REPORT NO: 2007/01

EQUIPMENT ENERGY EFFICIENCY PROGRAMME

MAY 2007

ACHIEVEMENTS > 2006

AN INITIATIVE OF THE MINISTERIAL COUNCIL ON ENERGY FORMING PART OF THE AUSTRALIAN NATIONAL FRAMEWORK FOR ENERGY EFFICIENCY AND THE NEW ZEALAND NATIONAL ENERGY EFFICIENCY AND CONSERVATION STRATEGY

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EQUIPMENT ENERGY EFFICIENCY

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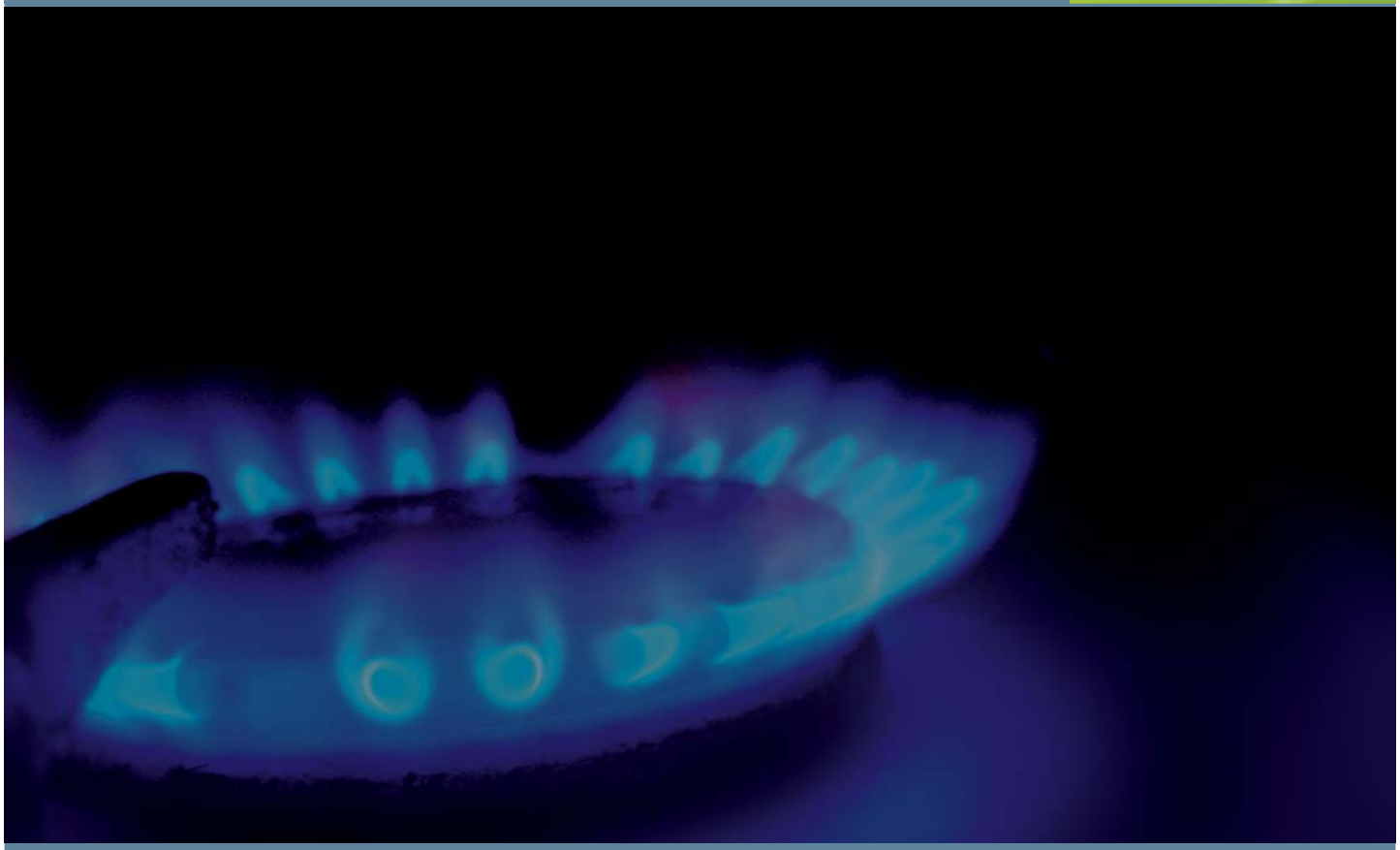
May 2007

Australian Government
Department of the Environment and Water Resources
Australian Greenhouse Office



- ACHIEVEMENTS 2006 IS THE ANNUAL REPORT OF THE EQUIPMENT ENERGY EFFICIENCY PROGRAMME
- IT REPORTS THE PROGRESS MADE IN THE CALENDAR YEAR 2006, AGAINST THE GOALS SET FOR THE PROGRAMME BY THE MINISTERIAL COUNCIL ON ENERGY
- MORE INFORMATION ABOUT THE PROGRAMME, WHICH COMMENCED NATIONALLY IN AUSTRALIA IN 1992, CAN BE FOUND AT WWW.ENERGYRATING.GOV.AU
- THIS IS THE 7TH ANNUAL REPORT SINCE THE PROGRAMME WAS SUBSTANTIALLY UPGRADED

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CONTENTS

ACRONYMS

CFL- compact fluorescent lamps
E2WG - Energy Efficiency Working Group
E3 Programme - Equipment Energy Efficiency Programme
- formerly known as the National Appliance and Equipment Energy Efficiency Programme
MCE - Ministerial Council on Energy
MEPS - Minimum Energy Performance Standards
NATA - National Association of Testing Authorities
NFEE - National Framework for Energy Efficiency
RIS - Regulatory Impact Statement

EQUIPMENT ENERGY EFFICIENCY PROGRAMME

PROGRAMME CONTEXT

Energy consumed by appliances and equipment is a major source of greenhouse gas emissions in Australia and New Zealand. Improving the energy efficiency of appliances and equipment is a key objective for all Australian governments and the New Zealand Government.

Performance codes and standards are the most widely used measures internationally to reduce energy use and greenhouse gas emissions from equipment and appliances. The Equipment Energy Efficiency Programme (the Programme) embraces a range of measures aimed at increasing the energy efficiency of products used in the residential, commercial and manufacturing sectors in Australia and New Zealand.

Some of these measures are backed by regulations mandating the energy labelling of products at the point of sale, or specifying minimum energy performance standards (MEPS) that products must meet or exceed to be lawfully sold. A number of individual sub-programmes stimulate the development of world class products as well as helping to create fairer competition in the marketplace by informing consumers of comparative energy consumption or endorsing the best performing models in a product range (through labelling) or by stipulating minimum acceptable efficiency levels below which products may not be sold.

The main policy tools used to achieve these outcomes are:

- mandatory MEPS (set out in the relevant product standard published by Standards Australia);
- mandatory energy efficiency labelling (set out in the relevant product standard published by Standards Australia) ; and
- voluntary measures including endorsement labelling, training and support to promote the most efficient available products.

The Programme measures improvement by increasing the number of products covered, increasing the stringency of existing energy requirements through a process of regular review, and increasing the intensity of the programme in key areas so that a range of programme tools are used to maximise the energy saving outcomes.

GOVERNANCE

The Ministerial Council on Energy (MCE) was established by the Council of Australian Governments in 2001 and is responsible for energy efficiency policy (see **www.mce.gov.au/**). MCE is made up of Ministers with responsibility for energy from the Australian Government and each of the states and territories. The New Zealand Minister of Energy has full membership and voting rights when Trans Tasman Mutual Recognition Arrangement issues are being considered. This trigger applies whenever any proposals for mandatory performance standards or labelling for end-use products are considered. Otherwise, like the Papua New Guinean Minister for Petroleum and Energy, New Zealand has observer status on the Council. A current MCE membership list is at **Appendix 1.**

MCE has identified one of the key goals for the National Framework for Energy Efficiency (NFEE) (see **www.nfee.gov.au**) is to improve end-use product energy efficiency performance. The New Zealand Energy Efficiency and Conservation Strategy aims to improve the efficiency of energy appliances used in homes and businesses, in conjunction with Australia, through the development of MEPS and comparative energy labelling. The Programme is the principal means pursued to meet these goals. Management of the Programme is the responsibility of the Equipment Energy Efficiency Committee (E3 Committee), which consists of officials drawn from Commonwealth, State and Territory Government agencies, as well as representatives of the New Zealand Government. A current E3 Committee membership list is at **Appendix 2**.

The E3 Committee is responsible for advising the MCE on efficiency implementation measures to address the efficiency needs of all types of electrical equipment. MCE has given the E3 Committee a mandate to assess any energy-using product for possible regulation, subject to community consultation and the completion of a Regulatory Impact Statement (RIS) as required by the Council of Australian Governments. In 2006, the MCE for the first time agreed to consider regulating products even in circumstances where a cost is imposed upon the community provided such action may offset even more expensive mitigation action sometime in the future. The E3 Committee charter provides the Terms of Reference for the Programme and is listed at **Appendix 3**. The Programme operates under the Stage One of Implementation Plan for the NFEE which is reproduced at **Appendix 4**.

TARGETS

The Programme publishes three-year work plans. The current work plan for 2005/06 to 2007/08 is listed at **Appendix 5** and represents stage one of the NFEE. The Programme has already delivered impacts across a range of end use product groups including:

- Household appliances;
- Standby power;
- Lighting;
- Electricity distribution transformers;
- Air conditioners;
- Commercial refrigeration;
- Water heaters; and
- Electric motors.

Products from each of these groups are considered for inclusion within the Programme on the basis that the community will benefit from its regulation. Individual energy efficiency mandatory levels are either the equivalent of world-best regulatory levels, or an even more stringent level developed specifically because such action has the support of key stakeholders.

In 2004, Australian and New Zealand officials agreed to a common list of products to be targeted under a joint Trans-Tasman programme. This list remains current as at 1 January 2007 and is at **Appendix 6**.

COST EFFECTIVE OUTCOMES

The Programme is an extremely cost effective measure that delivers real benefits for the economy, the environment, and to Australasian consumers. Key outcomes projected by 2020 include:

- The Programme will deliver economic benefits to Australia - with a total estimated value of $4.8 billion by 2020;
- The Programme will deliver economic benefits to New Zealand - with a total estimated value of $0.8 billion by 2020 (excluding CO_2 benefits);
- The Programme will deliver environment benefits to Australia – with over 200 Mt of abatement projected by 2020;
- The Programme will deliver environment benefits to New Zealand – with over 6.4 Mt of abatement projected by 2020;
- The Programme will deliver these economic and environmental benefits at a consumer benefit, not cost – measured in terms of greenhouse gas emission reductions, the community cost is minus $23/tonne of CO_{2e} reduced, (net present value).

LOGO AND PROGRAMME NAME

In 2005, the name of the Programme changed from the National Appliance and Equipment Energy Efficiency Program to the Equipment Energy Efficiency Programme. The E3 Committee also chose a programme logo in 2006 which will become a brand for its publications. Initial feedback from stakeholders about the changes has been positive:

www.energyrating.gov.au
EQUIPMENT ENERGY EFFICIENCY

COMMON AUSTRALIA/ NEW ZEALAND WORK PROGRAMME

A common end-use energy efficiency work programme between Australia and New Zealand benefits programme stakeholders because:

- The same regulatory standards apply to suppliers in both countries offering improved economies of scale in local production and lower compliance costs
- Consumers are not confused by differing regulatory arrangements or labelling schemes in each country
- Efficiency regulators deliver common regulatory proposals with resultant public sector resource savings
- It fulfils the obligations of the Australia New Zealand Closer Economic Relations Trade Agreement and the Trans-Tasman Mutual Recognition Arrangement.

MAJOR ACHIEVEMENTS

The year 2006 marked an epoch in this long-running programme. This is a bold statement for a programme that has existed for 15 years but 2006 marked the year when:

1. Enforcement became a centrepiece of the Programme – when suppliers were held accountable for the consumer cost of their energy efficiency mis-statements
2. Past projections about the cost-effectiveness of the Programme were confirmed by retrospective analysis
3. Consumer awareness of the mandatory label was found to rival the public recognition of iconic brand names like “Coca Cola” and “MacDonalds”
4. Funding was first given for Australian officials to lead a number of international standards and labelling projects based on successful projects operated by the Programme
5. New regulations imposed more stringent standards upon several products.

