>3</b>
<b>GLOSSARY</b> .....	<b>5</b>
<b>EXECUTIVE SUMMARY</b> .....	<b>6</b>
<b>1. INTRODUCTION</b> .....	<b>7</b>
1.1 The Check Testing Process .....	7
1.2 Aims of Check Testing .....	8
1.3 Product Selection Guidelines .....	8
<b>2. EXISTING GUIDELINES</b> .....	<b>10</b>
2.1 E3 Guidelines .....	10
2.2 Australian consumer compliance and enforcement guidelines .....	10
2.3 Examples of overseas guidelines .....	11
<b>3. OPTIONS FOR SELECTION CRITERIA</b> .....	<b>13</b>
3.1 Objectives .....	13
3.2 Criteria to identify products with a higher risk of not meeting performance claims, reacting to market intelligence.....	13
3.2.1 Complaints from competitors.....	13
3.2.2 Intelligence from consumer groups and individuals .....	14
3.2.3 Intelligence from overseas testing programs .....	14
3.3 Criteria to identify products which have the greatest potential to impact on the energy and greenhouse savings of the Program .....	14
3.3.1 Models with a high market share .....	14
3.3.2 Product categories with the highest greenhouse gas emissions .....	15
3.3.3 Past History Criteria .....	16
3.4 Ensuring full coverage of all regulated equipment types .....	18
3.5 How it might all work.....	20
<b>4. APPLYING THE CRITERIA</b> .....	<b>21</b>
4.1 Prioritising criteria.....	21
4.2 Linking available budget to future testing .....	22
<b>5. CONCLUSIONS</b> .....	<b>23</b>
<b>6. REFERENCES</b> .....	<b>25</b>
<b>ATTACHMENT A: EXISTING CHECK TESTING PRODUCT SELECTION CRITERIA</b> .....	<b>26</b>
1. Group Selection - Factors For Consideration .....	26
2. Model Selection - Factors For Consideration .....	26
3. Unit Selection – Process.....	27
<b>ATTACHMENT B: SELECTION CRITERIA USED IN THE UNITED STATES</b> .....	<b>29</b>
<b>ATTACHMENT C: AUSTRALIAN COMPETITION AND CONSUMER COMMISSION (ACCC) COMPLIANCE AND ENFORCEMENT POLICY</b> .....	<b>31</b>
<b>ATTACHMENT D: WEIGHTING FORM</b> .....	<b>34</b>
<b>LIST OF TABLES</b>	
Table 1 – Estimated savings in greenhouse gas emissions from regulations by product category (aggregated) .....	15
Table 2: Electric appliances and equipment regulated for energy efficiency to 2012 .....	19
Table 3: Ranking scores for criteria.....	21



---

**LIST OF FIGURES**

Figure 1: Survey of MV&E regimes and activities in selected countries: Product selection criteria for verification testing (MEA, 2010b) .....11

Figure 2: Share of products by category to fail Stage 2 tests, 2004/5 to 2010/11.....17

Figure 3: The share of check tests undertaken and approved registrations 1991/2-2010/11..... 19

# Glossary

The following terms and definition are used in this report:

<b>Check Testing</b>	Selecting a product model for independent laboratory testing to the relevant Australian/New Zealand Standard to verify compliance with MEPS and supplier declarations on energy performance.
<b>Compliance</b>	Defined as the actions of a program participant that are in accordance with program requirements, even for voluntary programs (as the participant makes a commitment to any program requirements - even if they're not legally binding).
<b>Compliance Regime</b>	A comprehensive set of program specific processes purposefully established to check conformity with <u>all</u> program requirements, including facilitation and education; monitoring; market surveillance and verification; enforcement and reporting. Also including methodologies to ensure errors are found and corrected and violations of requirements are returned to the permitted range or, if necessary, sanctions applied. It protects suppliers by making wilful non-compliance unacceptable.
<b>E3 Committee</b>	The Equipment Energy Efficiency Committee comprising officials from the Commonwealth, State and Territory government agencies and representatives from New Zealand. The Committee manages the E3 energy efficiency program for equipment and appliances in Australia and New Zealand.
<b>Energy Labelling</b>	The use of a label to describe the energy performance of a product.
<b>Energy Performance</b>	The characteristics of a product in respect to the energy or power it consumes under certain conditions.
<b>GEMS</b>	Greenhouse and Energy Minimum Performance Standards legislation
<b>MEPS</b>	Minimum energy performance standards. Mandatory requirements applying to energy-using equipment and appliances.
<b>Model</b>	A specific unit or variety of a product.
<b>Non-compliance</b>	Any instance deemed by the 'compliance regime' to be discordant with requirements of a program.
<b>Product</b>	A category of appliance that is included, either voluntarily or mandatorily in an energy efficiency program. A product may have a number of (product) models.
<b>S&amp;L Programs</b>	Standards and labelling programs.
<b>Sample</b>	An individual product selected for the purpose of testing.
<b>Screen test</b>	An initial process to determine whether the performance of an individual product conforms to the requirements of an energy efficiency program. Also referred to as a Stage 1 Check Test.
<b>Stage 2 test</b>	A process to finally determine compliance, following a failure at Stage 1.
<b>Standard</b>	A protocol describing the methodology for testing the performance of a product. Often published either by a national or international standards body, or an industry organisation.
<b>Supplier</b>	Defined as a manufacturer, importer or wholesaler of appliances or products included in an energy efficiency program.
<b>Test</b>	A laboratory procedure to determine one or more characteristics of a given product, according to a specified methodology.
<b>Verification Testing</b>	Verification testing in S&L programs is used to substantiate the performance of a product in accordance with the specified test methodology. It may also be referred to as check testing.  Individual program requirements will specify who may conduct verification tests (e.g. an independent test laboratory, via a third party laboratory or in-house in the form of a 'self-test'), and the sample size and selection process.

# Executive summary

---

The national Equipment Energy Efficiency (E3) Program has existed in some form in Australia for 20 years with engagement by New Zealand agencies for the last 15 years. For much of this time, the regulatory agencies managing the Program have undertaken verification testing to check if suppliers are complying with mandatory standards.

The manner in which equipment is chosen for verification testing is the subject of this report. The selection criteria (as well as the verification test processes) have evolved over time but with the Australian Government announcing plans to administer Greenhouse and Energy Minimum Standards legislation in Australia it is timely to look again at the appropriateness of the selection criteria.

Mark Ellis and Associates, a consulting firm with comprehensive knowledge of the compliance regimes used internationally in standards and labelling programs, was engaged to assist Departmental staff examining the criteria in use today. These selection criteria were examined against criteria used by comparable schemes overseas and by other regulatory agencies in Australia.

The existing selection criteria match closely the types of criteria used by comparable programs and were found to have served the Program well over this time. The existing criteria have assisted regulatory agencies manage the twin objectives of fairly assessing competitor complaints and non-compliance risk. The introduction of a scoring system against specified selection criteria will provide for an enhanced selection process and greater transparency of the selection process for products undergoing verification testing.

The process of selecting products for testing will be changed to ensure that there is a spread of testing across all equipment types regulated under the Program. A scoring system will be implemented using the range of selection criteria to identify and rank products that pose the greatest risk to the program. The use of the scoring system will also help to improve transparency and disclosure surrounding the use of selection criteria.

While confidentiality will continue while investigations are conducted, a more open scheme including public reporting in several forms will become a feature of the revised process. This more open system will be achieved by documenting reasons for product selection which will be available to suppliers and eventually third-parties. This greater disclosure should permit better analysis by E3 and third parties to determine if the selection process is indeed delivering benefits to regulatory agencies.

This move to more openness in reporting on equipment selection will take the form of recording the decisions for choosing specific models for testing using the revised criteria. It will also take the form of historical reviews to assess whether the selection criteria, as applied, have delivered a cost-effective check testing regime. The historical reviews will assess if the selection criteria continue to focus attention on the areas of most compliance risk to the Program.

# 1. Introduction

This report examines the process used by the E3 Committee to select products for check testing from amongst those that are regulated for energy efficiency in Australia and New Zealand. It examines the criteria used in similar compliance programs in Australia and overseas and recommends improvements to the product selection criteria to better target products more at risk of not meeting the requirements of this mandatory program. The consulting firm, Mark Ellis and Associates, provided much of the analysis contained in this report though the policy decisions are those of the E3 Committee.

Verification testing (also known as check testing) has been undertaken according to published criteria for many years. Those criteria were often derived from methodology specified by the test standard or protocol. Verification testing is the most certain means to confirm whether individual models meet the performance requirements specified in the mandatory program.

