

DISCUSSION PAPER

Energy Efficient Appliance

ANNUAL AWARD & LABEL SCHEME

A potential framework for a national voluntary endorsement award and label scheme to identify *High Energy Efficient* electric and gas household appliances.

This discussion paper, which supports an earlier concept paper circulated for comment to interested stakeholders, is prepared for a select audience of appliance suppliers to gauge support for the proposed new Award Scheme.

NATIONAL APPLIANCE AND EQUIPMENT
ENERGY EFFICIENCY PROGRAM

April 2003



Purpose

This discussion paper seeks to provide suppliers in particular with a framework upon which to consider supporting the launch by Australian Governments of an Award and label scheme for high-energy-efficient electric and gas household appliances.

The proposals in this discussion paper purport to further elaborate the sketch outline of such an award and label scheme in the concept paper released earlier in 2003. The proposals are ideas presented for debate and will be modified as the proposal is improved by the critique and criticism of interested stakeholders. This paper should be read in conjunction with the concept paper.

This discussion paper provides another opportunity for more detailed comments about the Award scheme and its practical implementation. The closing date for submissions or comments is 16 May 2003, after which the Award energy efficiency eligibility levels will be reviewed and issued by July 2003 for the 2004 Award.

Submissions/comments may be emailed to Graeme.Priestley@greenhouse.gov.au or may be posted or faxed to:

The Built Environment Team
Australian Greenhouse Office
GPO Box 621
CANBERRA ACT 2601
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Further information about the National Appliance and Equipment Energy Efficiency Program is available on the Australian Greenhouse Office (AGO) Website www.energyrating.gov.au.



Background

Household sector energy consumption is projected to increase up to 2010. At the same time the proportion of electricity consumption

is projected to decrease slightly and natural gas consumption to increase slightly over that period as follows¹:

Year	Electricity (PJ)	Natural Gas (PJ)	Other (PJ)	Total (PJ)
2003	165.7 (47.5%)	126.8 (36.4%)	56.1 (16.1%)	348.6
2005	168.6 (47.1%)	131.8 (36.8%)	57.5 (16.1%)	357.3
2010	173.7 (45.8%)	144.9 (38.2%)	60.7 (16.0%)	379.3

Household energy use is about 11.5% of the national total. Of the household energy consumption electricity is estimated to be around 84%, natural gas 14% and other forms 2%. The household energy sector is estimated to account for over 17% of Australia's energy-related greenhouse gas emissions².

The only figures available for the energy consumption by labelled appliances is electricity consumption of appliances and equipment as follows¹:

Year	Refrigerator (PJ)	Freezer (PJ)	Clothes Washer (PJ)	Clothes Dryer (PJ)	Dishwasher (PJ)	Total (PJ)
2003	23.1	7.0	1.3	1.4	1.4	34.2
2005	22.9	7.0	1.3	1.3	1.4	33.9
2010	22.4	6.9	1.4	1.2	1.4	33.3

Energy consumption by labelled electric appliances represents around 20% of household energy consumption.

No comparable sales figures are currently available for gas appliances (water heaters, space heaters and ducted heaters) labelled under the Australian Gas Association's energy rating scheme.

There is a large number of energy labelled appliances purchased by consumers. Most recent figures for sales of electrical appliances are for the year 2001 as follows³:

Electric Appliances	Sales 2001
Refrigerators & freezers	588,343
Clothes washers	443,836
Clothes dryers	176,670
Dishwashers	151,561
Airconditioners	Not available

Since the 1980s, Australian governments and the household appliance industry have independently recognised the need to intervene in the market for selling major domestic appliances by requiring information schemes in the form of comparative energy rating labels, to encourage reduced energy consumption and greenhouse gas emissions through informed consumer choice.

¹ The figures are taken from the *1999 Final Report of the Australian Residential Building Sector Greenhouse Gas Emissions 1990 – 2010* prepared for the Australian Greenhouse Office by Energy Efficient Strategies.

² The estimate of household energy consumption as a proportion of the overall energy consumption in Australia is based on information in *Household Energy Use in Australia: End Uses, Greenhouse Gas Emissions and Energy Efficiency Program Coverage*, prepared by George Wilkenfeld and Associates for NAEEEEC, March 1998.