PROGRAMME ENFORCEMENT AND MANAGEMENT

Prior to 2006, the main sanction used by state regulators against suppliers making misleading or inaccurate claims was deregistration. If a product is deregistered, it means the supplier is no longer entitled to sell that model in Australia or New Zealand. This sanction is significant because suppliers could hold large stocks of that model in their warehouses. This sanction however does not address the detriment to consumers who have already purchased products not meeting their efficiency claims.

For several years, efficiency regulators considered how best to address that issue, resolving that an arrangement with the Australian Competition and Consumer Commission (ACCC) would deliver a real deterrent. In 2005, that deterrent was exercised in relation to one of the largest suppliers of whitegoods and air conditioners in Australia with the results becoming public in 2006.

The ACCC statement about the undertakings provided by LG is reproduced as **Appendix 7**. LG agreed to recompense purchasers of several air conditioning models for the additional energy costs likely to be used over the lifetime of the products. LG agreed to a package valued at more than **$3 million** to redress the consumer detriment caused by their marketing mis-statements. In the future, efficiency regulators will focus on settlements with suppliers that ensure those who purchased mislabelled or non-compliant product are adequately compensated.

Regulators also resolved to publicise all future de-registrations in timely newsletters to ensure the marketplace was made aware of products found not to comply with their efficiency claims.

De-registrations in 2006 are listed in **Appendix 8**.

E3 REVIEW COMMITTEE

In 2006, the E3 Review Committee was constituted as a forum for key industry stakeholder groups to provide advice to government on individual regulatory proposals. This forum includes the representatives of five key trade associations whose members’ products are subject to regulation under the Programme. The E3 Review Committee does not replace the consultation required for regulatory proposals but is an additional formal step which examines all regulatory proposals looking to ensure each proposal:

- has been the subject of reasonable consultation
- has sufficient technical and engineering rigor underpinning it
- complies with existing laws and administrative frameworks
- meets the objectives of the Programme in a cost effective manner.

Four E3 Review Committee meetings were held in 2006 with records of discussions available to the public upon request. It ensures no regulatory proposal comes as a surprise to product suppliers and enhances the capacity of industry to inform government of views about regulatory proposals.

ACCURATE PROJECTIONS ABOUT PROGRAMME IMPACTS

In 2005, the Productivity Commission questioned the accuracy of the Programme projections within its wider criticisms of the economic analysis of stage one of the NFEE. This Commission review called for a rigorous re-evaluation of the regulation programme. The final report by the Productivity Commission is available at **www.pc.gov.au/inquiry/energy/finalreport**

In response, the E3 Committee commissioned a paper to evaluate the impacts of the Programme using domestic refrigeration (the first product subject to mandatory labelling and performance requirements which commenced in 1986). Consultants used complete market sales data since 1993 to the present (together with the regulators database of every refrigerator and freezer sold in Australia over that time and a range of other data sources) to construct a model of what the market would have been in the absence of government standards and labelling intervention. This model was compared to the projections conducted immediately prior to the two rounds of MEPS regulation in 1999 and 2005. The findings of the retrospective analysis showed that original analysis underestimated the impact of 1999 MEPS regulation by around 30% and that 2005 MEPS savings were comparable with the original estimates (although these had just been implemented at the time of the analysis). This undervaluing of the energy efficiency impact of regulation is readily understandable given the original estimates adopted conservative estimates or assumptions. This conservative approach provided a safeguard ensuring the proposals would be in the community interest and had community support.

Efficiency regulators have offered the study to the Productivity Commission and have agreed to participate in a similar study with United Kingdom authorities evaluating their domestic refrigeration programme. Ultimately, the two studies will compare and contrast the impacts of policies in both countries and establish a fixed methodology for conducting such retrospective reviews.

LABEL RECOGNITION

The E3 Committee commissioned a nationwide study into consumer awareness and use of all energy efficiency labels used in Australia. The resulting report, Appliance Performance Labelling in Australia and New Zealand, was released in 2006 and is available at **www.energyrating.gov.au/library/details200608-labelling.html**

ENERGY LABEL

The Energy Rating Label is a star performer enjoying very high levels of consumer recognition usually only found with market leading brands or high profile celebrities. The label is almost universally recognised with 94% of consumers Australia wide being able to recall it unaided, rising to 96% when prompted. This level of recognition has increased significantly since the Programme was launched nationally more than 15 years ago. In New Zealand, where the scheme has only been mandatory for five years, the label is recognised by 75% of consumers of which 44% declared that the energy labels had some effect on their decision.

WATER LABEL

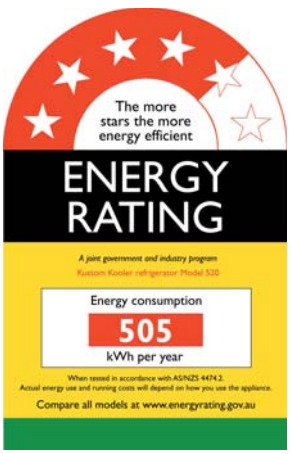
Even though it was only developed in 2005, the Water Label was recalled by 41% of people unaided, rising to 53% when prompted. Government regulation made the water label mandatory from 1 July 2006 after it was launched on a voluntary basis a year earlier. The original water efficiency label (up to 5A rating in the shape of a water drop) was redesigned to more closely resemble the energy label and experts expect that, like the energy label, recognition will continue to grow.

GAS LABEL

This voluntary industry-sponsored gas label has not achieved significant levels of consumer recognition. Even though the gas label has operated longer than the mandatory electrical label, only 15% of consumers were able to recall the label unprompted, rising to 20% when prompted. In 2004, energy ministers instructed E3 to consider the merits of mandating the gas appliance label. The E3 Committee expects to make recommendations on this issue to MCE in 2007.

ENERGY STAR LABEL

Australia became an Energy Star partner and adopted the program nationally in 1999 for office equipment and in 2001 for consumer electronics (principally home entertainment appliances). In 2005 the E3 Committee decided to move towards using the Energy Star label as the primary endorsement label for appliances and equipment in Australia. New Zealand went further and injected $3 million dollars into its national programme for Energy Star. In partnership with its US brand partners New Zealand has developed Energy Star specifications for refrigerators, heat pumps and dishwashers and is expecting approval, in the near future, for specifications for clothes washers. The Energy Star programme in New Zealand has significant industry buy in and already industry marketing spend matches EECA Energy Star marketing spend dollar for dollar. In Australia 35% of consumers are aware of the label unprompted and 42% when prompted while in New Zealand recognition is 18%. If MCE agree to support Energy Star in 2007, recognition of this label should grow.



AUSTRALIAN LEADERSHIP ON EFFICIENCY ISSUES

The effectiveness of the Programme is not only measured by its achievements within Australasia but also its ability to influence global efficiency debates.

INTERNATIONAL STANDBY CONFERENCE

The Australian Greenhouse Office (AGO) hosted an international standby power conference, Time for Global Action, in Canberra on 6 & 7 November 2006. The conference attracted almost 120 participants from around the world. The conference took as its theme Time for Global Action to make a statement of intent. The steering committee agreed to entitle the conference report 'Order Out of Chaos' which captured the spirit of many of the presentations at the event; the global community has not yet solved the problem of excessive standby but recognised that the "tipping point" is at hand.

The conference heard:

- Activities are underway to reduce standby through a range of multi-lateral, bilateral or in-country approaches. However, these initiatives are uncoordinated with other responses and, as such, are not as effective as they could be on a global scale.
- The key to unleashing the full potential of these programmes depends on agreement for a global approach.
- Standby policy debates amongst stakeholders are maturing with increasing agreement between those stakeholders on the merits of aligning approaches. There is general support for consistency in approach and for urgency in implementation.
- The growing economies of China, India and others in the developing world do not need to follow the past technology development path that lead to excessive standby; the capacity and will to avoid such folly exists and can be deployed.

The Prime Minister further announced that Australia, through the Asia-Pacific Partnership on Clean Development and Climate (AP6), would make:

- $2 million available for alignment of national standby power approaches across participating countries
- $2 million for harmonising appliance testing procedures (for electric motors, lighting, computers and air-conditioning) across AP6 countries.

[Footnote – to place these funding announcements in context, the annual Programme operating budget is less than $2 million]

AIR CONDITIONER INDUSTRY FORUM

This event demonstrates how even national events can help set the international agenda. In late 2006, nearly 40 experts from the air conditioner industry and government agencies met to discuss air conditioner energy, peak load and related policy issues. Through a range of actions including voluntary and regulatory measures, government agencies agreed to work closely with industry to match international best policy practice in terms of regulation, to ensure that products supplied to the market are efficient, safe, quiet and environmentally friendly while minimising operational impacts and maximising consumer performance.

The meeting also supported in principle the development of a 10-year strategy for air conditioners in an attempt to pull together and coordinate all the potentially disparate policy threads which impact on the air conditioner industry. The strategy will include elements of demand response, future domestic and commercial regulatory MEPS levels, regulation of specialised equipment such as computer rooms, as well as specifications for chillers used for large building air conditioners. The strategy will also look at coordination of other inputs such as test procedures (especially with respect to development and adoption of international methods), coordination of standby power issues, tools for optimising sizes and type of air conditioners and interfaces with other programs that have a direct impact on air conditioning (such as building shell efficiency programs for residential and commercial sectors).

These proposals will shape the 10-year strategy suggested for the Australasia domestic sector and will be presented to the AP6 project to align standards across the region.

EXPANDED MEPS PROGRAMME

In 2006, MEPS became more stringent for consumer air conditioners and three phase electric motors. The MEPS programme covers 13 product types listed in Table 1.

TABLE 1: PRODUCTS REGULATED BY THE EQUIPMENT ENERGY EFFICIENCY PROGRAMME

Product	Sector	MEASURE		Regulatory Standard
		MEPS	Labelling	
Whitegoods				
Refrigerators	R,C	1999, 2005	1992, 2000	AS/NZS4474.2
Freezers	R	1999, 2005	1992, 2000	AS/NZS4474.2
Clothes washers	R		1992, 2000	AS/NZS2040.2
Clothes dryers	R		1992, 2000	AS/NZS2442.2
Dishwashers	R		1992, 2000	AS/NZS2007.2
Electric Water Heating				
Electric Water Heaters	R,C	1999, 2005		AS/NZS4692.2
Air Conditioners				
> Single-phase air conditioners	R,C	2004, 2006	1992	AS/NZS3823.2
> Three-phase air conditioners	C	2001		AS/NZS3823.2
Lighting				
Linear fluorescent ballasts	C,I	2003		AS/NZS4783.2 NZHB4783.2
Linear fluorescent lamps	C,I	2004		AS/NZS4782.2 NZHB4782.2
Commercial and industrial				
Commercial refrigeration	C	2004		AS1731.14
Distribution Transformers	I	2004		AS2374.1.2
Electric Motors-Three-phase	C,I	2001, 2006		AS/NZS1359.5

Sectors R-residential, C-commercial, I-industrial
Measures MEPs – minimum energy performance standards
Codes AS/NZS Australian/New Zealand standard, NZHB-New Zealand handbook,
NZHB is a regulatory standard prepared by the NZ Government and published by standards NZ as a footnote
Labelling Some states had mandatory energy labelling regulations prior to 1992 for a range of products.
Refrigerators were first labelling in late 1986.

ENERGY EFFICIENCY AWARDS

The E3 Committee acknowledges the significant contribution of stakeholders who help drive improvements in the energy efficiency of appliances and equipment sold in Australia and New Zealand. In 2005, the first such awards were presented to worthy recipients. In 2006, the E3 Committee decided to call for nominations from industry as well as its members. Five categories were established as outlined below.

INTERNATIONAL ENDEAVOUR AWARD

For outstanding efforts by an organisation or individual to encourage international cooperation on the improvement of energy efficiency of equipment and/or appliances.