The national check testing program is just one element of the overall compliance regime managed by the E3 Committee, in conjunction with state-based regulators. Other compliance activities range across:

- Information and support through education, stakeholder forums and other communication activities.
- In-store surveys to check that the correct labels are being displayed<sup>1</sup>.
- Inspections to ensure that products on the market are registered<sup>2</sup>.
- Administrative settlement actions for matters where a formal penalty or other proceedings are not warranted, including referrals to other enforcement agencies like the Australian Competition and Consumer Commission.
- Court and other related proceedings (for example infringement notices) for matters where such action is warranted.

Check testing remains the cornerstone of the Program's compliance activities and provides several important functions with respect to the energy efficiency regulatory program:

- It confirms appliances are meeting their declared energy efficiency and therefore the projected energy and greenhouse gas savings are actually being delivered;
- It safeguards the integrity of program by maintaining consumer and industry confidence in the energy performance labels and standards, by publicly holding suppliers to account; and
- It protects the investment made by industry who are producing compliant equipment, from unfair competition by non-compliant products (i.e. being undercut by products without the same compliance cost structures). (MEA, 2010a)

## 1.1 The Check Testing Process

The check testing process has been developed over many years taking into consideration stakeholder input. It strives to provide a balance between a simple, affordable scheme for suppliers while ensuring the energy and environmental benefits associated with regulation are achieved for consumers. Importantly, it also builds in safeguards to ensure regulatory agencies are not placed in a position of accusing a supplier of not meeting mandatory requirements without strong and sound grounds.

The first step in the check testing process is the Stage 1 Check Test (also known as the screen test) usually performed on one sample of the model randomly sourced and independently purchased (usually through a retail

---

<sup>1</sup> See for example: <http://www.energyrating.gov.au/library/details201101-aircon-labelling-survey.html>

<sup>2</sup> See for example: <http://www.energyrating.gov.au/library/details200910-labelling-compliance-survey.html>

---

outlet) and paid for by the regulatory authority. The test is conducted by a laboratory accredited for that form of check testing, in accordance with the requirements of the relevant standard identified in the regulation.

If the model is found to be non-compliant, the supplier has the choice of either accepting the result and nominating to cancel the model's registration (which withdraws the right for the product to be lawfully sold) or challenging the initial finding by agreeing to proceed to Stage 2 Check Testing.

Depending on the product type this second stage of testing involves testing of a minimum of two further units organised and paid for by the registration holder at an accredited test facility of their choice. Under the Stage 2 terms, the supplier has up to 15 working days to provide a written response and a timetable for Stage 2 check testing from the date of notification of Stage 1 failure. The units to be tested under Stage 2 are randomly selected from stock by a representative of the E3 Program.

## 1.2 Aims of Check Testing

The Australian Competition and Consumer Commission (ACCC) propose reasons or "principles" for regulatory action. Its primary aims in enforcing the Trade Practices Act are to:

- stop the unlawful conduct;
- deter future offending conduct;
- undo the harm caused by the contravening conduct (for example by corrective advertising or restitution for consumers and businesses adversely affected);
- encourage the effective use of compliance systems; and
- where warranted, punish the wrongdoer by the imposition of penalties or fines. (ACCC, 2010)

The check tests conducted by the E3 Program are the detection element of this quality assurance process. They are designed to protect the integrity of the E3 Program and safeguard the economic and environmental savings the Program aims to achieve.

The E3 Committee:

"... conducts a national check testing program to provide the community and stakeholders with data on accuracy of the labelling scheme and compliance by suppliers. It is the quality assurance element that ensures that the labelling and MEPS scheme maintains high levels of credibility both with consumers and manufacturers." (E3, 2011c)

Central to this compliance activity is establishing the belief amongst product suppliers that instances of non-compliance will be detected and acted upon; and that the penalties imposed will outweigh any potential benefit achieved through selling non-compliant products. This concept of deterrence is widely promoted as an appropriate framework for compliance by enforcement authorities. The following is an excerpt from the European Commission guide to best practice in market surveillance:

"Compliance behaviour is stimulated when the risk of being inspected is perceived as being high. The perceived risk of being inspected is of course largely under the control of the market surveillance authority which can determine the frequency of inspections in the target group. The effect on behaviour can be increased when the activities to be undertaken are widely communicated in the target group, as this raises the perceived risk of being inspected (enforcement communication)." (EC, 2009)

## 1.3 Product Selection Guidelines

The number of tests conducted each year by the E3 Program depends on the available budget and the cost of individual tests. The testing program has grown over recent years and is currently testing over 300 products per annum. While this number may appear impressive when compared to the testing conducted by many other nations, it is still less than 2% of the approximately 16,000 current approved product registrations included under the E3 Program. The selection criteria have been developed because a credible robust enforcement regime requires targeted testing of at-risk products.

The existing selection criteria, within the Administrative Guidelines, were last updated in 2005. With the forthcoming introduction of the proposed Commonwealth legislation for Greenhouse and Energy Minimum Standards (GEMS) it is timely to reconsider their application. Since the selection criteria were developed, an

---

analysis of the results of over 1,000 tests conducted since 1991 has been conducted. This analysis has also provided an insight into the use and effectiveness of these criteria (see E3, 2011a; 2011b). The proposed new GEMS legislative framework provides an opportunity to review the suitability of the existing selection criteria for the new compliance and enforcement capacities contained in the proposed legislation. With these developments in mind, the E3 Committee has decided to review not only the product selection criteria used in association with the check testing program but also the companion procedures adopted in the check-testing process.

This report into the selection criteria aims to highlight the main issues, discuss the options and records the proposals from the E3 Program management committee to allow for comment by stakeholders before the new criteria and processes commence with the passage of the GEMS legislation.

## 2. Existing Guidelines

### 2.1 E3 Guidelines

The E3 Administrative Guidelines (section 4.7) have provided the basis for the selection of models for checktesting. The E3 Program has never used random selection as the basis of product selection, but rather focussed on products that were considered to have a greater likelihood of non-compliance.

The selection of models for check testing is on the basis that:

“Models to be check tested are not selected on a random or statistical basis but rather on the basis of a series of factors that are considered to increase the risk of failure. In addition, regulatory agencies will consider complaints by third parties and will take action if the complaint includes a test report conducted by a NATA accredited laboratory that demonstrates a compliance failure in a product. The selection criteria for check testing are explained in Attachment 5.” (E3 Administrative Guidelines, 2005)

Attachment A in this report is reprinted from the E3 Administrative Guidelines and provides additional insight into the selection of product groups. It explains the factors for considering individual models for testing, encouraging coverage of all product categories but a focus on those with the highest number of sales, new models and those with a demonstrated history of non-compliance.

The existing E3 Administrative Guidelines provide an explanation of the selection criteria for the selection of individual models:

- Newer models: because of their potential to remain on the market for a longer period as compared to older models, except where models have been on the market for 3 years or more without being subjected to testing;
- Models with high volumes of sales: because of their greater potential to impact on energy usage as compared to models with low sales volumes;
- Models with the highest claims for energy efficiency (e.g. high star ratings): because of the market’s higher expectations with respect to the performance of these models as compared to models with low ratings;
- Suppliers with a demonstrated record of check testing non-compliance: because of the likelihood of a continuation of such historical trends;
- Models about which complaints have been received from third parties such as competitors, consumers, consumer groups or regulatory agencies; and
- New brands to the Australian market.

This list of selection criteria actually contains or mixes two types of selection factors, those intended to indicate a higher likelihood of failure, and those with the greatest potential impact on the energy and greenhouse savings. These two types of criteria continue to appear relevant and reasonable as the reasons for maintaining similar selection criteria into the future.

### 2.2 Australian consumer compliance and enforcement guidelines

Enforcement actions by the E3 Committee have been and will continue to be undertaken in association with the ACCC. It is therefore important that products selected for testing meet the priorities of both organisations. The ACCC prioritises transgressions with the potential to provide the greatest overall impact on consumers and businesses. The following published criteria reflect the ACCC approach to choosing between competing investigations:

- conduct of significant public interest or concern;

- conduct resulting in a significant consumer detriment;
- conduct resulting in a substantial consumer (including small business) detriment;
- anticompetitive conduct involving cartel behaviour or misuse of market power;
- unconscionable conduct, particularly involving large national companies or traders;
- conduct demonstrating a blatant disregard for the law;
- conduct involving issues of national or international significance;
- conduct detrimentally affecting disadvantaged or vulnerable consumer groups;
- conduct in concentrated markets which impacts on small business consumers or suppliers;
- conduct involving a significant new or emerging market issue;
- conduct that is industry-wide or is likely to become widespread if the ACCC does not intervene;
- where ACCC action is likely to have a worthwhile educative or deterrent effect; and/or
- where the person, business or industry has a history of previous contraventions of competition, consumer protection or fair trading laws.