³ Sales figures are taken from input data, purchased by NAEEEEC from a commercial source (GfK Market Research), to the report *Greening White Goods: A Report into the Energy Efficiency Trends of Major Household Appliances in Australia from 1993 – 2001*, February 2003, by Energy Efficient Strategies to NAEEEEC.

For over ten years the Victorian Government, and more lately with the NSW Government, managed the *Galaxy Energy Awards*, a voluntary endorsement scheme that enabled suppliers to use the *Galaxy Energy Awards* label. This aimed to reward the most energy-efficient labelled electric and gas appliances and also rewarded the suppliers and retailers of such appliances. This scheme was discontinued after the awards in 2002.

It is arguable that the comparative Energy Rating labels for electric and gas appliances could convey the same message to potential customers as the proposed new national voluntary endorsement Award label because the comparative label actually identifies the efficiency of that appliance so that an informed consumer can compare that with the full range of available appliance efficiencies.

However, this presumes all potential customers have the time and inclination to test the market and “shop around”. Where granted, this new Award label saves potential customers that effort. Moreover, since the mandatory energy efficiency labels for electrical appliances were re-rated in 2000, and with the likelihood that the gas appliance label will undergo a similar revision shortly, it is more difficult for potential purchasers to identify the most energy efficient appliance of its category. Potential customers can no longer rely on the simplistic message of seeking to buy a 5 or 6 star appliance as they used to because, in some categories, that efficiency is not available.

The new Award will clearly demonstrate to potential customers the most energy efficient appliance in its category that is currently on the market.

The New Award

The new Award is a voluntary endorsement label that applies to both electric and gas household appliances.

The Award focus is on the most energy efficient appliance models in each category rated under the existing Energy Rating (star

rating) system, as specified in the relevant Australian Standards. The eligibility criteria for the Awards – based on appliance star ratings – are set with a view to making the most energy-efficient models on the market eligible for an Award. However, for a few appliance categories this target may not be achieved as existing models are clustered around average efficiency levels. Winning appliances must demonstrate a clear lead in energy efficiency to the point where customers value the distinction.

The first year of the Award will be 2004, subject to household appliance manufacturer, importer and retailer support for the scheme. Governments are considering that, from 2005 onwards:

- For electrical appliances, the Award scheme would be advertised within the green label of the Energy Rating label. In-principle decision on promoting the Award within the green band on the label will be sought from the Ministerial Council on Energy in November 2004. Ministerial commitment to this will reflect industry’s position on it;
- For gas appliances, the Australian Gas Association would similarly use the gas label to advertise the Award scheme; and
- The new Award would be supported with targeted publicity from governments and retailers.

No application or participation fee is intended to be charged to manufacturers/suppliers for an Award. However, each test report from a NATA accredited test laboratory that may be required to meet the “**Award Conditions**” in **Appendix B** could be subject to a charge by the testing agency.

Appliance Categories

Appendix A identifies the appliance categories eligible for the new award in 2004. These reflect the categories of the last year of the discontinued *Galaxy Energy Award*.

Administration of the New Award

Governments intend to publish the Award eligibility criteria for each applicable year on the Energy Rating website in July of the preceding year. Draft eligibility criteria will be published in May for public comment. (Note for the start of the process in 2004, draft levels are released in 2003 in **Appendix A “Award Eligibility”** of this paper to assist industry to understand the process and to provide an opportunity for comment on the energy efficiency levels). All appliances registered with state regulators that meet the eligibility criteria published in July of the previous year will be eligible for an Award for the applicable year. The Award, when granted, applies for the calendar year of the Award. However, it may appear in showrooms from October of the preceding year. The draft and finalized Award eligibility levels and the actual appliance models subsequently granted the Award will be listed at www.energyrating.gov.au.

Previous year’s Award appliances, if ineligible in the applicable year, must not display the Award label for the former year.

Each year, appliances granted the award will be entitled to display the Award label for that year in promotional material, including point of sale material. A supplier, at its discretion, may apply the Award label at the production stage or later when appliances are on display.