National Lighting Test Centre

This Chinese lamp testing facility has become a key player in the international Compact Fluorescent Lamp Initiative, assisting with developing the test protocol and making its staff available to work with international standards setting organisations.

NATIONAL ENDEAVOUR AWARD

For outstanding efforts by an organisation or individual to encourage national cooperation on the improvement of energy efficiency of equipment and/or appliances.

The Good Guys

Master Plumbers and Mechanical Services Association (MPMSA)

This retailer was nominated because it chose to promote products by advertising the comparative energy label in its promotional catalogues. While the label must be displayed on showroom stock, retailers are not obligated to include the energy rating in promotional materials. The MPMSA created the Green Plumbers who have become important intermediaries in helping customers choose more efficient and environmentally friendly water heaters.

ENTERPRISE AWARD

This award recognises a contribution by an organisation that has resulted in greater energy efficiency of equipment and appliances.

ACTRONAIR

Automatic Technology

Seeley International

These three companies nominated themselves for specific technologies or products that are energy efficient. The E3 committee thanks these companies for nominating and commends all suppliers of products that exceed the regulatory MEPS set under the Programme.

LIFETIME ACHIEVEMENT AWARD

This award recognises an individual who has provided a substantial ongoing contribution to the delivery of energy efficient products in Australia.

Mick Albany
Ex - Mitsubishi Heavy Industries

Richard Brown
Ex- Electrolux

Tony Fairclough
Ex- Frigrite

Geoff Whiford
Ex- Rheem Australia

These four industry stalwarts retired in 2006 after years of service to their profession. Each has been involved in working with government officials on equipment energy efficiency matters and has participated or chaired Standards Australia committees for many years. The E3 Committee acknowledges their service to their profession and the wider community.

LIFETIME ACHIEVEMENT AWARD (HONOURABLE MENTION)

Peter Skinner
Electrolux Home Products

Peter Szental
Energy Conservation Systems Pty Ltd

These two persons were also nominated for specific services while continuing to work within the energy efficiency industry. The E3 Committee agreed to recognise their contribution while hoping that they would continue to further the interests of energy efficiency in the future.

RESIDENTIAL STANDBY

On 8 November 2006 the Australian Government announced world leading action to reduce greenhouse gas emissions from 'standby' power in electrical appliances. Through the E3 Committee federal and state governments will work with industry to ensure that by 2012 all electrical appliances are regulated to meet a 'one watt' passive standby target.

The full Ministerial announcement is at **Appendix 9.**

The E3 Committee's first step towards this target is to announce interim standby goals for products within the home entertainment sector (see Table 2). These interim measures are to assist industry prepare for the more demanding 'one watt target'. As the home entertainment sector experiences rapid technology change and new development, a horizontal standard has been developed which dictates only what will be excluded from the sector (in this case TVs and set top boxes which are covered by specific product MEPS requirements which include on mode power consumption, so are excluded from the levels below).

A 2005 store survey found that while the majority of appliances in the home entertainment sector consume less than 2 watts in standby and nearly three quarters consume less than 4 watts, some products are using nearly 50 watts in this mode (see Figure 1). Average passive standby has remained fairly static at just under 4 watts for the last couple of years (see Figure 2). The data indicates that the existing voluntary actions within the standby strategy initiated in 2002 are not delivering the reduction in standby power levels needed in Australian homes.

A second intrusive study (based on a survey of 120 homes - double the size of the first 2000 study) also supports the conclusion that more interventionist action is warranted. The study found that standby power in a typical home in 2005 was over 92W, which is an increase of 12% since 2000. This latter figure equates to more than 10% of Australia's residential electricity consumed in 2005. The product groups contributing to standby are primarily computers and peripherals, home entertainment equipment, major appliances and other kitchen equipment. Household standby appears to be increasing at more than 2.5% per annum making it the largest growth area in household energy use.

TABLE 2:

	Stage 1 MEPS - ≥ October 2008		Stage 2 MEPS - ≥ 2012	
Home Entertainment Product Type	**Passive Standby**	**Off**	**Passive Standby**	**Off**
Without video recording capabilities	4 watts	0.3 watts	1 watt*	0.3 watts
With video recording capabilities	6 watts	0.3 watts	1 watt*	0.3 watts

**Auto power down to passive standby after 30 minutes of no AV input or inactivity is also required.*

FIGURE 1: POWER MEASUREMENTS FOR HOME ENTERTAINMENT: PASSIVE STANDBY

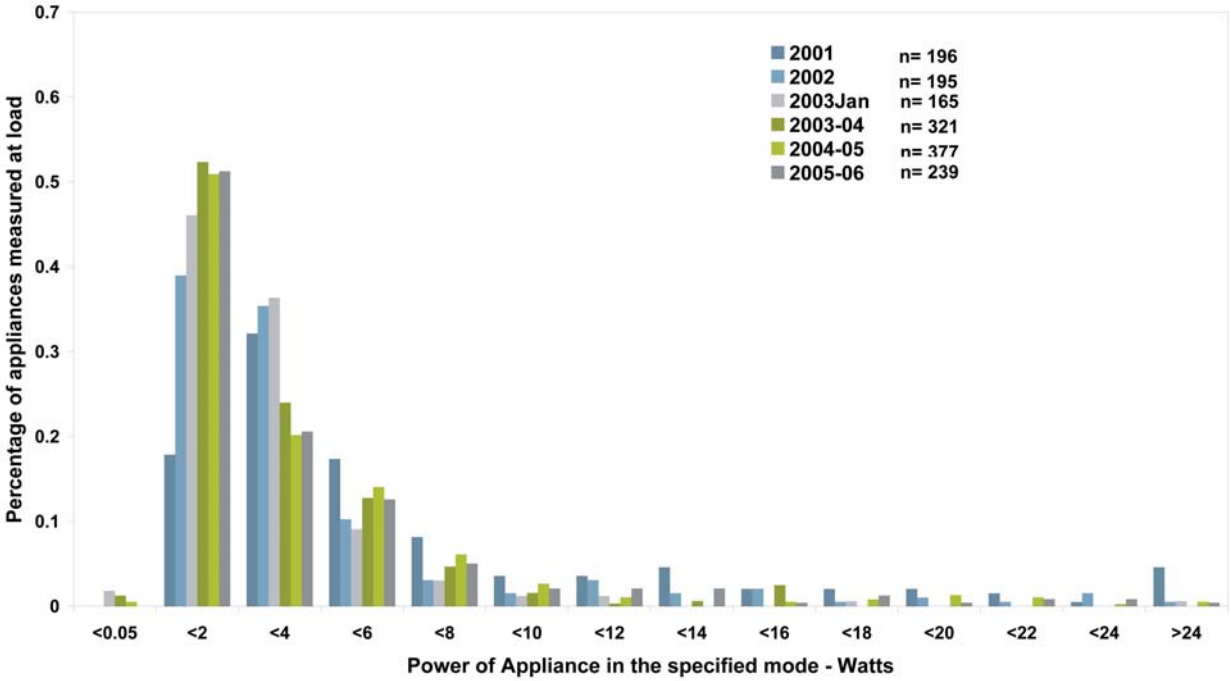
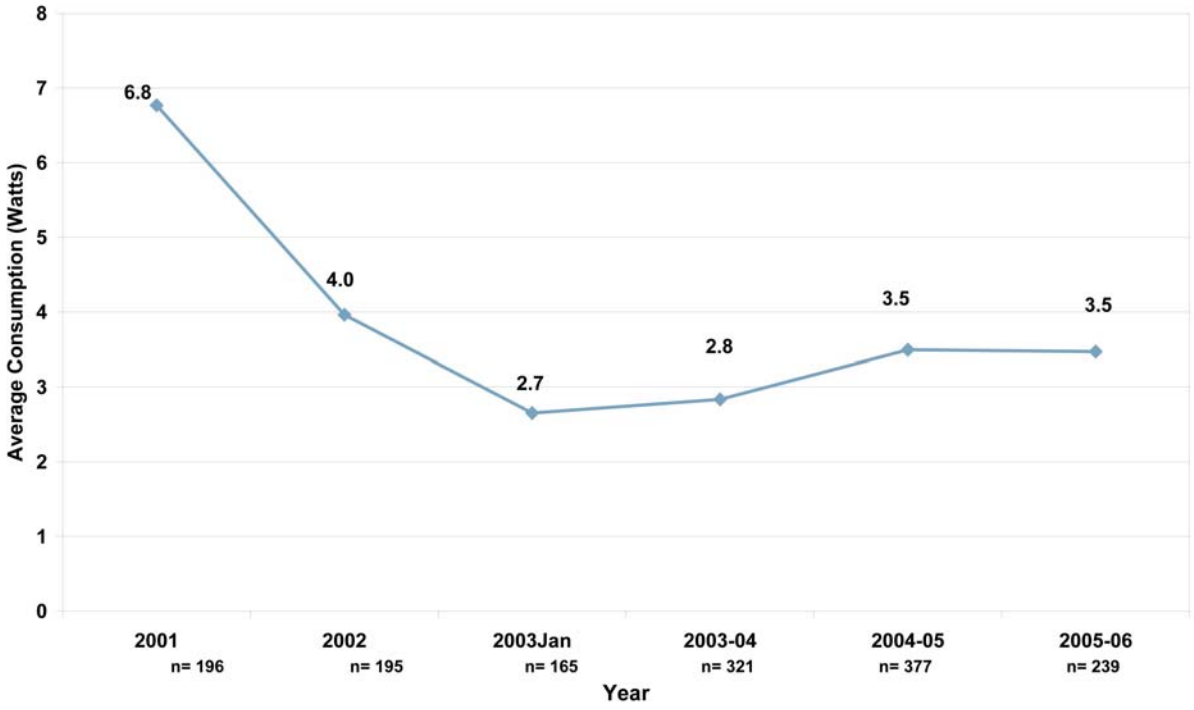


FIGURE 2: AVERAGE PASSIVE STANDBY CONSUMPTION: HOME ENTERTAINMENT PRODUCTS



Figures 1 and 2 were sourced from A Draft Proposal for Minimum Energy Performance Standards: Home Entertainment Equipment prepared for the E3 Committee by EnergyConsult in November 2006.

INTERNATIONAL INITIATIVES

The Programme has long held links with other national and regional activities, which assist regulators to apply that knowledge to our own programme. In 2006, the key international exchanges included those outlined below.

ASIA-PACIFIC PARTNERSHIP ON CLEAN DEVELOPMENT AND CLIMATE (AP6)

The AP6 Partnership brings together key developing and developed countries in the region to address the challenges of climate change, energy security and air pollution in a way that is designed to promote economic development and reduce poverty. The E3 Committee is involved in leading or participating in two projects under the Building and Appliances Task Force (BATF):

- Alignment of national standby power approaches
- Harmonisation of international testing procedures.

ASIA-PACIFIC ECONOMIC COOPERATION (APEC)

Asia-Pacific Economic Cooperation

The APEC Energy Working Group (EWG), launched in 1990, seeks to maximize the energy sector's contribution to the region's economic and social well-being, while mitigating the environmental effects of energy supply and use. The EWG is one of 11 Working Groups operating under the APEC umbrella, bringing together twenty-one economies from the APEC region who currently account for around 60% of world energy demand. The EWG is assisted in its work by five Expert Groups and two task forces which concentrate on particular strategic aspects of the EWG's agenda set forth by the APEC Energy Ministers.