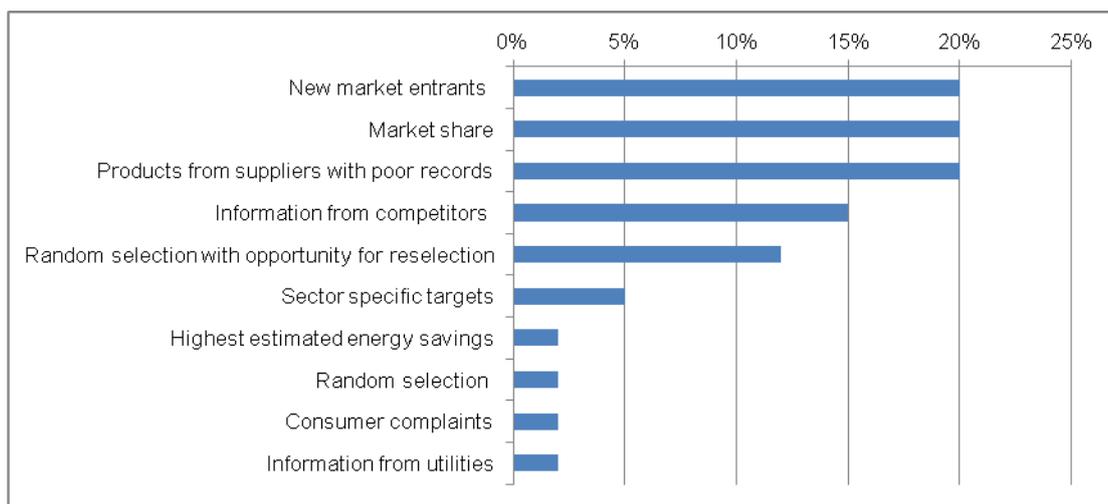
Where appropriate the ACCC may also pursue matters that test or clarify the law. (ACCC, 2012 and Attachment C)

## 2.3 Examples of overseas guidelines

The active promotion and publication of product selection criteria for check testing is not common in many countries but the fact that selection criteria exist is definitely on the public record. A 2009/10 survey of energy efficiency programs in 14 (mainly G20) countries did show it is far more common to select products according to a set of criteria rather than choose a random sample for testing (Figure 1). (MEA, 2010b)

Generally the criteria are used in combination, and while different programs place emphasis on particular criteria, there is considerable similarity in the type of criteria used.

**Figure 1: Survey of MV&E regimes and activities in selected countries: Product selection criteria for verification testing (MEA, 2010b)**



In the European Union, the best practice guide on market surveillance for consumer protection encourages targeting at ‘operators that are most likely to break the rules’. This targeting maximises effectiveness and reduces burdens on industry, as outlined in the following text:

“The practice of market surveillance comprises checks at economic operators that trade the products. Limited resources generally do not allow checking all the operators active in the market segments that need to be covered.

---

The market surveillance authorities must therefore decide which operators should be checked. The choices made determine the effectiveness of the market surveillance efforts to a considerable extent. After all, market surveillance practice indicates that some operators follow the rules while others frequently break them. Targeting market surveillance at those operators that are most likely to break the rules is more effective than inspection of randomly selected businesses. This is also in line with political priorities concerning 'better regulation' like those established at EU Level (see [http://ec.europa.eu/enterprise/regulation/better\\_regulation/index\\_en.htm](http://ec.europa.eu/enterprise/regulation/better_regulation/index_en.htm)) and the wish to reduce the administrative burden on European industry." (EC, 2009)

The UK Market Transformation Programme (MTP) is a similar regulatory program to that conducted in Australia. It has no published policy on the selection of models but it does publish reports on test results which contain a description of the criteria used in each case. This extract from a 2009 report found the key criteria used were market share and time on the market:

"The brand selection covers the top selling brands in terms of units sold based on 2007 data. The models were selected from these brands listed in 2007 GFK Market Data and broadly reflected the range of appliances in that brand in terms of proportion of sales and time on market. The top 21 brands selected cover 91% of the market and each had one sample appliance tested. The top three brands represent 62% of the market and had an additional appliance of a different type tested." (MTP, 2009)

Until recently, verification testing undertaken by the US Department of Energy (DOE) in support of its program was limited by legislation to products that were suspected to be violating a standard as identified by written information from another entity. This restriction was removed in March 2011, so that the DOE can now initiate testing on its own as well as in response to complaint.

The DOE also undertakes testing in support of the ENERGY STAR® program in the US where the model selection criteria includes:

- The newest products and technologies;
- Manufacturers and product categories with a history of non-compliance;
- Ratings much higher than ENERGY STAR specification;
- Products that have requested a waiver from the DOE scheme;
- Credible information on a specific product's performance from a third party.

This DOE testing augments activities undertaken by the ENERGY STAR® Certification Body, who is required to randomly select 50% of models to be tested with the remaining models drawn from:

- Product classes for which previous models failed verification testing;
- Referrals from third parties; and
- Models with high sales volumes.

A full description of the relevant US documents are included as Attachment B.

These examples show that targeted product selection is widely preferred internationally over random sampling to identify products for testing. This outcome also might be explained by an examination of the quantum of funding available for testing. There may be a correlation between the small size of testing budgets and more selective testing, though the available data does not allow for this assertion to be tested by quantitative analysis. The overseas analysis shows a similarity between the main targeting criteria used by energy efficiency schemes, although the emphasis varies between programs.

The lessons from overseas on the selection of models for testing can be said to support the Australian approach; that is based on criteria that reflect a risk assessment. Risk needs to be interpreted widely in this context; to include risks posed by poor product coverage or non-responsiveness to stakeholder complaints, as well as those elements more traditionally associated with risk already included as part of the selection criteria.

# 3. Options for Selection Criteria

## 3.1 Objectives

The integrity of the E3 Program will be compromised if regulated products do not meet minimum energy performance levels or do not perform as claimed on the label. This is likely to occur if:

- consumers do not receive the benefit claimed by the supplier on the label or in the product sales literature.
- compliant product suppliers do not gain a return on the investment made in producing energy efficient equipment because their competitors are able to avoid those investments when making non-compliant products.
- the program fails to deliver the level of economic and environmental savings expected by governments.

The use of robust selection criteria can assist in avoiding this outcome by maximising the deterrence value of the testing program and targeting products where the impact of non-compliance has the greatest potential impact on the energy and greenhouse savings of the program. The deterrence effect is maximised when suppliers consider that instances of non-compliance are likely to be detected and followed-up by intervention (MEA, 2010a). The use of selection criteria contribute to achieving this goal by identifying products more likely to be non-compliant.

This approach is also economically sensible since, with a limited budget, E3 is more likely to identify a larger proportion of non-compliant products through targeting as compared to the random selection of products. The EU best practice guide on market surveillance, endorses this approach:

“Targeting market surveillance at those operators that are most likely to break the rules is more effective than inspection of randomly selected businesses.”

The E3 Program proposes to adopt three objectives for future selection criteria:

1. to identify products with a higher than average risk of failure to meet MEPS or energy performance claims by responding to market intelligence;
2. to identify products which have the greatest potential impact on the energy and greenhouse savings of the Program; and
3. to cover each category of appliance and equipment products regulated under the Program.

These objectives will help guide the creation of selection criteria that pinpoint the individual models for testing that will deliver the most benefit to the E3 Program.

## 3.2 Criteria to identify products with a higher risk of not meeting performance claims, reacting to market intelligence

There are a number of reliable sources of market intelligence that highlight potential non-compliance. These include competitor complaints, intelligence from overseas testing programs and intelligence from consumer groups and individuals.

### 3.2.1 Complaints from competitors

Competitors are well placed to identify non-compliant products and have a commercial interest as well as public interest in bringing this to the attention of regulators. As a result many energy efficiency programs overseas place considerable reliance upon intelligence provided by market suppliers.

Regulatory agencies, however, must critically assess these competitor complaints to avoid accepting claims with malicious intent or made with little or no substantiation. Accepting such complaints without full assessment could impose unwanted costs on the testing budget and unfairly burden the accused supplier. Therefore, the E3

---

Committee seeks to strike a reasonable balance between encouraging competitor complaint and requiring some independent substantiation of those complaints. The selection criteria will weight the information against the following hierarchy:

- Competitor complaint with evidence supplied that is compelling and free from any suggestion of tampering, where there is willingness to supply a test report from a NATA accredited laboratory and the tested unit to DCCEE as evidence;
- Competitor complaint with evidence that goes to establish non-compliance but is from in-house sources or could be questioned on the basis of competitive bias; and
- Complaint which might be considered expressing a suspicion of non-compliance but without supporting evidence.