Reflecting the disparate history of gas and electrical appliances, two separate administrative approaches may operate.

Electrical

Energy Efficient Strategies Pty Ltd (EES), consultants to the NAEEEEC, will be responsible for administering the new Award on behalf of state energy efficiency regulators.

The Award is a simple process, supported by an “on-line” system⁴. **Appendix B “Award Conditions”** outlines the process for achieving an Award.

Gas Appliances

At present the Australian Gas Association (AGA) Certification Services administers the gas appliance energy-rating scheme. Nominated gas appliances must be tested and labeled as part of AGA Certification. State Technical Regulators require appliances to be certified before they can be legally sold. Options for enhancing the existing industry-run scheme in order to align it with the electrical appliance Energy Rating (star rating) scheme, including consideration of the new Award scheme, are being considered by Government and industry.

The AGA would work with government and industry stakeholders to determine eligibility criteria, and would assist government to advise companies of their Award winning appliances.



⁴ This on-line system for electrical appliances is part of the registration system and is therefore available to all applicants. To gain access to the “on-line” system, suppliers must have a user name and password. This is obtainable through www.energyrating.gov.au.

Market Research

The new Award name and logo design is the subject of market research by Artcraft Research to test consumer response. Issues that will be addressed in the research include:

- Do consumers recognize it as an endorsement just for this specific appliance, or do they assume it endorses the manufacturer or all that manufacturers' appliances in general?
- How to publicize the Award label so that it is clearly understood to apply only to specific appliances, not the manufacturer in general?
- How do consumers react to the possibility that, where two comparable appliances both have 4½ stars, one may have a new Award label and the other may not (i.e., although falling within the 4½ star band, one uses sufficiently less energy to be in the eligible top performing appliances whereas the other is just outside it)?
- How do consumers react in categories where the top performing appliances receive a new Award label despite having only 2 or 3 stars i.e. a perception that the appliance is not very efficient on a 6-star scale? Should the Award only be given in categories where the eligible appliances have at least 3½ or 4 stars?
- What should the label look like (e.g., size, shape, colours, etc)?
- What is the current extent and nature of residual recall of the *Galaxy Energy Award* – can anything be drawn from it?
- What does “Reach for the Stars” convey?
- Would its wording in the singular (i.e., “Reach for a/the/this Star”) better explain it and overcome confusion?
- Would wording along the lines of “Select a Star” or “Select the Star Performer” be less confusing and/or communicate better?
- What does being a “top performing appliance” in terms of energy efficiency mean to people – “top performing appliance” of all appliances generally (e.g., every kind of appliance), or “top performing appliance” of this type of appliance generally (e.g., all refrigerators), or “top performing appliance” of this size range of this type of appliance (e.g., 10 litre to 12 litre refrigerators)?
- Should this “top performing appliance” statement (or words to that effect) be included on the Award label itself?
- Should the make and model of appliance be identified on each label so as to minimise mislabeling?
- How should it interact/link with the Energy Rating label which will continue to appear on all labeled appliances – how can this be improved?