CHINA BILATERAL

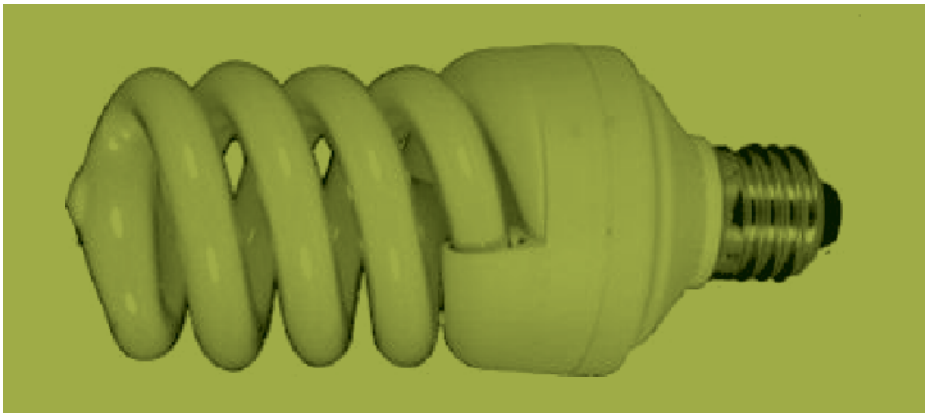
The Australian Government Bilateral Climate Change Partnerships Programme was introduced in 2004-05 to develop and implement projects that deliver mutual practical benefit for Australia and partner countries, help build the capacity of developing countries to take action on climate change and provide an additional mechanism to facilitate strategic policy dialogue with key countries. The bilateral partnerships are a useful complement to other international forums, providing more flexible mechanisms for reaching agreement and building stronger cooperative relationships on climate change. Energy efficiency is a focus area in a number of bilateral partnerships, including China, the United States, New Zealand and the European Union. There are currently seven active or developing bilateral projects on energy efficiency. Cooperative areas include harmonisation of emissions monitoring, reporting, verification and certification procedures between Australia and partner countries.

FIJIAN STANDARDS AND LABELLING PROGRAM

The AGO and the Fijian Government have been working together to develop energy efficiency standards (MEPS) and energy labels for refrigerators in Fiji. A major workshop was held in Fiji in the first half of 2006 clearing the way for the regulatory case to be prepared for the Fijian public. The recent coup, however, has stalled support for the proposal.

EU BILATERAL

Australia is working with the European Community to contribute more effectively to developing common analyses and methodologies for assessing the impact of end-use energy efficiency policies, to map the still available potentials and to develop new policy ideas that should lead to more effective policy support, decision making, technology siting and analyses of the related socio-economic issues in the respective areas of competence.



LONG TERM STRATEGIES

A key feature of the Programme is the development of 10-year strategies to clearly articulate government policy and to provide a road map for reducing energy use in that area. Three product strategies have been completed and approved by the MCE.

TABLE 3: EXISTING 10-YEAR STRATEGIES

Strategy	Release Date
National Standby Strategy – *Money isn't all you're saving*	2002
Lighting Strategy – *Greenlight Australia*	2005
Gas Strategy – *Switch on Gas*	2005

NATIONAL STANDBY STRATEGY

In November 2002, the MCE released Australia's strategy to reduce standby power within the umbrella of the International Energy Agency 'one watt' initiative. The 10-year strategy from 2002-2012:

- Outlines the measures that government will use to combat excessive standby
- Identifies the products to be targeted in three year rolling plans under the strategy
- Establishes the procedure whereby standby targets will be set for each of the targeted products
- Identifies the sanctions that will apply should suppliers not meet the targets for these products.

The standby strategy is available online at **www.energyrating.gov.au** in the electronic library.

LIGHTING STRATEGY

The Greenlight Australia 10 year strategy for improving the efficiency of lighting in Australia was released by the MCE in November 2004. The strategy represents the agreed government plan of all jurisdictions for improving the efficiency of lighting products and reducing greenhouse gas emissions from lighting and sets out immediate and future priorities for consideration. The strategy will improve the efficiency of all lighting equipment in the residential, commercial, industrial and public lighting sectors.

The Greenlight Australia Strategy is available online at **www.energyrating.gov.au** in the electronic library

GAS STRATEGY

The Switch on Gas strategy is a blueprint jointly endorsed by government and industry outlining the actions to enhance energy efficiency for gas appliances and equipment from 2005 to 2015. The 'Equipment Energy Efficiency – Gas Committee' is responsible for implementing the Switch on Gas strategy and for its overall management. The Gas Committee consists of officials and representatives from Commonwealth, State, Territory and New Zealand government agencies with current membership listed at Appendix 10. The Gas Committee reports to the MCE via the EWG.

The E3 Committee is expected to develop a further seven strategies in the next two years, as shown in Table 4. Updates will be available as they occur at **www.energyrating.gov.au** in the electronic library.

TABLE 4: FORECAST 10-YEAR STRATEGIES

Strategy	Sectors	Release Date
Residential air-conditioning strategy	R	2007
Demand side management in the home	R	2007
Swimming pool equipment	R,C	2007
Heating, ventilation and air conditioning in commercial buildings	C,I	2007
Electric Motors in the industrial sector, including fans and pumps	C,I	2008
Hot Water systems	R,C,I	2008
Commercial catering equipment	C	2008

R=Residential, C=Commercial, I=Industrial.

CONTINUING ACTIVITIES

ONLINE DATABASE FOR REGISTRATIONS

The on-line registration database system that facilitates the completion of application forms for prescribed appliances and equipment and also provides the database for the interactive products listing at **www.energyrating.gov.au** was introduced in 2002. Just over 1000 registered users of the on-line registration system completed approximately 11,000 logins during 2006.

Throughout 2006 this system has continued to be enhanced and extended:

- In August 2006 in a joint initiative between the E3 Committee and the Water Energy Labelling Standards (WELS) regulator, the server and software used for the database was replaced with a high speed processor and new SQL software. This upgrade allows the system to handle more users more efficiently and provides for projected future expansion of the system. Following the upgrade those with broadband connections noticed a marked improvement in the time taken by the server to return pages.
- In July 2006 the registration of clothes washers and dishwashers for water labelling (in addition to energy labelling) became mandatory. In 2006 the water labelling application form was integrated into the existing electronic energy rating forms for the registration of clothes washers and dishwashers providing a "one stop shop" for suppliers wishing to register these products for energy and water rating.
- During 2006 the method for inputting model numbers was progressively upgraded. Under the enhanced system applicants who wish to include multiple models in a single application can now list each of these separately and upload a separate image to be associated with each model in their list. On the interactive public listing each model listed in an application now appears on a separate line with its own image (if uploaded by the applicant)

ENDORSEMENT LABELLING

The Programme has supported two labelling schemes: Energy Star and Top Energy Saver Award Winner (TESAW).

Energy Star (**www.energystar.gov.au** or **www.energystar.govt.nz**) is an international endorsement label for electronic equipment and other products. The label and underlying partnership programme were created by the US Environmental Protection Agency in 1992 and subsequently has been adopted by other countries around the world, including Australia and New Zealand. It is available for office and home entertainment equipment and could be extended to other areas with US agreement.

The Top Energy Saver Award Winner (TESAW) was an Australian Government award that was developed to recognise the most efficient products on the market. It was established to apply to both electric and gas products that carried an Energy Rating label to help consumers quickly identify the most efficient products on the market. Industry support for this label has been sporadic.

In 2005, the E3 Committee recognised that two endorsement labels in the appliance and equipment field was an undesirable outcome for all stakeholders. To overcome the problem, the Programme designed a transition to Energy Star for all relevant products. It is seen as the best vehicle given the global nature of the label and the relevance this had to the majority of suppliers.

ADMINISTRATIVE GUIDELINES

The nationally consistent energy efficiency legislative scheme is delivered by state and territory legislation. The use of nationally endorsed model regulations allows each jurisdiction to follow a nationally consistent scheme.

The scheme operates through a set of mutual expectations. Industry expects that regulatory agencies will act in a nationally consistent and cooperative manner and will use the Standards Australia processes in setting and publishing technical standards. Regulatory agencies expect that industry will participate constructively in those technical debates to ensure that technical requirements are fair and equitable for all participants.

The administrative guidelines play a crucial role in meeting these expectations. They help state and territory regulatory agencies work in a consistent manner so that costs and inconvenience to industry are minimised, and regulations concerning energy efficiency labelling and performance standards are enforced efficiently. The guidelines provide an explanation to industry about:

- The way legislation operates and is administered by state and territory regulatory agencies
- The standard procedures, rules and processes that underpin state and territory legislation
- The responsibilities of all stakeholders.

The guidelines have operated since the programme began but were first published in April 2000. A major revision was published in 2005 with the guideline now updated from time to time on **www.energyrating.gov.au**

REGULATORY IMPACT ASSESSMENTS

The Programme must comply with national regulation-making processes in both Australia and New Zealand. Following agreement between relevant agencies on both sides of the Tasman, joint RIS are prepared as a matter of course. This public economic analysis ensures that the costs and benefits (both social and economic) of regulating a product are canvassed in a timely, systematic, objective and transparent manner with a recommendation to regulate only supported if that is the most effective option.

In 2006, a RIS was released for public comment on the proposal to include standby power in the energy ratings of clothes washers and dishwashers.

CLOTHES WASHERS AND DISHWASHERS

Release Date:

A draft RIS was circulated in September 2005, a consultation RIS was released in May 2006 and a decision RIS was prepared in August 2006.

Outline:

TThe RIS outlines a proposal to include the energy used in standby modes (including off mode) in the testing protocols that determine the efficiency ratings (stars) shown on energy labels for dishwashers and clothes washers. These revised protocols and ratings have been set out in revised Australian and New Zealand standards released in late 2005.

The proposal requires suppliers (manufacturers and importers) to re-register all existing models to comply with the new standards by the end of March 2007.

Suppliers will have to arrange for the testing of products to include standby power, and may organise for the redesign and manufacture of products with less standby power, if that is commercially attractive. As part of the new clothes washers performance standard, products will also be required to meet rinse performance requirements that were developed as part of the water labelling project.

Benefits and Costs:

Impacts of the proposal to include standby energy in energy labels from 2006:

- Reductions in energy use of about 900 GWh and greenhouse gas emissions of about 800 kt CO_{2e} over the life of the appliances subject to the revised labels which include standby power (those sold over 2007 to 2020) and which result in lower standby designs by manufacturers.
- It is estimated the proposal will raise the cost of the 14 million dishwashers and clothes washers expected to be sold from 2007 to 2020 by $2.8 million, but deliver energy savings to consumers worth $39.9 million. This will result in an overall net benefit of $37.1 million in net present value terms with a benefit-cost ratio of 14.

Effective Date:

Revisions to the testing protocols and efficiency rating standards for dishwashers and clothes washers were published in late 2005 and manufacturers were progressively re-registering their products to the new requirements during 2006.

PLANNED REGULATORY IMPACT STATEMENTS

Table 5 provides a summary of RIS planned for release during 2007. Updates are available as they occur at **www.energyrating.gov.au/considered.html**

2007 Regulatory Impact Assessments
External power supplies (carried over from 2006)
Set-top boxes (carried over from 2006)
Clothes washers - energy and water standards
Refrigerator energy label and algorithm
Lamps - incandescent lamp phase-out, halogen lamps, compact fluorescent lamps and extra low voltage converters for halogen lighting
Air conditioning – energy label and algorithm for single phase room A/C, MEPS for close control A/C
Commercial building tower air conditioners (chillers)
Standby power - home entertainment products
Televisions
Personal computers
Gas water heaters

ENFORCEMENT

In 2006, the Programme continued to use a variety of compliance strategies to maintain its integrity, these included:

- Checktest regime to ensure that the labelling and MEPS scheme maintain high levels of credibility both with consumers and manufacturers. This programme aimed to test products that were suspected of being non-compliant.
- Use of laboratories as part of checktesting to screen, test and develop standards to ensure that suppliers comply with regulations.
- Issuing of infringement notices by state regulators.

CHECKTEST PROGRAMME

Since 1991, the Programme has conducted "checktesting" of products to ensure that the labelling and MEPS scheme maintains high levels of credibility both with consumers and manufacturers. Since its inception the Programme has tested a total of 643 products (over 10 product categories) with a failure rate of approximately 35%. It should be noted that this high rate of failure reflects a policy of only selecting product at the highest risk of failing the test. Risk assessment is based on a number of factors as detailed in the administrative guidelines (see **www.energyrating.gov.au/admin-guidelines.html**).

In 2006, Energy Safe Victoria (regulator) and Energy Efficient Strategies (technical consultant) managed the checktest programme which included laboratory validity testing, round robin testing, equipment check testing and standards development for a range of product types.

Screen tests (Stage 1 checktest) were conducted on units identified as at risk of failing MEPS or labelling standards by compliance inspections, competitors or market intelligence. Following testing conducted in 2005 and 2006, 16 models were de-registered (**see Appendix 8**).