The E3 Committee will establish a weighting for this criterion of between 5 and 25 depending on the quality and source of the information.

### **3.2.2 Intelligence from consumer groups and individuals**

Consumer and advocacy groups, most notably the Australian Consumers Association, have in the past provided substantial evidence of non-compliance for individual models based on in-house testing. The E3 Committee will continue to encourage the provision of information from these sources as they are more likely to identify instances of non-compliance as borne out by the results of investigating such complaints in the past.

Individual consumers may be less likely to be in a position to provide evidence of a breach, although they may be able to provide some information on non-performance and anomalies. Where there are a reasonable number of these types of complaints about a supplier or a particular model, these should be taken into account for future investigation.

The E3 Committee will establish a weighting for this criterion of between 5 and 25 depending on the quality and source of the information.

### **3.2.3 Intelligence from overseas testing programs**

Many of the product categories regulated under the E3 Program are also subject to verification testing by energy efficiency regulators and program managers overseas. It is reasonable to assume that products which have failed to meet the performance criteria in an overseas market may also fail to meet Australian requirements and therefore should be targeted for testing<sup>3</sup>. This intelligence could take the form of detailed test results on particular models that may be sold locally or timely reporting on suppliers under scrutiny in markets where the brand is traded in Australia or New Zealand.

The explicit addition of this criterion would be useful in itself as a deterrent. It reinforces the linkages between regulators in Australia and their overseas equivalents in the minds of multi-national suppliers. It would also help legitimise the developing exchange of information between regulatory agencies involved in standards and labelling programs.

The E3 Committee will establish a weighting for this criterion of between 5 and 25 depending on the quality of the information.

## **3.3 Criteria to identify products which have the greatest potential to impact on the energy and greenhouse savings of the Program**

The following set of criteria are proposed to target testing products where non-compliance places enhanced risk of the program failing to meet the energy and greenhouse targets claimed as a result of regulating the equipment type.

### **3.3.1 Models with a high market share**

In many product categories, there are a relatively small number of products that command a large proportion of the annual sales, and are therefore responsible for a disproportionately high level of energy consumption. As a

---

<sup>3</sup> For example, the Australia government also took action against LG for the incorrect testing of some refrigerators, following using the detection of this practice by the US Department of Energy as the trigger to investigate in Australia.

result, ensuring that the best selling models within a product category meet performance requirements is important in order to safeguard the overall energy and greenhouse emission savings of the E3 Program.

Where it is not possible to determine the market share of newer product models, for example, where sales data is not yet available for that particular model, the use of past sales data for similar models or other independent market data should be used to inform the weighting of this criterion.

The E3 Committee will establish a weighting for this criterion of between 0 and 15.

### 3.3.2 Product categories with the highest greenhouse gas emissions

As shown in Table 1, there is considerable variation in the expected energy savings from regulations on different product categories. As a result, the impact of non-compliant models that represent a high market share in those categories responsible for a large proportion of savings will be greater than for equivalent models in categories with lower greenhouse savings estimates.

This suggests that greater emphasis should be placed on product categories with the highest savings estimates, particularly where these categories haven't been covered in testing recently, with a focus on products with the largest market share.

The E3 Committee will establish a weighting for this criterion of 5 for products which have a cumulative impact of greater than 10,000 kt CO<sub>2</sub> below BAU by 2030 and 0 for products below that number.

**Table 1 – Estimated savings in greenhouse gas emissions from regulations by product category (aggregated)**

Product Categories	Impact in 2020 (kt CO <sub>2</sub> below BAU)	Impact in 2030 (kt CO <sub>2</sub> below BAU)	Cumulative impact 2011- 2030 (kt CO <sub>2</sub> below BAU)
<b>Possible 5 points based on emission potential</b>			
Household Refrigerators & Freezers	3,758	5,520	81,839
Lamp efficacy & LV transformer MEPS	2,849	3,796	61,943
Televisions - labelling & MEPS	3,554	4,792	59,035
Distribution transformers - 2004 MEPS	2,293	2,351	44,037
Air conditioners (fixed) labelling and MEPS to 2010	2,166	2,082	39,387
Motors - MEPS 2001, 2006	878	928	19,144
Ballasts - 2003 MEPS	710	946	15,436
Electric storage water heaters - MEPS	693	602	15,341
<b>Not a priority based on emission potential</b>			
Linear fluorescent lamps - 2005 MEPS	344	459	7,490
AC Chillers - MEPS 2009	417	563	7,636
External Power Supplies MEPS	409	454	7,430
Commercial Refrigeration - 2006 MEPS	291	323	5,285
Close Control ACs - MEPS	206	265	4,013
Clothes washers, dishwashers, clothes dryers	170	199	3,506
Set Top Boxes - MEPS	121	77	2,415

(Source: Draft E3 Work Plan, 2011-14, July 2011)

---

### 3.3.3 Past History Criteria

The E3 Program administrators propose to use criteria that identify products sold by companies deemed to have a higher probability of failure, based on previous experience. These criteria will use a simple system prioritising:

- poor past history (brand, test house, or entire product category).
- no past history to establish compliance (new supplier, new test house or just new model).
- compliant past history (brand, test house and/or product category) from past testing.

#### 3.3.3.1 Brands with a history of non-compliance

Experience shows that some brands do have an above average level of non-compliance, sometimes in particular product categories and sometimes across several. An examination of the records since check testing commenced shows a number of brands which have had two or more registrations cancelled by regulators, indicating that these might be worthwhile targets for future investigation. The E3 Committee will establish a weighting for this criterion of 5.

Models registered by brands for which there is no history within the Program also represent a slightly greater risk of non-compliance since the absence of established compliance gives rise to a presumption that the brand may not have a full understanding of the Program requirements. The E3 Committee will establish a weighting for this criterion of 5.

Brands that have been tested many times and found compliant on numerous occasions will be weighted at -5.

#### 3.3.3.2 Product categories with comparatively higher levels of non-compliance

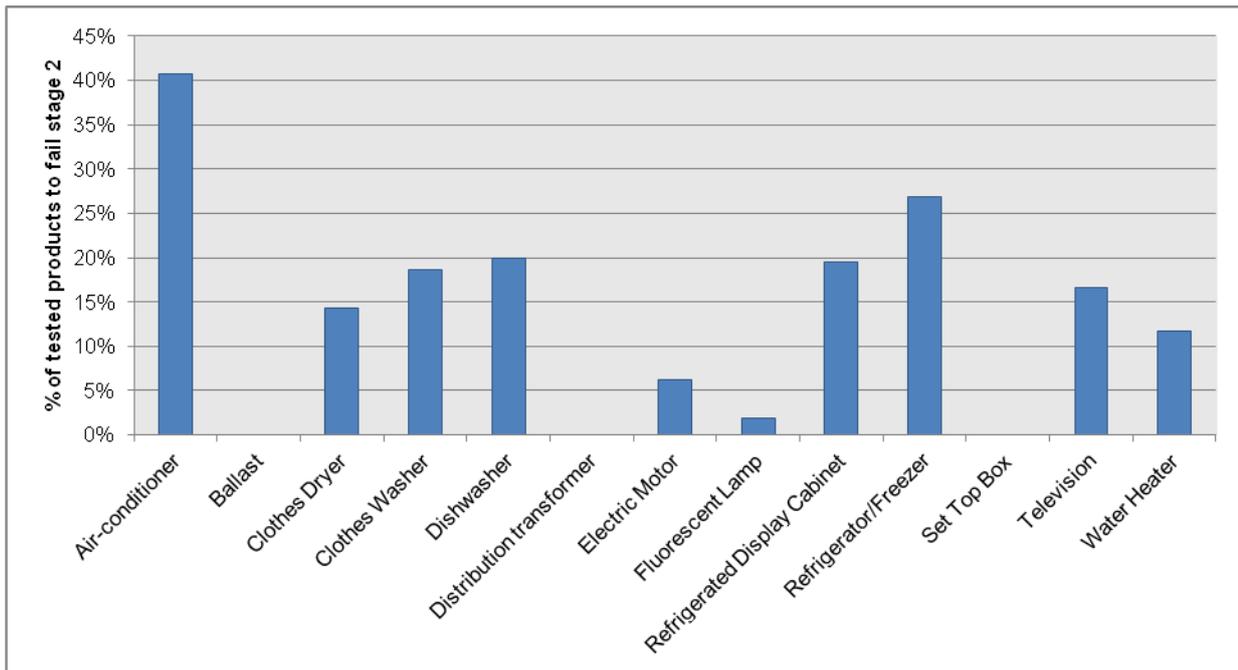
Figure 2 provides the historical failure rates across equipment types. The proportion of tested products that have failed testing varies considerably by product category, from 41% in the case of air conditioners to 0% for lighting ballasts, distribution transformers and set top boxes.