Draft logo ideas for use in market research



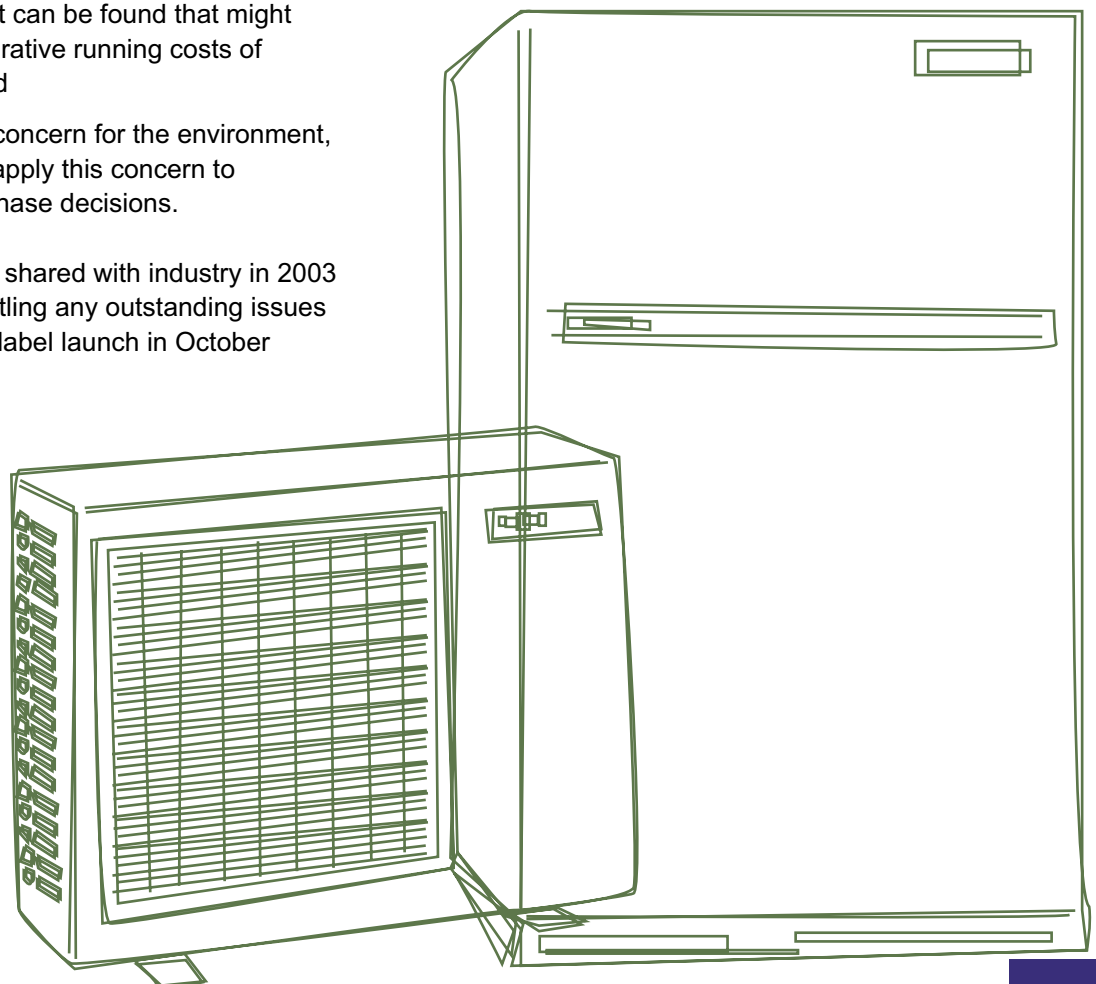
The market research broad tasks and timetable are:

Task	Timetable (2003)
Detailed project definition and preparation of materials for testing and recruiting of participants for focus groups and in-depth interviews	Mid April
Conduct of first wave of focus groups and in-depth interviews	End April
Progress report	Mid May
Conduct of second wave of focus groups and in-depth interviews	End May
Presentation of draft report	Mid June
Final report	End June

Retailers and consumers are the target of the market research. The consumer groups are restricted to recent (last six months) and intending (next six months) purchasers of appliances and will be selected from consumer segments who:

- Make decisions based on what they are doing is basically good for the environment per se, rather than on more specific cost or energy efficiency criteria;
- Make decisions based on more specific technical data as to the relative energy efficiency of appliances;
- Make decisions based on whatever information that can be found that might indicate comparative running costs of appliances; and
- Profess some concern for the environment, but do not yet apply this concern to appliance purchase decisions.

The results will be shared with industry in 2003 with the aim of settling any outstanding issues before a potential label launch in October 2003.



Industry Consensus

During May a meeting of suppliers, the Australian Electrical and Electronic Manufacturers Association (AEEMA) and the Consumer Electronics Supplier Association (CESA) will develop their position on the Award prior to the energy efficiency levels for the Award in 2004 being announced in June 2003.