ACCC ACTION

In 2006 the E3 Committee concluded a joint enforcement action with the ACCC. On the 29th September 2006 the ACCC announced that LG had given court-enforceable undertakings to compensate purchasers of five air conditioner models identified by the check test program as having failed one or more of the checktesting validity criteria.

A compensation package of up to $3.1 million payable by LG, for purchasers of these units was agreed.

Commenting on the matter the Chair of the ACCC, Mr Graeme Samuel said:

> *"Consumers need to have confidence that they can use the star rating of an air conditioner to make an informed choice between competing brands. "The ACCC, the Australian Greenhouse Office and state energy regulators will continue working together to ensure compliance with the energy labelling system."*

PURCHASE OF TEST REPORTS

In 2006, the Programme purchased six test reports from the Australian Consumers Association's National Association of Testing Authorities (NATA) accredited test research laboratory. The purchase of NATA test reports for failed units is a cost effective way to increase the number of appliances covered by the programme.

SUPPORT FOR LABORATORIES

In 2006, the checktest programme used six laboratories with NATA accreditation to screen test and develop standards to ensure that suppliers comply with the regulations and to establish a basis for the setting of new MEPS levels. NATA laboratories are used exclusively for standards development and compliance programmes in Australia.

In 2006, the E3 Committee continued to work with and encourage independent test laboratories to obtain NATA accreditation and join the checktesting program, especially for products where there is a perceived shortage of testing facilities in Australia (e.g. air conditioners, TVs).

COMPLIANCE NEWSLETTER

In October 2006, the E3 Committee published the first edition of its "Compliance Newsletter". This newsletter, to be published several times each year, is designed to keep all stakeholders abreast of the latest developments in the E3 compliance programme. The newsletter provides timely information about compliance activities undertaken and the overall success of the programme, as well as foreshadowing topical issues.

A copy of the first newsletter can be found at **www.energyrating.gov.au** under E3 newsletters.

The second edition is due to be published on the energyrating website early 2007.

INFRINGEMENT NOTICES

The main sanction used against electrical equipment retailers is infringement notices. During 2006, Australian and New Zealand energy regulators concentrated on using educative approaches to retailers, explaining their responsibilities in relation to labelled appliances. This work engaged not only traditional appliance retail outlets but also included those trading on the internet.

State regulators have also in 2006, been either piloting infringement notice powers in their jurisdictions, or have already issued notices to electrical store retailers. Retailers can receive more than one infringement notice.

COMPLIANCE MONITORING AND INTERNET SALES

In addition to retail store compliance, regulators have followed-up supply of unregistered and unlabelled equipment on internet auction sites such as eBay and obtained registration of these products. Notices to comply are sent to advertisers. The E3 Committee is working with eBay to ensure that advertisers can only offer new proclaimed products that are registered for energy labelling or MEPS in Australia.

STANDARDS DEVELOPMENT

MEPS are made mandatory in Australia by state government regulation which give force of law to the relevant Australian Standards. In New Zealand, MEPS are made mandatory by central government regulations which give force to the relevant standards. Standards provide a "one-stop shop" for stakeholders of the Programme to address testing and performance requirements, and also energy labelling and MEPS requirements for products.

In 2006, industry worked collaboratively with Government to progress work on the following standards to be used for energy efficiency regulation in Australia:

AIR CONDITIONERS

In 2006 measurements of standby power consumption were undertaken at Mechlab on a set of air conditioners supplied by Choice. The purpose of these tests was to build capacity for such testing and to gauge the accuracy of supplier's claims. Heat pump labels have been improved to allow for a voluntary declaration which states how well the heat pump works at two degrees.

Work on international standards for ducted and non ducted air conditioners continued during 2006. It is hoped that a new ISO test method for multi-split air conditioners, which are not currently regulated for MEPS, will be available in the near future.

CLOTHES WASHERS

The E3 Committee is undertaking ongoing work to make the International Electrotechnical Commission (IEC) method suitable for adoption in Australasia, hopefully in about 2010-12. As a first step, tests were commissioned at Test Research to investigate the suitability of the IEC load for use in the AS/NZS test standard. Tests were also undertaken with a view to shifting towards a single detergent. These tests were completed in 2006 and now form the basis for an expected amendment to the standard in 2007.

The E3 Committee continues to coordinate ongoing testing requirements for clothes washers to determine the suitability of, and appropriate normalisation curves for, each new swatch batch made available for sale in Australia. These tests are commissioned through Test Research in Sydney and made available to the standards committee.

CLOTHES DRYERS

In 2006 work on the IEC clothes dryer test method was reactivated. The main objective is to improve the accuracy of the IEC test method to a level where it can be adopted as an AS/NZS standard.

REFRIGERATED DISPLAY CABINETS

In 2006, the E3 Committee commissioned a demonstration test on a refrigerated display cabinet at VIPAC Engineers and Scientists. The purpose of this test was to help build capacity for this test and to provide an opportunity for industry to witness the testing process. A similar demonstration test was conducted at Mechlab in 2005.

REFRIGERATORS AND FREEZERS

Comparative testing on a range of refrigerators/freezers was undertaken at the Enertech laboratories in Melbourne in 2006. These tests formed part of Enertech's move to obtain NATA accreditation for this test. Following these tests, Enertech was granted NATA accreditation to test this appliance type.

New work commenced in 2006 to develop a globally applicable test procedure for refrigerators and freezers. Refrigerators and freezers are highly regulated around the world and there are a large number of disparate test procedures, so this is an important step towards international harmonisation.

THREE PHASE ELECTRIC MOTORS

New MEPS levels for three phase electric motors commenced in April 2006. To build confidence and assist industry with the transition process, several motors offered up by industry were tested at the independent NATA accredited test laboratory, Caltest, to determine their compliance with the new standard.

SWIMMING POOL PUMPS

Late in 2006 a range of tests and monitoring activities were commenced on pool pumps. These tests include the measurement of the electrical and hydraulic performance of approximately 30 pumps. In addition, in the field pump performance monitoring is to be undertaken on approximately 15 pumps over the 2006-2007 summer. This data collection will inform the process of determining an appropriate regulatory framework for this product type.

GAS WATER HEATERS

Work on a new test procedure, that has improved repeatability and reproducibility, progressed through 2006 as a necessary precursor to government regulation of gas products. It is hoped that the new test method can be finalised in 2007.

STANDBY

In 2006 approval was given by IEC TC59 to proceed with an amendment to IEC62301 for the measurement of standby power to improve the accuracy and approaches specified in the test method. Further work on mode definitions will be undertaken. It is hoped that the amendment will be published by 2009.

COMMUNICATIONS

PROGRAMME PUBLICATIONS

Twenty-two publications were published during 2006. A full list of the publications is at Appendix 11 and electronic copies (along with those from previous years) are available for download from the electronic library.

ENERGY RATING WEBSITES

WWW.ENERGYRATING.GOV.AU

The Energy Rating website commenced in 2000 and is now the main access point for all appliance and equipment efficiency programmes. The website address has been displayed on all appliance energy labels since 2000.

The website has two main sections: the first provides information and reports about government energy efficiency programmes and regulatory requirements; the second provides consumers with an interactive listing of all registered products. Website usage has increased dramatically in recent years as illustrated in the following tables.

TABLE 6: WWW.ENERGYRATING.GOV.AU

Item	2002	2003	2004	2005	2006
Total Visits		80,000	192,000	570,000	**771,000**
Website hits total (million)	0.22	0.523	1.1	7.4	8.2

TABLE 7: ENERGYRATING.GOV.AU/SEARCH

Item	2004	2005	2006
Total Visits	NA	160,000	215,000
Website hits total (million)	3.4	3.3	4.1

ENERGY ALLSTARS WEBSITE

WWW.ENERGYALLSTARS.GOV.AU

The website was launched in 2005 and serves as a resource for all Australian Governments, large corporate purchasers and the public. The site lists only the most energy efficient appliances and equipment currently on the market and is designed to encourage suppliers to market efficient products. The MCE and the Australian Procurement and Construction Ministerial Council has endorsed the use of Energy Allstars to assist governments in determining whole-of-life costs when procuring relevant products.

For each product type, a set of performance criteria will be established each year for eligible models together with a process for listing efficient products. New product categories will be added progressively.

ENERGY STAR WEBSITE

WWW.ENERGYSTAR.GOV.AU

WWW.ENERGYSTAR.GOVT.NZ

The Energy Star websites are the Australia and New Zealand portals for the international voluntary endorsement labelling programme operated by the US Environmental Protection Agency. The Energy Star program recognises the most energy efficient office equipment and home entertainment products. Australia and New Zealand are Energy Star Partners and participate in a range of activities within the Programme. Energy Star rated products have low standby power consumption. In Australia and New Zealand the Energy Star is found on consumer electronic products like TVs, VCR and DVD players, audio products, computers, printers, scanners and photocopiers. In New Zealand Energy Star can also be found on air conditioners and dishwashers.

The use of Energy Star is being expanded to cover the most efficient products on the market. This will become the main endorsement mechanism in Australia and New Zealand replacing the Top Energy Saver Award (TESAW).

ELECTRONIC NEWSLETTERS

One issue of Switched On, the Programme's electronic newsletter was released during the year. Topics focussed on product energy efficiency and items that keep stakeholders up-to-date on topical issues (back issues can be found on **www.energyrating.gov.au** under E3 newsletters).

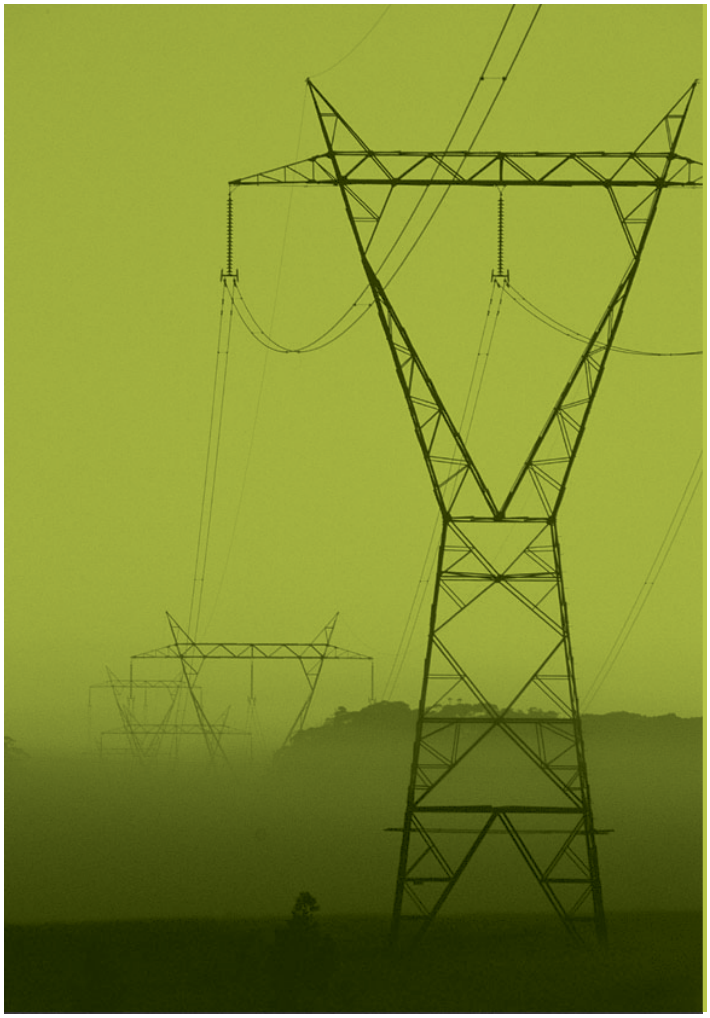
The E3 Committtee has also decided to share much more information about its compliance activities with stakeholders through newsletters. The first Compliance Newsletter was released in October 2006 following the ACCC agreement with LG. The theme of the newsletter was to provide an overview of past issues and some context for electrical equipment compliance action. Programme supporters want timely information about what is happening and regulators want to report on the overall success of the programme, supported by so many stakeholders. The Programme is committed to releasing reports on completed compliance activities as well as foreshadowing topical issues keeping everyone up-to-date. In 2007 newsletters for each significant sector will be released when warranted.