There is no obvious correlation between the length of time that a product has been regulated and compliance rates. Regulations have been in force for air conditioners since 2001 and yet non-compliance rates are at 41%, while products such as televisions show better compliance rates even though they have been regulated for a short period of time.

This suggests that targeting those product categories with a record of non-compliance should be one of the selection criteria. This would not negate the need to test models from all product categories but would focus testing toward product categories with a more significant failure rate than other categories. The E3 Committee will explore focusing testing toward air conditioners and other product categories with higher rates of non-compliance in 2011/12 to examine the merits of any weighting factor for this criterion.

The E3 Committee will weight air conditioners under this criterion as between 5 and 10 depending on the category, other product types with a failure rate at or above 15% as 5 and products under 15% as 0.

**Figure 2: Share of products by category to fail Stage 2 tests, 2004/5 to 2010/11**



### 3.3.3.3 Models supported by test laboratories with a past history of failing check tests or without a past history

In a similar fashion to brand risk analysis, test laboratory past history or limited history can be a risk factor to the Program. The maintenance of high standards by test laboratories underpins the integrity of the E3 Program. Where check testing results indicate a high proportion of failures of models supported by reports from particular test facilities, there is justification to consider that future tests conducted by these laboratories represent an above average risk of failure, especially if they are not in a position to demonstrate remedial action.

As the scope of the E3 Program broadens to encompass new products, registrations have been supported by an increasing number of test laboratories. The Australian Government policy is to allow for testing to be undertaken by as wide a range of suppliers and third parties as possible in order to not unduly restrict access, to reduce compliance costs for traded goods and to avoid any capacity limitations of Australian test laboratories. The E3 Program will examine past testing records with a view to establishing a list of test houses with more than 2 failures to be targeted in future check testing.

Australian regulators are not in a position to have full knowledge of the accreditation or ability of all test laboratories to understand and conduct tests according to the requirements of the relevant Australian/ New Zealand Standards, particularly those overseas. In order to ensure that laboratories maintain the technical standards of the Program, it is important that laboratories undertaking tests for the first time are checked in a timely fashion.

As the risk of problems is unknown for test houses previously untried under the scheme, the risk analysis should be weighted toward facilities with a poor history or without any history of involvement in the Australian or country-of-origin energy efficiency program. Therefore the E3 Committee will weight products registered with test reports from test houses:

- with no history at 10;
- where a subsequent check test has resulted in a failure at 5; and
- where subsequent check tests have resulted in multiple failures at 10.

---

#### **3.3.3.4 New product categories**

As noted above, recently regulated product categories do not appear to show higher than average rates of non-compliance, however this cannot be guaranteed in the future. Testing products in newly added product categories serves the highly beneficial function of demonstrating to new industries that E3 takes compliance seriously. It also demonstrates to long regulated product areas that compliance responsibilities apply to everyone. It also provides impetus for E3 to ensure that appropriate verification processes are in place, including independent laboratories with demonstrated expertise.

This would weight newly regulated products (less than 5 years) somewhere between 0-10 with products regulated for longer than 5 years awarded 0.

### **3.4 Ensuring full coverage of all regulated equipment types**

There are currently more than 20 categories of regulated products, as listed in Table 2. To date, the largest number of check tests has been conducted on the products that have been regulated for the longest period. This relationship between the length of time a product has been regulated and the number of check-tests completed is not necessarily consistent. There are some product categories where little or no testing has been undertaken. In these cases, insufficient data exists to quantify the risk of non-compliance for that product type which in itself is a risk to the E3 Program.

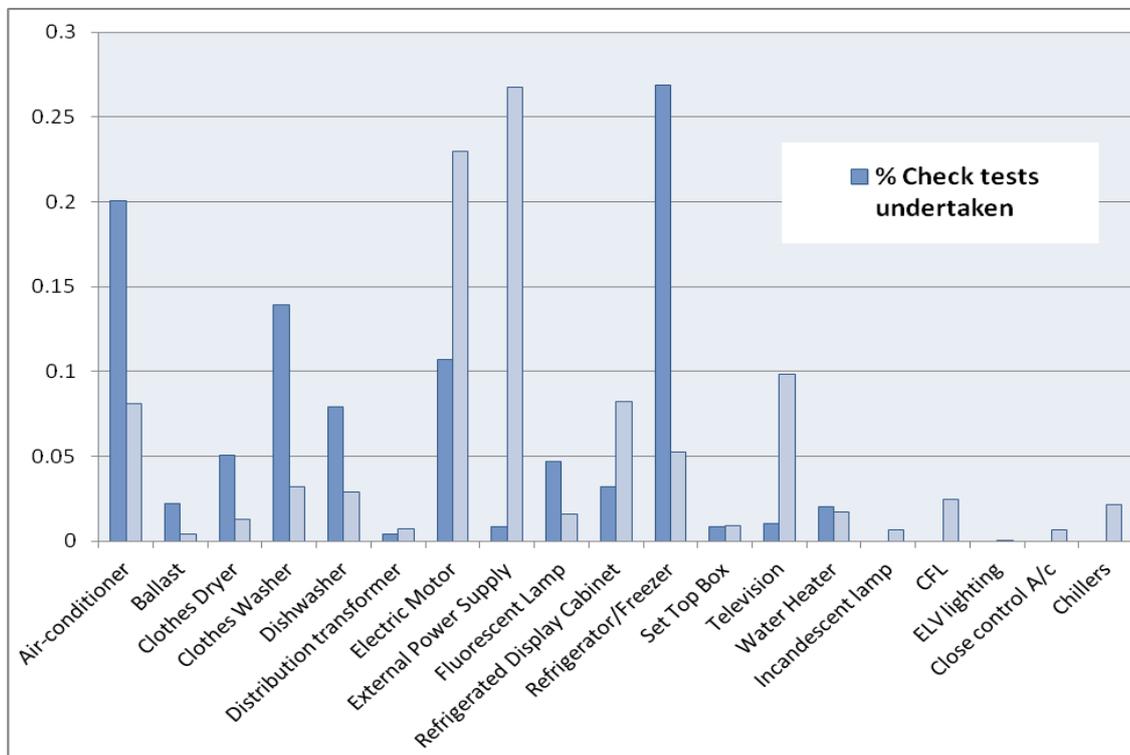
To meet the overall quality assurance aims of the testing program it is important that examples from all regulated product categories are tested. In order to ensure a more even spread of product testing and taking account of financial and resource constraints, the Program will focus testing on particular product types in each financial year in a cyclic approach, ensuring all products are identified as a priority item at times when they may represent a greater risk.

**Table 2: Electric appliances and equipment regulated for energy efficiency to 2012**

PRODUCT	MEPS	LABELLING
Chiller towers	2009	
Close Control Units (CCUs)	2009	
Single-phase air conditioners	2004, 2006 (2011)	ML: 1992, 2000, 2010
Three-phase air conditioners	2001, 2010 (2011)	VL: 2001, 2010
Refrigerator Display Cabinets	2004	-
Distribution Transformers	2004	-
Electric Motors (Three-phase)	2001, 2006	-
Electric Water Heaters	1999, 2005	-
External Power Supplies	2008	PM: 2009
Set Top Boxes	2009	-
Televisions	2009 (2012)	ML: 2009
Linear fluorescent ballasts	2003	VL
Linear fluorescent lamps	2004	VL
Self-ballasted CFLs	2009	
Incandescent lamps	2009	
Extra low voltage converters (ELVC)	2010	
Clothes dryers	-	ML: 1989, 2000
Clothes washers	-	ML: 1990, 2000
Dishwashers	-	ML: 1988, 2000
Refrigerators	1999, 2005	ML: 1986, 2000, 2010
Freezers	1999, 2005	ML: 1986, 2000, 2010

**Measures:** MEPS – minimum energy performance standards; ML- Mandatory Labelling; VL- Voluntary Labelling; PM – Performance Marking

**Figure 3: The share of check tests undertaken and approved registrations 1991/2-2010/11**



---

### 3.5 How it might all work

The scoring of criteria assist the Program staff select products for verification testing. The criteria are not used to assess the competing claims of all existing registrations but rather as a set of considerations allowing staff to choose between possible candidate products for verification testing. The criteria are generally applied to all current registrations of the product type selected in order to choose individual products for testing.