A Steering Group comprising representatives from the AGO, the NSW and Victorian Energy Authorities, manufacturers, the Australian Gas Association and consultants in the energy efficiency industry are managing the development of the new Award. Any person wishing to provide comments, suggestions or criticisms should provide them in the first instance to Graeme Priestley at the AGO as requested on page 2 of this discussion paper, or if you wish to discuss issues with an industry representative the contacts are as follows:

MEMBER	AGENCY	PHONE	FAX	EMAIL
Michael Church <i>General Manager Sales and Marketing</i>	Fisher & Paykel	02 8745 8218	02 8745 8209	mike.church@fp.com.au
Bernard Erica <i>Managing Director</i>	Rinnai Australia	03 9271 6634	03 9271 6622	bernarde@rinnai.com.au
Chris Blogg <i>Manager, Standardization Policy and Services</i>	Australian Gas Association	03 8587 2290	03 9580 5500	cblogg@melbourne.gas.asn.au
Michael O'Neill <i>Director</i>	Oncon P/L	03 9534 5080	03 9534 5080	bigstep@bigpond.net.au
Lloyd Harrington <i>Consultant</i>	Energy Efficient Strategies	03 5626 6333		lloyd@energyefficient.com.au
Graeme Priestley <i>Project Officer Best Practice</i>	Australian Greenhouse Office	02 6274 1716	02 6274 1884	graeme.priestley@ea.gov.au

Launch and Publicity of New Award

Energy Ministers will announce the new Award scheme at a suitable major industry event, such as a conference, in the third quarter (probably October) of 2003, and will write to manufacturers/suppliers in particular to inform them of the Award and its importance.

In 2004 there will be a promotional campaign through various media. A suitable promotion campaign will be developed and ideas are sought to build a promotional program.

There will be no formal award ceremony/function or other formal announcement of Award winners. Award winning appliances will be:

1. Identified in www.energyrating.gov.au;
2. Identified in promotional activities such as:
 - "Awards" features published or promoted by government agencies;
 - Articles, special features and advertisements in national trade and consumer magazines placed by government agencies, where supported by those appliance suppliers whose appliances are identified;
 - Promotions at home shows and building centres undertaken by government;
 - Appliance displays at government advisory centres; and
 - Joint government and retailers promotional material.

Right to Use the Award Logo

The grant of an Award for a model confers on the supplier the right to use the Award logo to promote that model. A draft of the conditions of use of the Award and logo is contained in **Appendix B “Award Conditions”**. The supplier of a model can only use the Award and logo if it agrees to the conditions.

Ultimately, details of Award labels will be contained in the relevant Australian Standards. These will make reference to www.energyrating.gov.au for the specific energy efficiency levels to apply to each appliance category for each Award year. The levels will be published in July of the preceding year.

Withdrawal of Award

Awards may be withdrawn for any of the following reasons:

- Following application by the supplier to have the Award withdrawn.
- Following cancellation of the registration.
- Following an amendment to the registration details that results in the appliance no longer meeting the selection criteria.
- Following a breach of any of the conditions upon which the Award is granted.

In the case of a withdrawal, Government agencies and Australian Gas Association will no longer display the appliance on the relevant website. Government agencies reserve the right to publicise the withdrawal.

Award Eligibility

Eligibility criteria for an applicable year are reviewed and published on www.energyrating.gov.au in May in draft form and finally in July of the preceding year of the Award. For the 2004 Award, the draft levels are contained in this Appendix and will be confirmed in July 2003.

Category	Minimum Star Rating
ELECTRICAL APPLIANCES	
Airconditioners	
• Cooling only	4
• Reverse cycle	4 + 4
Clothes Dryers	3
Clothes Washers	4.5
Dish washers	3.5
Refrigerators and freezers	
Group 1: Refrigerator, no frozen food storage, automatic defrost	4
Group 2: Refrigerator, optional ice making	3
Group 3: Refrigerator, short term frozen food storage	3
Group 4: Refrigerator/freezer, cyclic defrost	3.5
Group 5B: Refrigerator/freezer, bottom freezer, frost free	3.5
Group 5T: Refrigerator/freezer, top freezer, frost free	3.5
Group 5S: Refrigerator/freezer, side by side, frost free	4
Group 6C: Freezer, chest	2.5
Group 6U: Freezer, upright, not frost free	4
Group 7: Freezer, upright, frost free	2
GAS APPLIANCES	
Gas Space Heaters	
• Flued	4.5
• Unflued	5.5
Gas Water Heaters	5
Gas Ducted Heaters	5