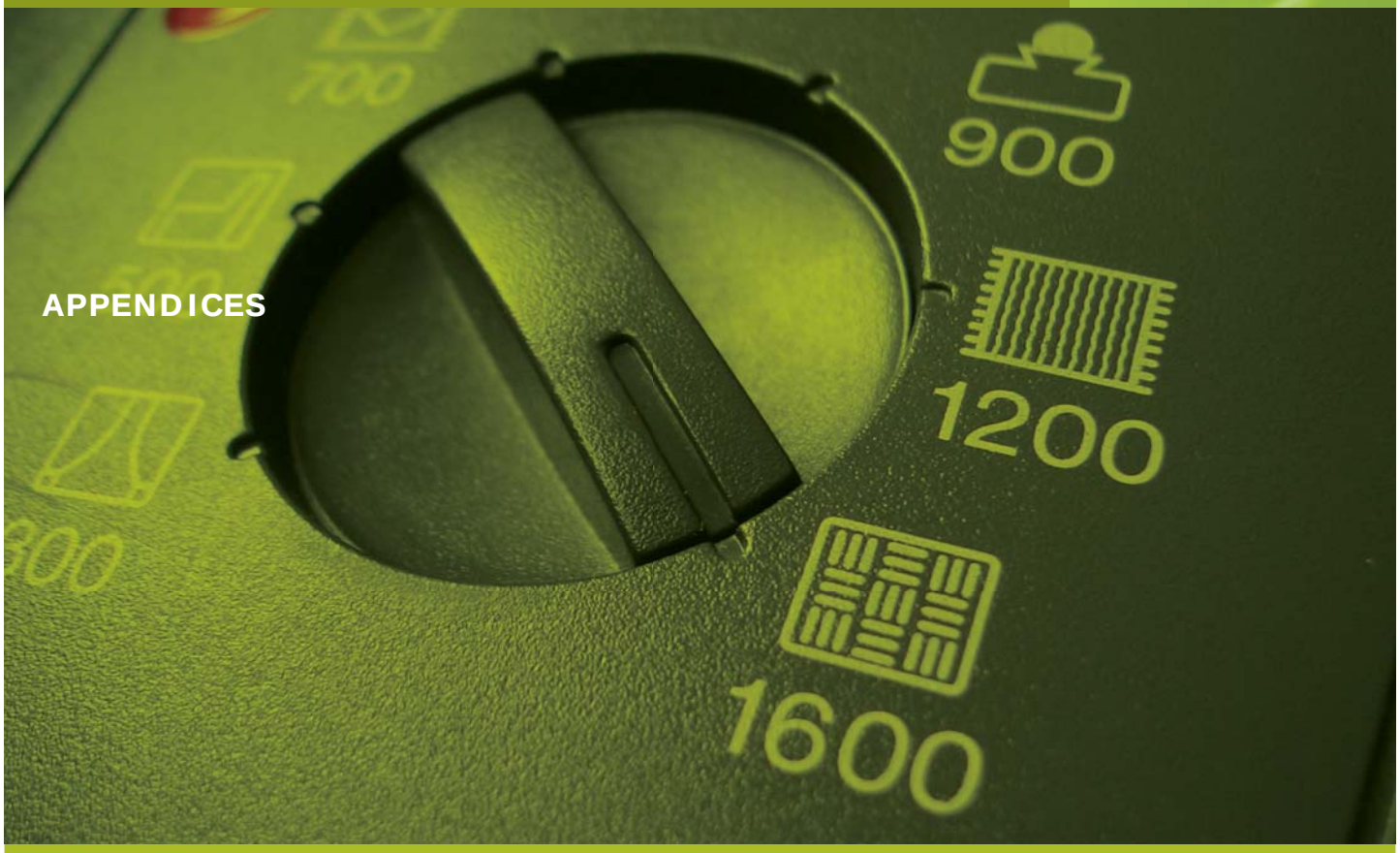
BUDGET

The Programme operates with contributions from all Australian jurisdictions and now New Zealand. Under the agreed funding formula, the Australian Government will contribute 5/12ths, with the states and territories and New Zealand contributing 5/12ths and 1/6th, respectively, on a population proportional basis.

The E3 Committee received funding from the MCE in FY 2005-06 of $1.533 million and in FY 2006-07 of $1.528 million.

The E3 Committee for Gas received funding from the MCE in FY 2005/06 of $300,000 and in FY 2006-07 of $400,000. This brings the total MCE funding for the period FY 2006-2007 to $1.928 million.





APPENDICES

APPENDIX 1

MINISTERIAL COUNCIL ON ENERGY MEMBERS

AS AT 5 APRIL 2007

The Hon Ian Macfarlane MP
Minister for Industry, Tourism and Resources, COMMONWEALTH
(Chairman, Ministerial Council on Energy)

The Hon Geoffrey Wilson MP
Minister for Mines and Energy, QUEENSLAND

The Hon Joe Tripodi MP
Minister for Energy, NEW SOUTH WALES

The Hon Peter Batchelor MP
Minister for Energy and Resources, VICTORIA

The Hon Francis Logan MLA
Minister for Energy, WESTERN AUSTRALIA

The Hon Patrick Conlon MP
Minister for Energy, SOUTH AUSTRALIA

The Hon Chris Natt MLA
Minister for Mines and Energy, NORTHERN TERRITORY

Mr Jon Stanhope MLA
Chief Minister, AUSTRALIAN CAPITAL TERRITORY

The Hon David Llewellyn MHA
Minister for Energy, TASMANIA

OBSERVERS

The Hon David Parker
Minister of Energy, NEW ZEALAND

Hon Sir Moi Avei KBE MP
Minister for Petroleum and Energy, PAPUA NEW GUINEA

APPENDIX 2

EQUIPMENT ENERGY EFFICIENCY COMMITTEE MEMBER ORGANISATIONS

The Commonwealth, New Zealand and each state and territory are represented on the E3 Committee and participate in its deliberations. Representatives are officials within government departments, agencies and statutory authorities or people appointed to represent these bodies. Representatives are usually a senior officer directly responsible for energy efficiency. The membership is currently under review and may expand to include other agencies working in these fields. Current membership includes:

- Australian Greenhouse Office, Department of the Environment and Water Resources
- Department of Industry, Tourism and Resources
- NSW Department of Energy, Utilities and Sustainability,
- Energy Safe Victoria
- Sustainability Victoria
- Queensland Department of Energy
- Electrical Safety Office, Queensland Department of Industrial Relations
- Western Australia Sustainable Energy Development Office
- South Australian Office of the Technical Regulator
- Department of Primary Industry and Resources, South Australia
- South Australia Department for Transport, Energy and Infrastructure
- Office of Energy Planning and Conservation, Department of Infrastructure, Energy and Resources, TAS
- Energy and Water Policy, ACT Chief Minister's Department
- Northern Territory Department of Planning and Infrastructure
- New Zealand Energy Efficiency and Conservation Authority
- New Zealand Ministry for the Environment

Commonwealth

The **AGO** is part of the Australian Government Department of the Environment and Water Resources. The AGO delivers the majority of programmes under the Australian Government's climate change strategy. An AGO Officer is the chair of the E3 Committee and others provide support for its activities.

The **Department of Industry, Tourism and Resources** (ITR) has the lead coordination role on implementing the Australian Government's energy white paper, Securing Australia's Energy Future. ITR provides the Secretariat for the MCE which brings together all state and territory government ministers to work on national policy and governance for the Australian energy market. The Minister for Industry, Tourism and Resources chairs the MCE.

New South Wales

The **Department of Energy, Utilities and Sustainability** leads the NSW Government's sustainable energy and urban water agenda. The Department is the agency responsible for regulating appliance and equipment energy efficiency in NSW.

Victoria

Energy Safe Victoria is the Victorian Technical Regulator responsible for electrical safety and equipment efficiency. Its mission is for Victoria's energy to be the safest and most efficient and its corporate vision is for Victoria to enjoy the safest, most efficient supply and use of electricity and gas. A strategic responsibility of the office is to ensure energy efficiency of equipment through the labelling of major domestic appliances and meeting (MEPS).

Sustainability Victoria's purpose is to show the way to using our resources more efficiently and reducing our everyday environmental impacts. The Energy Efficiency for Victoria Action Plan and the NFEE demonstrate commitment to a program of action on energy efficiency in the residential, commercial, industrial and government sectors. The Energy Efficiency for Victoria Action Plan sets out a comprehensive program of Government action to drive improvements in energy efficiency and greenhouse gas abatement. It also establishes the context for action - detailing where Victoria stands today and the opportunities and challenges with respect to energy efficiency - and outlines the VIC Government's broad objectives and strategies.

Queensland

The **Department of Mines and Energy** (Department) develops and manages the Queensland Government's energy policy and regulatory frameworks in which energy participants operate. The Department works with industry in identifying and proposing solutions for future strategic issues which may affect industry, business or domestic energy consumers. The Department is committed to providing Queenslanders with the tools and information needed to become more energy wise. The Queensland Government works with the Commonwealth and other states and territories to develop and implement national programs for energy efficiency through the NFEE.

Western Australia

Western Australian Department of Consumer and Employment Protection's mission is to create an employment and trading environment that provides for the growth, safety and protection of the community by enhancing capacity; ensuring an effective regulatory environment; and enforcing the law.

The Sustainable Energy Development Office is focused on delivering the Government of Western Australia's sustainable energy policy. Key objectives include the increased uptake of energy efficient products, best practice energy management and greater use of renewable energy. The Office plays a vital role in accelerating the adoption of renewable energy and energy-efficient strategies across all sectors of the community - from business and industry to government and the general public. By implementing programs that promote and highlight the importance of renewable energy and energy efficiency, the Sustainable Energy Development Office is fostering a sustainable energy industry that contributes to the Western Australian economy and the environment.

South Australia

The **South Australian Office of the Technical Regulator's** primary role is to ensure the safety of workers, consumers and property, and to ensure compliance with legislation and technical standards and codes throughout the electricity and gas industries. The Technical Regulator has been assigned, under the Electrical Products Act 2000, the examination, testing, safety and energy labelling of electrical products and MEPS registration of electrical appliances and equipment. The Technical Regulator is involved in national regulatory developments to ensure national consistency within the electricity and gas industry.

Tasmania

The Tasmanian Government's interest is managed by the **Office of Energy Planning and Conservation** (OEPC) within the Department of Infrastructure, Energy and Resources. The OEPC provides policy advice on energy issues to the Minister and the Tasmanian Government and provides input into the development of the framework for the regulation of industry participants in Tasmania's energy industry.

Australian Capital Territory

The primary responsibility of **Energy and Water Policy**, within the **ACT Chief Minister's Department**, is to provide the ACT Government with strategic policy advice and direction on local and national energy and water issues. The section applies a whole-of-government approach, coordinating with agencies to achieve policy outcomes.

Northern Territory

The newly formed **Department of Natural Resources, Environment and The Arts** enables the NT Government to provide opportunities to better coordinate planning and development of the Territory's economic infrastructure, while balancing this with the need to protect and conserve the natural environment and heritage values and to achieve efficiencies in delivering services to Government.

New Zealand

The **Energy Efficiency and Conservation Authority** (EECA) is the principal body responsible for delivering the New Zealand Energy Efficiency and Conservation Strategy. EECA's function is to encourage, promote and support energy efficiency, energy conservation and the use of renewable energy sources.

The **Ministry of Environment** is the lead New Zealand Department advising the Minister of Energy on the development of government policy and advice on energy efficiency, conservation and the use of renewable sources of energy. It works with EECA and also monitors its performance under the Public Finance Act.