Products to be tested are selected from the 16,000 current registrations considering constraining factors like budget allocation, coverage of regulated products, market intelligence, potential to impact on energy and greenhouse savings and history of non-compliance. Approximately twice as many models are selected as are to be contracted for testing.

Products must reach a score of 25 or above to be check tested. Any models that achieve a score less than 25 will not be subjected to testing at this time, unless there are special circumstances that determine a need for testing of a particular model.

E3 proposes to make this selection process as transparent as possible. Staff involved in selecting products will record the reasons why individual products were selected and make those decisions available to the supplier upon request. This information may also be released in the form of an entry on a publicly accessible register. The information may also be aggregated and used to evaluate the criteria and the selection process.

The criteria are not intended to find models which achieve the highest possible rating. The criteria are about requiring staff selecting products for verification testing to undertake a transparent process with sound justification for selecting the models tested. The numerical weighting for each criterion provides an indication of its relative importance in the overall selection process.

From 2012, the E3 Committee proposes that a product that achieves a score of 25 or above meets the minimum threshold for being selected for verification testing. This minimum threshold may be adjusted on review of the process and with experience. Any future change to the scoring thresholds will be communicated to stakeholders.

Following implementation and a period of use of the selection criteria, the scores allocated to individual criterion will also be reviewed in light of the results achieved by the testing program to ensure that the weighting given to each criterion is satisfactory. It is also intended that the selection criteria will be reviewed against international programs to ensure that the E3 Program aligns with international best practice in regulatory compliance.

The E3 Committee recognises the balance it must strike between creating a workable scheme that identifies using risk products most suitable for testing while also ensuring all parties (whether they be product supplier, competitor or consumer) have confidence in the process through transparency and regular evaluation.

## 4. Applying the criteria

### 4.1 Prioritising criteria

The task of applying these criteria in practice will be assisted by having a weighting or scoring system for assessing the level of risk of failure and their relative priority, or the ability to rank models that satisfy several of the criteria. A criticism from some industry sources has been about a perceived lack of transparency or accountability in the selection of models for check testing. The use of a points score ranking tool would provide a way to combine multiple criteria that is both practical and transparent. It could also be made public should a supplier want to know the reasons for their product being selected.

The system would work by permitting the E3 Program to score a particular model according to the weighting of the selection criteria. The threshold may change with experience but at this early stage of development a score of 25 points has been chosen as the minimum score justifying a check test. Table 3 provides a listing of the selection criteria and proposed rating score for each criteria. Individual models considered for testing are then given a total score that is the sum of the values for all the criteria satisfied by that model.

**Table 3: Ranking scores for criteria**

Criteria	To identify products with a high risk of failure	To identify products which have the greatest potential impact on the E3 Program
1a. Complaints from competitors		
1b. Intelligence from consumer groups and individuals		
1c. Intelligence from overseas testing programs		
Supported by independent evidence	25	
Supported by non-independent evidence	10	
Without evidence	5	
2. Models with a high market share		0-15
3. Brands with a history of non-compliance	5	
4. Product categories with the highest greenhouse gas emissions		0-5
5. New Brands or brands with limited exposure to the Program	5	
6. Brands with a history of passing check testing	-5	
7. Product categories with comparatively high levels of non-compliance	0-10	
8. Models supported by test laboratories with a past history of failing check tests	5-10	
10. Models supported by test laboratories without a past history	10	
11. New product categories. Less than 5 yrs =0-10/ longer than 5 yrs = 0	0-10	

The following scenarios may help explain how the criteria might be used in practice.

- Example One: a competitor complains about a specific model (supplying a test report from their in-house non-NATA accredited facility) which relates to a supplier with a poor history. While these matters alone generate 15 points (1b = 10 points + 4 =5 points) these criteria are not enough to meet the minimum points score. Staff will examine other criteria to explore if this complaint should lead to verification testing.
- Example Two, the Australian Consumers Association complains about an air conditioner model it had tested in a NATA accredited facility which failed the applicable minimum energy performance standard. This complaint about a product type with the worst comparative history (1a = 20 points+ 7 = 10 points) is sufficient to justify verification testing without examining any other criterion.

The E3 Committee will publish a priority ranking for check testing in a cycle designed to ensure complete coverage.

---

## **4.2 Linking available budget to future testing**

The E3 Committee proposes to publish an indication of the number of models to be tested each year through the application of these criteria. This information will be indicative as some scope will be retained so that market complaint and intelligence in cases of unforeseen non-compliance can be responded to. The E3 Committee will develop a standard format for communicating this information to stakeholders.

## 5. Conclusions

Product compliance with energy efficiency regulations is the reasonable expectation of all stakeholder groups. A viable compliance scheme delivers on these expectations and will also have other benefits including to:

- confirm the expected energy and greenhouse gas savings attributable to the energy efficiency programs; and
- protect the investments made by industry and consumers in more efficient energy-using products.

The E3 Program recognises that an effective compliance regime is a vital component of quality assurance and is working towards an improved process for the selection of product models for check testing. E3 intends to modify the current system for the selection of models for testing to improve transparency and reporting.

The E3 Program currently uses selection criteria outlined in their Administrative Guidelines which include a complaints and a risk assessment process to target verification tests at products that are more at risk of damaging the integrity of the Program. The experience of the other market surveillance agencies is that targeting products on this basis is more effective than random sampling, and represents the most efficient use of public funds. The E3 Program will continue with this approach but has included additional criteria to ensure check testing is allocated across all regulated products.

The resulting criteria better address the three key objectives of the selection process:

1. To identify products with a higher than average risk of failure to meet MEPS or energy performance claims.
2. To identify products which have the greatest potential impact on the energy and greenhouse savings of the Program.
3. To cover a selection of models from each category of appliances and equipment under the E3 regulatory program.

These objectives are further developed to best respond to reactive (i.e. in response to external intelligence and complaint), risk-based and program-wide selection criteria. The following eleven criteria will be used to assess the merits of check-testing particular models using a weighting system for each of the following criteria:

1. Complaints or intelligence
  - a. Complaints from competitors
  - b. Intelligence from consumer groups and individuals
  - c. Intelligence from overseas testing programs.
2. Models with a high market share.
3. Product categories with the highest greenhouse gas emissions.
4. Brands with a history of non-compliance.
5. Product categories with comparatively high levels of non-compliance.
6. Models supported by test laboratories with a history of failing check tests or without a past history.

Models will be selected for testing against the criteria. The final list of products recommended for check testing will contain products that have been scored at 25 or above using the weightings from the product selection criteria. Products with a score of less than 25 will not be tested, unless there are special circumstances that justify the testing of a particular model.

In order to meet the quality assurance aims of the testing program it is important that models from all regulated product categories are tested regularly. Previous allocation of check tests has meant that some of the categories of

---

currently regulated products have been subjected to very little or no testing. The process of selecting products for testing will be changed to ensure that there is a spread of testing across all equipment types regulated under the Program.

The E3 Committee will record the basis for each model selected for check testing and this information will be made available to suppliers on request, reported publicly in formats acceptable to the E3 Committee for aggregation or case study purposes and for possible analysis in evaluating the criteria. It is intended that this analysis will also help inform future reviews of the product selection criteria.