Award Conditions

Suppliers' appliances that are granted Awards agree to abide by the set of conditions set out below before they are eligible to use the Award label or to continue to use the Award label in relation to their particular appliance. These conditions form the basis of the on-line Application for an Award. By clicking the "I Agree" button at the end of the conditions it is taken that you accept and agree with these conditions.

Definitions

'Appliance' means a gas or electric appliance specified in **Appendix A**.

'Application' means an application for an Award.

'Award' means an Energy Efficient Appliance Annual Award.

'Supplier' means a supplier of an Appliance.

Eligibility Criteria and Conditions

1. Suppliers whose Appliances are specified in **Appendix A** are eligible to be considered for an Award.
2. The Appliance must be available for sale within Australia at some time during the calendar year of the Award⁵.
3. The Appliance must meet or exceed the eligibility criteria specified in **Appendix A**. The eligibility criteria will be reviewed annually, with draft criteria published in May for public comment, and announced in July and remain valid from October of that year to the end of the following calendar year.
4. Appliances granted the Award that continue to meet the Award criteria in subsequent years will retain the Award in subsequent years as long as they continue to meet the relevant eligibility criteria. Each year, those appliances will be entitled to display the new Award label for that year.
5. Suppliers must submit a minimum of one certificate of certification issued by the appropriate energy regulator in order to substantiate its claims against those criteria. Energy regulators are identified in www.energyrating.gov.au.
6. The certificate must be based on a test report to the relevant Australian Standard from an independent Australian test laboratory with current NATA accreditation for the relevant test. (A list of NATA accredited test laboratories will be available from www.energyrating.gov.au). The certification based on the test report can either form part of the Application for an Award or be submitted separately, subsequent to the Application⁶.

⁵ A system is now in place that allows for the tracking of appliance availability on the web based database system www.energyrating.gov.au. Appliances noted by the applicant as no longer available will cease to appear on the public listing of appliances.

⁶ Note: where a NATA test report is submitted subsequent to registration the regulator shall use the NATA report to check the validity of the energy label in accordance with the provisions contained within part 2 of the relevant standard. Where such a report reveals that the appliance does not meet the energy label validity criteria, action will be taken in accordance with the attachment 7 of the administrative guidelines. These guidelines can be viewed at the following URL address: http://www.energyrating.gov.au/download/admin_guidelines.pdf

7. The Appliance must not be the subject of any regulatory action following a failure during check testing to verify the Energy Rating or any other matter relating to the eligibility criteria. In the event that an Appliance has its Energy Rating label registration cancelled, the right to display the Award will be withdrawn.
8. All information supplied in any supporting material, advertising, point of sale material and user manuals is the responsibility of the Supplier and must be accurate and correct. The relevant regulator reserves the right to request further information at any time regarding the accuracy of data associated with any Appliance. Failure to supply this information to the regulator may either make an Appliance ineligible to be considered for an Award or result in withdrawal of the Award.
9. The Supplier indemnifies the Commonwealth and its agents against all losses, damages, liabilities, costs and expenses suffered or incurred by the Commonwealth as a result of a claim, demand, proceeding or judgment that arises from or in connection with:
 - (a) Any information provided by the Supplier in relation to an Application; or
 - (b) The display of an Award in relation to the Appliance.
10. An Application may, at the discretion of the Commonwealth or its agent, be reclassified, disqualified or withdrawn at any time if any of the conditions set out in this Appendix B are not met. Any Appliance category may be withdrawn from the Award system at any time.
11. The Supplier acknowledges and agrees that the Commonwealth or its agent may promote or publicise the Award winning Appliances.
12. While it is the aim is to promote details of Award winners accurately, no responsibility will be taken by the Commonwealth for any discrepancy, error, omission or misrepresentation that may occur in any media report.