APPENDIX 3

TERMS OF REFERENCE
EQUIPMENT ENERGY EFFICIENCY COMMITTEE

THE CHARTER OF EEEC ENCOMPASSES THE FOLLOWING FUNCTIONS:

- to provide assistance to all states and territories, as required, in the development and regulatory implementation of technical, legal, and administrative aspects of equipment energy efficiency initiatives
- to coordinate the national development and implementation of energy efficiency programs of a non-regulatory nature and enhance existing regulator programs. These may include voluntary labelling initiatives, market transformation projects, and similar voluntary actions
- to coordinate national marketing and communication projects to support new, and enhance existing, energy efficiency programs
- to review existing appliance energy consumption and improve standards and test procedures
- to monitor program performance and achievements
- to provide a forum to exchange information on enforcement/compliance issues and community information and marketing initiatives
- to administer an effective, coordinated testing regime of the energy efficiency claims of suppliers
- to coordinate broad consultative processes with industry and other interested parties in the development and implementation of energy labelling and associated programs.

The charter recognises the maturity of the program and the need for a “holistic” approach to government policies for greenhouse gas abatement in the appliance and equipment field. The focus of the program continues to be the delivery of nationally consistent regulation. The implementation of most voluntary programs remains an individual jurisdictional responsibility although voluntary programs that assist the regulatory program to maximise benefits are being added to E3 Committee work plans.

APPENDIX 4

E3 COMMITTEE OPERATING INSTRUCTIONS UNDER THE NATIONAL FRAMEWORK FOR ENERGY EFFICIENCY STAGE ONE IMPLEMENTATION PLAN

OBJECTIVES

The Equipment Energy Efficiency package aims to drive improvements to the energy efficiency of major energy using appliances and equipment. It will achieve this by increasing the number of products covered by the existing Programme, increasing the stringency of existing MEPS requirements through a process of regular review, and increasing the intensity of the programme in key areas so that a range of programme tools are used to maximise the energy saving outcomes.

Specifically, under this package, the MCE has agreed that the existing Programme will be:

- broadened in scope to include MEPS and labelling for gas products
- expanded through the introduction of new or more stringent MEPS for residential, commercial and industrial products, with a key focus on increasing the number of commercial and industrial products regulated.

The Programme is a very cost effective policy measure for governments, and has demonstrated significant energy and greenhouse savings as well as net economic benefits. The current programme is projected to deliver energy savings of around 5 PJ a year below business-as-usual in 2004, rising to 33 PJ in 2010 and 68 PJ in 2020.

An expanded and accelerated Programme could deliver even larger savings and yet remain highly cost-effective:

- Independent experts estimate that the current Programme has an average benefit/cost ratio of 2.4 to 1, and is achieving greenhouse gas abatement at a cost of minus $30/tonne, indicating potential for further expansion.
- The Programme's current policy basis limits the scope for further expansion. By end 2006, Australia is likely to have implemented MEPS for all electrical products currently regulated by our major trading partners. Expansion would then rely on new products being regulated overseas or existing world's best practice MEPS being tightened.
- The Programme's current guidelines require MEPS levels to be fixed for around four to five years. A more flexible approach, where agreed by industry, would enable MEPS levels to be reviewed more frequently and more closely track regulatory changes undertaken by our major trading partners.
- To date, the Programme has focused on only electrical products. Gas appliances are covered by an industry-run scheme which lacks drivers for improving efficiency.

CURRENT STATE OF PLAY

The Programme is an existing nationally coordinated programme to improve the energy efficiency of, and reduce greenhouse gas emissions from residential, commercial and industrial appliances and equipment. The main tools employed are mandatory MEPS and energy labelling, and voluntary measures including information provision, endorsement labelling, training and support to promote high efficiency products.

The New Zealand government created its own mandatory MEPS and labelling programme in 2002 after initially operating a voluntary labelling scheme.

Since 2000, key factors which have underpinned the Programme are:

- A mandate to regulate any energy consuming product, subject to a positive cost-benefit study and community consultation
- Australia to match world's best regulatory practice, but with a suitable time-lag to allow local industry to adapt
- A requirement under the Trans-Tasman Mutual Recognition Agreement (TTMRA) for Australia to coordinate its programme with New Zealand.

In its early stages, the Programme concentrated on mandatory energy labelling for major domestic electrical appliances. Since 1999, there has been an increased focus on MEPS. By the end of 2004, three domestic, four commercial and two industrial product types will be subject to mandatory MEPS, with a further 12 proposals announced in October/November 2004.

KEY ELEMENTS

The expanded Programme, to be implemented under this package, involves the continuation and expansion of the successful elements of the existing Programme as well as the addition of new elements as shown at Table 8.

The Programme's guiding principles will also be updated to facilitate the introduction of more stringent MEPS levels and make the programme responsive to other key policy drivers:

- Mandate to regulate any energy consuming product, subject to a positive cost-benefit study, and stakeholder and community consultation. The benefits of reduced peak demand and reduced water consumption will also be taken into consideration in the regulatory impact statement where appropriate.
- A more pragmatic approach to establishing MEPS levels by selecting the most appropriate option (in decreasing order of preference) from:
  - lead the world with regulatory standards – where there is no significant manufacturing base and is supported by industry
  - match world's best regulatory practice – where there is a significant domestic manufacturing base to
  - use market regressions to remove a percentage of the least efficient products – where there is no basis for international comparison or as part of a two-step process where a product type has not been previously regulated.
- Monitor and report on technical and regulatory developments relating to demand side management and demand response to identify options to facilitate further reductions in peak demand through appliance and equipment standards.
- Regular review of existing MEPS levels, with stability periods of less than four to five years, where this is acceptable to industry stakeholders.
- Coordination, and ideally harmonisation, of the Programme's forward work plan with New Zealand through a policy framework approved by the MCE.

TABLE 8: KEY ELEMENTS OF THE STAGE ONE IMPLEMENTATION PLAN

EXISTING ACTIVITY	NEW/EXPANDED ACTIVITY
Expanded Electrical Appliance and Equipment Programme	
Maintenance of existing programme – MEPS, labelling (mandatory and voluntary) Implementation of new or upgraded MEPS and labelling regulations agreed to by the MCE in 2004	Complete regulation process for MEPS and labelling proposals released in 2004 Develop new/upgraded MEPS and labelling proposals for residential and commercial products
Gas Appliance and Equipment Programme	
Complete 10-year strategic plan and three-year work plan for Gas Appliance and Equipment Programme	Establish and introduce a nationally consistent MEPS and labelling scheme for gas appliances and equipment
Increased focus on industrial products	
	Identify and pursue opportunities for increasing industrial sector coverage
Consideration of other products/fuels	
	Consider regulating (non-electrical or gas) products proposed by New Zealand
Development of product strategies	
Implement National Standby Strategy and Greenlight Australia strategy	Develop cross-sectoral and multi-fuel product strategies for key technologies
Information and awareness	
Maintenance and continued development of the existing national websites Complete High Efficiency Product database	Link to the National Resource Labelling strategy Develop national promotional campaign targeting retail stores
Monitoring and evaluation	
Continue tracking efficiency of whitegoods sold and consumer attitudes Continue compliance surveys	Expand tracking to cover gas products Projected estimates of 2005–07 work plan

DELIVERING THE POLICY PACKAGE

DEVELOPMENT PROCESS

Ongoing stakeholder consultation will be used to design and implement key measures in the policy package including development of:

- detailed three-year work plans for electrical and gas appliances and equipment covering 2005–07
- 10-year product strategies, including the National Standby Strategy, Greenlight Australia and a range of others.

The standard Programme process for developing and implementing MEPS and labelling regulations will continue to be used, including the preparation of product profiles, regulation proposals, regulatory impact statements, involvement in standards development and formal stakeholder consultation processes.

DELIVERY MECHANISM

The programme for electrical and gas products, and any other product-types regulated, will continue to be implemented through the existing Programme delivery mechanism:

- Test methods, MEPS levels and labelling algorithms defined in Australian or joint Australian/New Zealand standards, and based on international standards where possible
- Mandatory regulations implemented through state, territory and New Zealand legislation which call up the relevant standards for each product type
- Products tested to the standards and registered for MEPS or energy labelling by state-based regulators (or the Energy Efficiency and Conservation Authority in New Zealand)
- Public information provided through national websites.

REPORTING AND EVALUATION

The performance and results of government energy efficiency programmes provide a valuable source of information for policy development and implementation, however during the development of NFEE Stage One it was found that program outcomes were not always reported in a way that allowed ready comparison, and often did not capture the range of benefits of improved energy efficiency outside energy and greenhouse savings. The Productivity Commission inquiry into energy efficiency also identified the value and importance of evaluation to determine the effectiveness of energy efficiency programs.

To improve the coordination of energy efficiency program monitoring, reporting and evaluation the NFEE Steering Committee is coordinating the development of a collection, reporting and evaluation framework, known as D-REF. The framework is intended to provide a nationally consistent approach to data collection, reporting and evaluation for existing government funded energy efficiency programs and will become an integral part of the program design of future energy efficiency initiatives. It will be used to determine the efficacy of Government funded energy efficiency programs, identify deficiencies in current programs, and inform decisions about future funding priorities and programme design.

D-REF will be used to report on and evaluate the actual impact of NFEE Stage One (as opposed to projected impacts), and may also be used for individual jurisdictions to report on and evaluate the implementation of jurisdiction-specific energy efficiency programmes.

The draft framework has now been developed and is currently being reviewed by Government.

APPENDIX 5

EQUIPMENT ENERGY EFFICIENCY WORKPLAN 2005/06

TYPE OF POLICY TOOL	DETAIL
2005-06	
Regulatory	> Implement the second round of MEPS for: > Electric motors > Small electric storage water heaters > Single phase air conditioners
	> Implement the first round of MEPS for: > Electric vented storage and electric heat exchange water heaters > Heat Pump Air Conditioners
	> Review label algorithm for refrigerators and freezers
	> Include standby power on wet product energy labels
	> Mandate the inclusion of rinse performance requirements for clothes washers
Voluntary	Long-term strategies:
	> Monitor and maintain the national standby strategy, *Money isn't all you're saving*
	> Develop and implement the first three year work plans for: > *Greenlight Australia* > *Switch on Gas*
	> Develop 10-year strategies for: > Hot water systems > Building HVAC > DSM in the home > Electric motor systems in the industrial sector, including > > Fans and pumps > > Industrial measurement and data collection > Swimming pool equipment > Commercial catering equipment*
	> Review fluorescent lamp (linear) high efficiency level
	> Complete air conditioning programme
	> Complete commercial refrigeration programme
	> Investigate second-hand products

APPENDIX 6

LIST OF COMMON PRODUCTS WITH NEW ZEALAND (COVERED BY 2012)
Equipment Energy Efficiency programme

			MEASURE			
LOCATION	NUMBER	PRODUCT	MEPS	LABELLING	STANDBY	ENERGY ALLSTARS
HOME	**Whitegoods**					
	1	Refrigerators	✓	ML		✓
	2	Freezers	✓	ML		✓
	3	Dishwashers		ML	✓	✓
	4	Clothes washers	✓	ML	✓	✓
	5	Clothes dryers		ML	✓	✓
	6	Ovens			✓	✓
	7	Cooktops			✓	✓
	8	Microwave ovens			✓	✓
	9	Rangehoods			✓	✓
	Browngoods and home entertainment					
	10	Televisions	✓	ML	✓	✓
	11	Set-top boxes	✓	HE	✓	✓
	12 13 14 15	Other home entertainment - DVDs - Home theatre - New technologies		HE	✓	✓
	Heating and cooling					
	16	Air conditioners (single phase)	✓	ML (non ducted), VL (ducted)	✓	✓
	17	Heat pumps (single phase) - Heating mode of household ACs	✓ (voluntary cold climate)	ML	✓	✓
	18	Dehumidifiers			✓	✓
	19	Ceiling fans			✓	✓
	20	Electric Storage water heaters	✓		✓	✓
	21	Electric space heaters			✓	✓
	Other products					
	22	Swimming pool equipment	✓	ML		✓
	23	Breadmakers			✓	✓
	24	Coffee machines			✓	✓
	25	Smoke alarms			✓	✓
	26	Motion detectors			✓	✓
	27	Rollerdoors			✓	✓
	28	Security systems			✓	✓