## 6. References

- ACCC (2012), *Compliance and enforcement policy*, Australian Competition and Consumer Commission, 2012.
- DOE (2011a), *DOE Verification Testing in Support of ENERGY STAR*, Department of Energy, April 22, 2011. Available at: [http://www1.eere.energy.gov/buildings/appliance\\_standards/pdfs/estar\\_verification\\_process.pdf](http://www1.eere.energy.gov/buildings/appliance_standards/pdfs/estar_verification_process.pdf)
- DOE (2011b), Federal Register Vol. 76, No. 44, Part II 10 CFR Parts 429, 430 and 431, *Energy Conservation Program: Certification, Compliance, and Enforcement for Consumer Products and Commercial and Industrial Equipment; Final Rule*, March 7, 2011. Available at: [http://www1.eere.energy.gov/buildings/appliance\\_standards/pdfs/cee\\_finalrule\\_notice.pdf](http://www1.eere.energy.gov/buildings/appliance_standards/pdfs/cee_finalrule_notice.pdf)
- E3 (2011a), *Performance Verified*, Revised criteria for selecting products for verification testing under the Equipment Energy Efficiency Program, April 2011
- E3 (2011b), *Refrigerator Energy Labelling and MEPS Compliance in the Australian Market* (Report 2011/08) available at: <http://www.energyrating.gov.au/library/details201108-refrigerator-labelling-compliance.html>
- E3 (2011c), *E3 Checktesting*, available at: <http://www.energyrating.gov.au/checktest.html>
- EC (2009), *Best Practice Techniques in Market Surveillance, safeguarding consumers supporting fair competition effective consultation*, a Prosafe Project supported by the European Commission DG-SANCO, consumer Affairs Directorate.
- ENERGY STAR (2010), *Conditions and Criteria for Recognition of Certification Bodies for the ENERGY STAR® Program*, August 23, 2010, available from: [http://www.energystar.gov/index.cfm?c=partners.enhanced\\_test\\_verification](http://www.energystar.gov/index.cfm?c=partners.enhanced_test_verification)
- MEA (2010a), *Compliance Counts: A Practitioner's Guidebook on Best Practice Monitoring, Verification, and Enforcement for Appliance Standards & Labeling*, Mark Ellis & Associates in partnership with the Collaborative Labeling & Appliance Standards Program (CLASP), September 2010.
- MEA (2010b), *A Survey of Monitoring, Verification and Enforcement Regimes and Activities in selected countries*, by Mark Ellis & Associates in partnership with the Collaborative Labeling & Appliance Standards Program (CLASP), June 2010
- MTP (2009), *Energy Label Market Picture Testing – Domestic Washer/Driers*, Market Transformation Program, UK.

# Attachment A: Existing Check Testing Product Selection Criteria

Recommendations for appliance and equipment groups and models to be tested are to be based on the following criteria with reference to the information sources listed under each factor noted below.

## **1. Group Selection - Factors For Consideration**

### **1.1 Plan to cover all Groups**

Over a two to three year period, there is a strategic plan to ensure that most major categories and types of appliances and equipment are included to ensure a broad and consistent coverage of the entire market.

Source of Information: Check test annual reports

### **1.2 Number and turnover of models**

Regard should be given to the numbers of models and the annual turnover of new models of each appliance group. Appliance groups will be given attention in proportion to such numbers and or turnover.

Source of information: Energy Labelling Register and Energy Labelling Brochures

### **1.3 History of non compliance in each appliance group**

Groups with a demonstrated history of high levels of non-compliance should be selected because of the likelihood of a continuation of such historical trends.

Source of information: Check test data base

## **2. Model Selection - Factors For Consideration**

A system of weighting and prioritisation for each the following factors is in use.

### **2.1 History of testing of specific models**

Models tested in previous years of the check test program should normally be excluded from any further testing unless specific evidence becomes available to suggest that a re-test is warranted.

Source of information: Check test data base

### **2.2 Age of Models**

Newer models should normally be given preference when considering models for check testing because of their potential to remain on the market for a longer period as compared to older models. The exception to this rule is models that have been on the market for a considerable period of time (3 years or more) without being subjected to testing.

Source of information: Energy Labelling Register and Energy Labelling Brochures

### **2.3 Volume of sales of models**

Models with high volumes of sales should normally be given preference when considering models for check testing because of their greater potential to impact on energy usage as compared to models with low sales volumes.

Source of information: Market Survey Data e.g. GFK Whitegoods survey, commercial market share reports.

### **2.4 Star rating of models**

Models with the highest claims for energy efficiency (eg. high star ratings) should normally be given preference when considering models for check testing because of the market's higher expectations with respect to the performance of these models as compared to models with low ratings.

Source of information: Energy Labelling Register and Energy Labelling Brochures, award nominations

---

## **2.5 Record of non compliance by supplier**

Suppliers with a demonstrated record of check testing non-compliance should be subject to greater scrutiny in the check testing program because of the likelihood of a continuation of such historical trends.

Source of information: Check test data base

## **2.6 Third party referrals**

Complaints as to the accuracy of express (labelling etc) or implied (MEPS) energy use/efficiency claims from third parties such as competitors, consumers, consumer groups or regulatory agencies, will be considered by the Manager, Check Testing Program. The Manager, Check Testing Program will be responsible for establishing a complaints handling mechanism that reflects best practice, and will include a 'complaints' report in the Annual Check Testing Report.

Source of information: Manufacturing Competitors either directly or via Regulators, ACA, or other sources.

## **2.7 New brands**

New Brands to the Australian market shall be selected as a higher priority for checktesting.

# **3. Unit Selection – Process**

This section sets out the process for selection of units for check testing.

## **3.1 Screen test selection**

Once a model has been selected for check testing, it is usual that the unit which is obtained for the initial screen test be purchased anonymously through a retail or wholesale supplier. Check tests are normally contracted on a confidential basis and normally only NAEEEEC and their contractors will be aware that particular models have been acquired for test. Nonetheless, the laboratory contracted to undertake the tests will ensure that the unit is stored securely with no access by any third parties while it is in their possession and will keep information on which product types, brands, models are under test strictly confidential.

## **3.2 Opportunity to view the test unit**

At the sole discretion of the Program administrator a product supplier may be offered the opportunity to attend the Laboratory and inspect the test unit on the following terms:

The inspection can, at the absolute discretion of the Laboratory, take place in the test rig or alternatively in a separate room outside the actual test area. The inspection shall occur on or before the day of the test as advised by the Laboratory.

Instead of attending, the Supplier may nominate a representative to attend the Laboratory in order to inspect the test unit on its behalf.

If the Supplier of the tested product is offered the opportunity to attend the Laboratory and inspect the test unit, the Supplier may request to be supplied with information by the Laboratory regarding the commissioning of the test unit (eg Refrigerant charge to be applied to a split system air conditioner) as well as details of user selectable settings or appliance operating procedures (eg program selection and dosing arrangements for detergents in a clothes washer test) to be used during the testing.

The Supplier cannot enter any part of the Laboratory without the approval of the testing officer at the Laboratory. The Supplier cannot attend the actual test of the test unit. If the Supplier is of the opinion that the test unit or information relating to its set up are unsatisfactory, the Supplier should inform the testing officer at the Laboratory and the Program Administrator of his /her views as soon as possible. The Program Administrator may direct that the test procedure be amended or a new test conducted if satisfied that it is appropriate to do so.

The time that the Supplier may take to view the test unit and the set up of the test is at the absolute discretion of the testing officer at the Laboratory.

The supplier shall be responsible for contacting the testing laboratory and making all necessary arrangements with them to attend the test. Any rescheduling of test times that the supplier may desire shall be at the absolute discretion of the test laboratory.

---

### **3.3 Stage 2 unit selection**

Where a check test proceeds to Stage 2, the registration holder is normally asked to supply randomly selected units. To ensure that the units supplied for test are randomly selected, one of the following processes shall be adopted:

- The registration holder will supply the serial numbers of all units in stock to the relevant regulator and the regulator will select units from this list.
- The regulator or their representative shall visit the relevant warehouse where units are stored and units for test are selected.
- If there is any doubt about the veracity of the above alternative selection processes, the regulator may elect to obtain the additional units anonymously through the normal retail or wholesale supply process.

In such cases the supplier shall be required to reimburse the full purchase cost to the Program.

- In all cases, the original packaging of units shall be in tact on delivery to the relevant test laboratory.

# Attachment B: Selection Criteria used in the United States

## **US Department of Energy (DOE, 2011b)**

### Enforcement Testing

The Department is modifying its regulations for enforcement testing to allow the Department to enforce the Federal efficiency standards proactively and fairly based on the circumstances of each case. In particular, today's rule makes three revisions to DOE's approach to enforcement testing that, although relatively minor, will significantly improve the effectiveness of DOE's enforcement program.

First, the Department is removing the current regulatory provision that requires DOE to receive a written complaint alleging a violation of the standard before it can perform enforcement testing to determine a model's compliance. EPCA affords DOE with broad enforcement discretion, and DOE must be able to exercise that discretion proactively to ensure compliance and deter violations effectively.

Second, today's rule allows the Department to select units for enforcement testing from retail, distribution, or manufacturer sources, depending on the circumstances, to ensure enforcement test results that are as unbiased, accurate, and representative as possible.

Finally, the Department recognizes that the current regulatory approach to enforcement testing—involving DOE selected units and third party testing—may be impracticable for low-volume, custom built products or where adequate laboratory facilities are unavailable. Thus, today's rule adopts an alternative approach to enforcement testing in such exceptional cases—allowing DOE witnessed testing at the manufacturer's lab and/or reduced sample sizes—to permit effective enforcement testing without imposing unreasonable burdens on manufacturers.

## **DOE Verification Testing in Support of ENERGY STAR (DOE, 2011a)**

### Verification Model Selection

DOE product selection may focus on specific product classes, products or basic models. The following criteria may be used, but is not all inclusive:

- Date product listed on ENERGY STAR website – preference given to newest products;
- History of manufacturer not meeting ENERGY STAR specifications;
- Ratings much higher than ENERGY STAR specification – preferentially selected because market expectations are higher;
- Product class experience – emphasis on product classes in which previous models were found not to meet ENERGY STAR specifications;
- New technology;
- DOE waiver request – emphasis on products having a waiver;
- Credible information on a specific product's performance

## **Conditions and Criteria for Recognition of Certification Bodies for the ENERGY STAR® Program**

### 3) ENERGY STAR Verification

#### a) Verification Testing

i) Operate an ENERGY STAR partner-funded verification testing procedure that fulfills the verification testing requirements enumerated as follows:

(1) Ensure products meet all product performance parameters as described in the relevant ENERGY STAR product specification.

(2) Number of products:

---

(a) Annually test at least 10% of all ENERGY STAR qualified models the CB has certified or for which it has received qualified product data.

(b) In the case of ENERGY STAR specifications that address multiple product types, the CB will annually test at least 10% of each type.

(c) When determining the number of models subject to verification testing, the CB shall consider product families as defined in the relevant product specification, and in consultation with EPA.

(d) In the event of significant product failures, EPA may advise the CB to increase the number of models tested in subsequent years. The minimum number of products tested may differ by product category.

(3) Products shall be selected by the CB according to the following general guidelines:

(a) The CB shall select models for verification testing from the ENERGY STAR qualified models the CB has certified;

(b) Approximately 50% of models to be tested shall be randomly selected; although, the more recently a model has undergone verification or challenge testing, the less likely it should be selected in this random selection process;

and,

(c) The remaining models shall comprise referrals from EPA as provided, and models selected in consideration of the following factors:

(i) Product classes from ENERGY STAR partners for which previous models failed verification testing;

(ii) Referrals from third parties such as consumers, consumer groups or regulatory agencies regarding the accuracy of ratings; and,

(iii) Models with high sales volumes if this data is available to the CB.

# Attachment C: Australian Competition and Consumer Commission (ACCC) Compliance and Enforcement Policy

The following excerpts are taken from ACCC 02/12\_45843\_481 published by the Commonwealth of Australia 2012 (ACCC, 2012).

## **Principles and approaches underlying this policy**

The ACCC exercises its enforcement powers independently in the public interest with integrity and professionalism and without fear, favour or bias.

The ACCC's enforcement response is proportionate to the conduct and resulting harm, and the implementation of the ACCC's enforcement policy is governed by the following guiding principles:

- Transparency—this has two aspects:
  - the ACCC's decision-making takes place within rigorous corporate governance processes and is able to be reviewed by a range of agencies, including the Commonwealth Ombudsman and the courts
  - the ACCC does not do private deals—every enforcement matter that is dealt with through litigation or formal resolution is made public.
- Confidentiality—in general, investigations are conducted confidentially and the ACCC does not comment on matters it may or may not be investigating.
- Timeliness—the investigative process and the resolution of enforcement matters are conducted as efficiently as possible to avoid costly delays and business uncertainty.
- Consistency—the ACCC does not make ad hoc decisions; it sets its focus clearly to give business certainty about its actions.
- Fairness—the ACCC seeks to strike the right balance between voluntary compliance and enforcement while responding to many competing interests.

## **ACCC compliance and enforcement strategy**

To achieve its compliance objectives the ACCC employs three flexible and integrated strategies:

- Enforcement of the law, including resolution of possible contraventions both administratively and by litigation.
- Encouraging compliance with the law by educating and informing consumers and businesses about their rights and responsibilities under the Competition and Consumer Act.
- Working with other agencies to implement these strategies.

## **Prioritisation of enforcement matters and the exercise of the ACCC's discretion**

In enforcing the provisions of the Competition and Consumer Act, the ACCC's primary aims are to:

- stop the unlawful conduct
- deter future offending conduct
- undo the harm caused by the contravening conduct (for example by corrective advertising or restitution for consumers and businesses adversely affected)
- encourage the effective use of compliance systems
- where warranted, punish the wrongdoer by the imposition of penalties or fines.

The ACCC cannot pursue all the complaints it receives and the ACCC is unlikely to become involved in resolving individual disputes. While all complaints are carefully considered, the ACCC's role is to focus on widespread

---

consumer detriment and the ACCC exercises its discretion to direct resources to the investigation and resolution of matters that provide the greatest overall benefit for consumers.

To assist with this determination, the ACCC gives enforcement priority to matters that demonstrate one or more of the following factors:

- conduct of significant public interest or concern
- conduct resulting in a significant consumer detriment
- conduct resulting in a substantial consumer (including small business) detriment
- anticompetitive conduct involving cartel behaviour or misuse of market power
- unconscionable conduct, particularly involving large national companies or traders
- conduct demonstrating a blatant disregard for the law
- conduct involving issues of national or international significance
- conduct detrimentally affecting disadvantaged or vulnerable consumer groups
- conduct in concentrated markets which impacts on small business consumers or suppliers
- conduct involving a significant new or emerging market issue
- conduct that is industry-wide or is likely to become widespread if the ACCC does not intervene
- where ACCC action is likely to have a worthwhile educative or deterrent effect, and/or
- where the person, business or industry has a history of previous contraventions of competition, consumer protection or fair trading laws.

Where appropriate the ACCC may also pursue matters that test or clarify the law.

The ACCC reviews its priorities regularly. In addition to those matters that demonstrate the factors above, the ACCC is currently prioritizing its work in the following areas:

- consumer protection in the telecommunications and energy sectors
- conduct that may impede emerging competition involving online traders
- competition and consumer issues in highly concentrated sectors, in particular the supermarket and fuel sectors
- carbon pricing representations
- the ACL consumer guarantees regime
- consumer protection issues impacting on Indigenous consumers.

When the ACCC decides not to pursue enforcement action in relation to complaints it receives, it may nevertheless:

- provide information to the parties to help them deal with the matter and gain a better understanding of the Competition and Consumer Act even where a possible contravention of the Act is unlikely
- postpone or cease investigations where insufficient information is available to it, with a view to later investigation should further information become available
- draw the possible contravention to relevant parties' attention and provide information to encourage rectification and future compliance where the possible contravention appears accidental, of limited detriment to consumers and of limited gain to the business concerned
- place the relevant parties on notice about the ACCC's concerns and the possibility of future investigation and action should the conduct continue or re-emerge
- deal with the matter informally where a business has promptly and effectively corrected a possible contravention and has implemented measures to prevent recurrence.

The ACCC is unlikely to pursue matters that:

- are one-off, isolated events, unless the conduct involves a blatant and deliberate breach of the law

- 
- are more appropriately resolved directly between the parties under an industry code (for example by way of mediation)
  - involve issues more effectively dealt with at the local level by state and territory agencies (for example by way of individual dispute resolution of a complaint)
  - are primarily contractual or private right disputes (the Competition and Consumer Act provides complainants with private right of action in these circumstances).

# Attachment D: Weighting Form

## Check Testing – Product Selection Criteria

Model selected	
Brand	Model
Model ranking scores for criteria	
Weighting Criterion	Score
25	Description
10	Competitor complaint supported by independent evidence; or
5	Competitor complaint supported by non-independent evidence; or
25	Competitor complaint without evidence.
10	Intelligence from consumer groups and individuals supported by independent evidence; or
5	Intelligence from consumer groups and individuals supported by non-independent evidence; or
25	Intelligence from consumer groups and individuals without evidence.
10	Intelligence from overseas testing programs supported by independent evidence; or
5	Intelligence from overseas testing programs supported by non-independent evidence; or
0-15	Intelligence from overseas testing programs without evidence.
0-5	Models with a high market share.
5	Product categories with the highest greenhouse gas emissions.
5	Brands with a history of non-compliance.
-5	New Brands or brands with limited exposure to the Program.
0-10	Brands with a history of passing check testing.
5-10	Product categories with comparatively high levels of non-compliance.
10	Models supported by test laboratories with a past history of failing check tests.
0-10	Models supported by test laboratories without a past history.
	New product categories. Less than 5 yrs=0-10/longer than 5 yrs=0
	Total Score

≥25

Proceed with testing

<24

No further action

**Comments**

---

**Authorisation**

\_\_\_\_\_  
(Signature)

\_\_\_\_/\_\_\_\_/\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Name)