		MEASURE			
LOCATION	PRODUCT	MEPS	LABELLING	STANDBY	ENERGY ALLSTARS
OFFICE	**Heating and cooling**				
	Air conditioners (packaged – 3 phase)	✓	HE, VL	✓	✓
	Heat pumps (3 phase) Heating mode of business AC		HE, VL	✓	✓
	Close control AC (for computer rooms)	✓			✓
	Chillers for commercial AC	✓			✓
	IT and office equipment				
	Computers (including laptops) and monitors	✓	HE	✓	✓
	External power supplies (EPS)	✓	HE	✓	✓
	Internal Power supplies (IPS)	✓	HE	✓	✓
	Printers			✓	✓
	PC Speakers			✓	✓
	Modems			✓	✓
	Photocopiers			✓	✓
	Scanners and multifunction devices (MFDs)			✓	✓
	Lighting				
	Fluorescent ballasts (linear)	✓	ML		✓
	Fluorescent lamps (linear)	✓	HE		✓
	Fluorescent lamps (CFLs)	✓	HE		✓
	Halogen lamps (including reflector lamps)	✓	HE		✓
	Halogen transformers	✓	HE		✓
	Luminaires	✓	HE		✓
	High intensity discharge lamps (HID)	✓	HE		✓
	High intensity discharge ballasts	✓	HE		✓
	Photoelectric cells	✓	HE		✓
	Emergency and exit lighting	✓	HE	✓	✓
	OTHER PRODUCTS				
	Chilled and boiling water dispensers	✓	HE		
	Refrigerated vending machines	✓	HE		

		MEASURE			
LOCATION	PRODUCT	MEPS	LABELLING	STANDBY	ENERGY ALLSTARS
FACTORY	**INDUSTRIAL**				
	Electricity distribution transformers	✓	HE		✓
	Electric Motors (3 phase)	✓	HE		✓
	Industrial fans	✓			✓
	Industrial pumps	✓			✓
	COMMERCIAL REFRIGERATION				
	Refrigerated display cabinets	✓	HE		✓
	Ice Makers	✓	HE		✓
	Ice storage bins	✓	HE		✓
	OTHER PRODUCTS				
	Large electric storage water heaters	✓	HE		✓
	Miscellaneous electric water heaters	✓	HE		✓
STREET	**LIGHTING**				
	Public amenity lighting (street lighting)	✓	HE		✓
	Traffic signals (LED)	✓	HE		✓

Key: MEPS – minimum energy performance standards,
HE – high efficiency voluntary label,
ML – mandatory star rating energy label – can include separate HE label for many products, for ballasts ML mean display for energy efficiency index
VL – voluntary use of the star rating energy label

APPENDIX 7

ACCC STATEMENT IN RELATION TO LG UNDERTAKINGS

LG COMPENSATES CONSUMERS OVER MISLEADING ENERGY RATINGS

Up to $3.1 million will be available in rebates for eligible consumers who bought five popular LG Electronics Australia Pty Ltd air conditioner models that did not comply with the energy efficiency values claimed on rating labels.

“LG sold more than 15,000 mislabelled air conditioners”, Australian Competition and Consumer Commission Chairman, Mr Graeme Samuel, said today.

“LG will also implement new testing procedures to ensure that the energy efficiency of its air conditioners matches the performance indicated by their stated energy efficiency star rating and, where applicable meet, ‘minimum energy performance standards’”.

LG has given court enforceable undertakings to the ACCC after it raised concerns about the accuracy of energy claims on the five models.

The ACCC investigation followed a complaint by the Australian Greenhouse Office. Check tests conducted on behalf of the Department of Energy, Utilities and Sustainability in New South Wales, and Energy Safe Victoria, found that:

a) the actual cooling output of a number of models of air conditioners sold by LG between particular dates was less than 90 per cent of the rated output

b) the energy consumption of some of the affected models was more than the rated power consumption, and

c) the energy efficiency ratings of the affected models were lower than that claimed by LG, and that of one model was lower than that required by the relevant Minimum Energy Performance Standards (MEPS).

As a result, it is likely that the five air conditioner models use more electricity and, accordingly, cost more to run than would be the case if those air conditioners complied with the values stated on the relevant energy labels.

The ACCC and LG have agreed an estimate of the potential difference in operating costs that may be experienced in respect of each of the five models. LG will compensate purchasers of affected models for the potential increase in operating costs as set out below.

Consumers who purchased these models between the dates listed below and who relied on representations made by LG in relation to the cooling capacity, power consumption or efficiency of that air conditioner should contact LG on 1800 506 154. Consumers will need to provide LG with their contact details, together with proof of purchase or other evidence reasonably establishing their ownership of an affected model within the next six months.

“The integrity of the Australian energy star rating system is important because it provides a powerful market driven incentive for manufacturers to improve the energy performance of their products”, Mr Samuel said. “Consumers need to have confidence that they can use the star rating of an air conditioner to make an informed choice between competing brands.

“The ACCC, the Australian Greenhouse Office and state energy regulators will continue working together to ensure compliance with the energy labelling system”.

Media inquiries:

Mr Graeme Samuel, Chairman, (02) 6243 1131, or 0408 335 555

Ms Lin Enright, Director, Public Relations, (02) 6243 1108, 0414 613 520

Air Conditioner Model	Relevant dates of sale	Rebate per unit
LST182H-2	16 October 2002 – 14 December 2004	$71.54
LST244H-2	31 October 2002 – 22 October 2005	$198.22
LST244T-2	24 October 2002 – 20 January 2004	$208.28
LSZ182M-4	23 September 2004 – 20 October 2005	$89.42
LBNL6081BL / LBUL6080BL	3 September 2003 – 22 September 2005	$436.77

APPENDIX 8

REGULATORY OUTCOMES FINALISED IN 2006

Appliance Type	Brand	Model	Date De-registered
Air-conditioner	Carrier/APAC*	QPA21-9/ S021IHR7AN+S021OHR9AN	29/08/2006
	Sanyo	SAP-KRV243GJH / SAP-CR243GJH	05/09/2006
	Mitsubishi Electric	PEH-6EKSB	28/04/2006
	Teco	LS2504V / LT2504V	31/03/2006
	Hitachi	RAK-60NHA/RAC-60NHA	03/02/2006
	Toshiba	RAV-SM801KRT-E/SM800AT-E	17/2/2006
Clothes Washer	Kleenmaid	KFL850	05/09/2006
	Westinghouse	LT959SA	02/02/2006
	Electrolux	EW1280F	23/01/2006
Electric Motor	DOVERS	M3400150-90 (MS90L1-4)	31/01/2006
Refrigerator/Freezer	CONIA	CF330	27/12/2006
	Heller	FRH110	04/12/2006
	WHIRLPOOL	6WRI27N	30/08/2006
	Mistral	MBF070SS(H)	02/02/2006
	BOSCH	KSU445216W	14/07/2006
	BOSCH	KSU405216W	14/07/2006

** Note: At the time of testing this Carrier unit was not registered, however a similar unit of different brand (APAC) from the same supplier that relied on the same test report for its registration was de registered by the Victorian regulator on the basis of the checktest fail result recorded against the tested (Carrier) unit*

APPENDIX 9

MINISTERIAL ANNOUNCEMENT ON STANDBY POWER

JOINT MEDIA RELEASE

AUSTRALIAN MINISTER FOR THE ENVIRONMENT AND HERITAGE

SENATOR THE HON. IAN CAMPBELL

&

MINISTER FOR INDUSTRY, TOURISM AND RESOURCES

THE HON IAN MACFARLANE, MP

8 November 2006

C293/06

'Standby' for greenhouse action

In a move that further demonstrates the Australian Government's action to reduce greenhouse gas emissions, Minister for the Environment and Heritage, Senator Ian Campbell and Minister for Industry, Tourism and Resources, Ian Macfarlane today announced that Australia will lead the world in reducing greenhouse gas emissions from 'standby' power in electrical appliances.

'Standby' power, one of the silent enemies of the global climate, occurs when electrical appliances are not being actively used and look like they are turned off but are often in 'standby mode', consuming electricity and generating greenhouse gases.

The Australian Government will work with state governments and industry to ensure, by 2012, all electrical appliances would be regulated to meet the 'one watt target'. Currently some appliances use up to 25 watts for their standby mode.

Minister Macfarlane said that not only will this action save greenhouse gas emissions, but also have significant economic benefits.

"In Australia alone this initiative is set to save the Australian community more than 2.5 million tonnes of greenhouse gas emissions and about $350 million per year," Mr Macfarlane said.

Around ten per cent of all energy used by Australian households is made up of standby power. Based on the most recent data, this equates to around 750kg of greenhouse gas per house each year.

Senator Campbell said that the Australian Government is working with industry to ensure only appliances that meet this new standard will be available on the Australian market.

"This action on 'standby' power also has huge potential internationally," Senator Campbell said.

"Last week Prime Minister, John Howard announced that through the Asia Pacific Partnership on Clean Development and Climate (AP6) household electricity consumption could be slashed with coordinated policy action on standby power in partner countries.

"Such action could have the potential to save more than 140 million tonnes a year of greenhouse gas emissions in 2030 across AP6 countries– approximately 40 per cent of the total projected electricity consumption for Australia across all sectors in 2030," Senator Campbell said.

Senator Campbell said if you applied that across the entire world, the potential savings in greenhouse gas emissions was enormous."

"I call on all international economies to follow the lead of Australia and mandate the one watt initiative as soon as practicable."

The International Standby Power Conference - Time for Global Action is being held in Canberra this week. The conference is being supported by the International Energy Agency, APEC and the AP6.

For more information about the Standby Conference - Time for Global Action visit http://standby2006.energyrating.gov.au

Media contact:

Rob Broadfield (Senator Campbell's office)02 6277 7640 or 0409 493 902

Lisa Chalk (Minister Macfarlane) 02 6277 7580 or 0409 476 619

APPENDIX 10

EQUIPMENT ENERGY EFFICIENCY COMMITTEE-GAS
Member Organisations

Australian Greenhouse Office, Department of the Environment and Heritage
Department of Industry, Tourism and Resources
NSW Department of Energy, Utilities and Sustainability
Energy Safe Victoria
Sustainability Victoria
Electrical Safety Office, Queensland Department of Industrial Relations
Queensland Department of Natural Resources and Mines
Queensland Department of Energy
Western Australian Department of Consumer and Employment Protection
Western Australian Sustainable Energy Development Office
Department of Transport, Energy and Infrastructure (SA)
South Australian Office of the Technical Regulator
Gas Technical Regulators Committee
Tasmanian Office of Energy Planning and Conservation, Department of Infrastructure, Energy and Resources
ACT Office of Sustainability
ACT Planning and Land Authority
Northern Territory Department of Planning and Infrastructure
New Zealand Energy Efficiency and Conservation Authority
New Zealand Ministry for the Environment

APPENDIX 11

PUBLICATIONS RELEASED DURING 2006
Equipment Energy Efficiency Programme

Copies of the following publications are available from the Equipment Energy Efficiency Committee's electronic library at www.energyrating.gov.au

Number or Date of Publication	Title
2006-01	Refrigerator Star Rating Algorithms in Australia and New Zealand
2006-02	2005 Intrusive Residential Standby Survey Report
2006-03	Achievements 2005
2006-04	Climate Control - Heating, Ventilation, Air Conditioning and Efficiency. Summary of Responses - Discussion Paper No 2
2006-05	RIS - Inclusion of standby power in the energy ratings of clothes washers & dishwashers
2006-06	Greening Whitegoods - 2005
2006-07	Appliance Standby Power Consumption - Store Survey 2005/2006 - Interim Report
2006-08	Appliance Performance Labelling In Australia and New Zealand
2006-09	Appliance Standby Power Consumption - Store Survey 2005/2006 - FINAL REPORT
2006-10	Standby Power - Current Status
2006-11	Switch on Gas - Revised Gas Workplan for 2007 to 2007/08
2006-12	Gas Water Heater Comparative Testing Round-Robin 2005/06 - Part of the E3 Gas Workplan 2007 to 2007/08
2006-13	A draft proposal for: Minimum Energy Performance Standards for Home Entertainment Equipment
2006-14	Retrospective Analysis of the Impacts of Energy Labelling and MEPS: Refrigerators and Freezers
2006-15	Final Report on a Consumer Research Study about Compact Fluorescent Lamps (CFLs)
Fact Sheet	Fact Sheet: MEPS for external power supplies