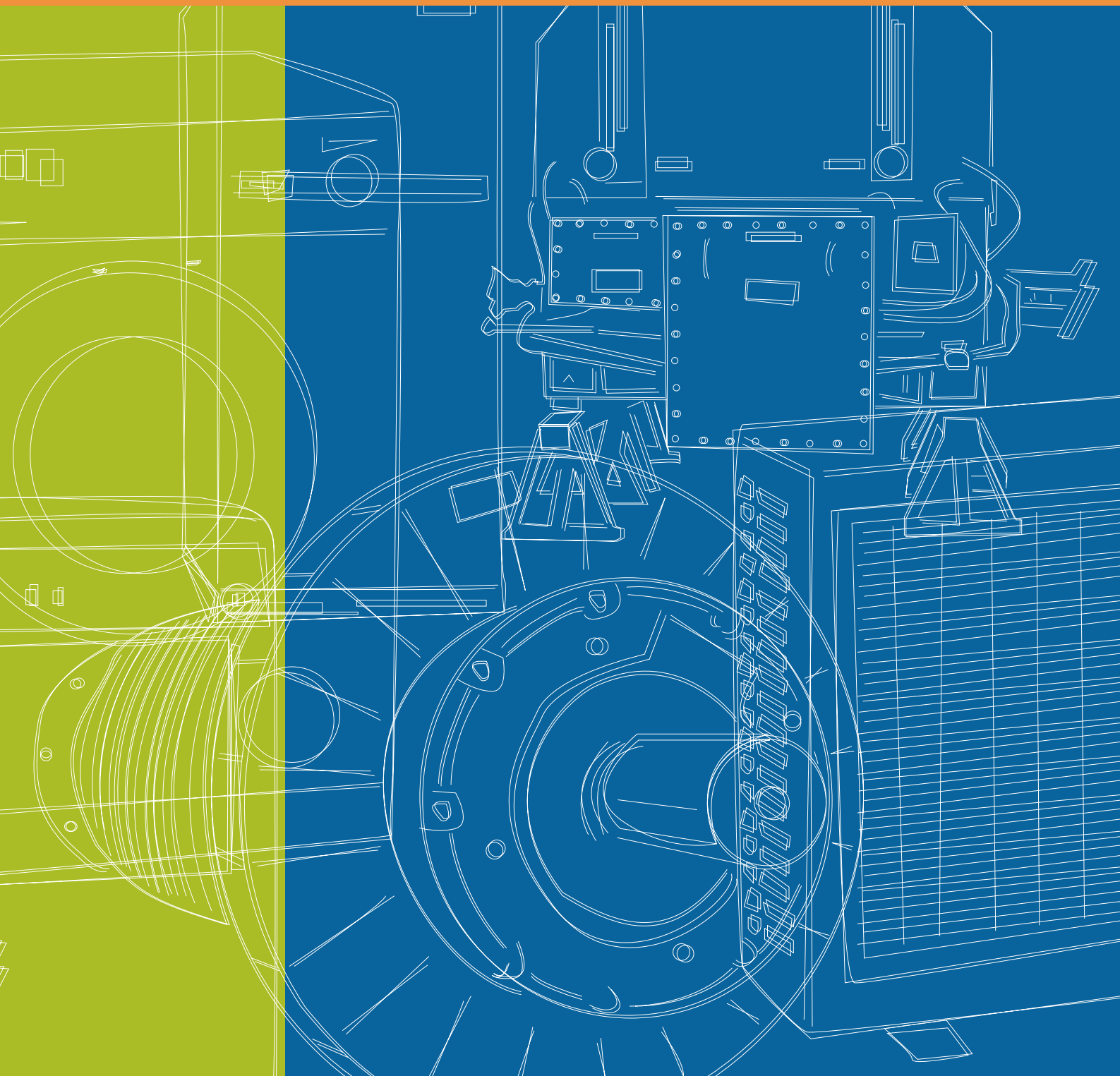




National Appliance & Equipment Energy Efficiency Program



Statement from the Chair of ANZMEC

The Australian and New Zealand Minerals and Energy Council (ANZMEC) is committed to supporting the national appliance and equipment energy efficiency program.

This Government commitment was reaffirmed with the release of the National Greenhouse Strategy (NGS) in November 1998. The NGS identified that an improved, coordinated national program can further assist in the reduction of greenhouse gas emissions. ANZMEC through its Energy Management Task Force (EMTF) and the National Appliance and Equipment Energy Efficiency Committee (NAEEEC) have developed a program plan which records how various Government agencies will give effect to the NGS in the fields of consumer appliances and industrial equipment.

Energy consumed by equipment and appliances is a major source of greenhouse emissions attributable to the industrial commercial and residential sectors. Codes and standards programs are amongst the most effective and widely used measures used to combat these greenhouse emissions. This program provides an important stimulus to developing world-class energy efficiency technologies and services, and providing community benefits through developing improved products and exploiting potential export markets.

This work plan identifies the future direction of this national program. It demonstrates the extent to which the public sector is working with all stakeholders to meet the challenge of climate change in these fields.



The Hon. C J Barnett, MLA
Minister for Resources Development; Energy; Education
Leader of the House in the Legislative Assembly, Western Australia
ANZMEC Chair



Statement from the Chair of NAEEEC

In developing this plan, the National Appliance and Equipment Energy Efficiency Committee has built on the already strong involvement of industry and other stakeholders. Following the release of the National Greenhouse Strategy, NAEEEC contacted key stakeholders to seek their cooperation in developing an expanded and enhanced program.

In February 1999, a discussion paper entitled *Future Directions for Australia's Appliance and Equipment Energy Efficiency Program* was released proposing a range of enhancement proposals. In March 1999, NAEEEC held a workshop involving more than 70 representatives from key stakeholder interests to consider these proposals. The outcomes of the workshop together with a review of individual submissions about the Future Directions paper were considered in developing this plan.

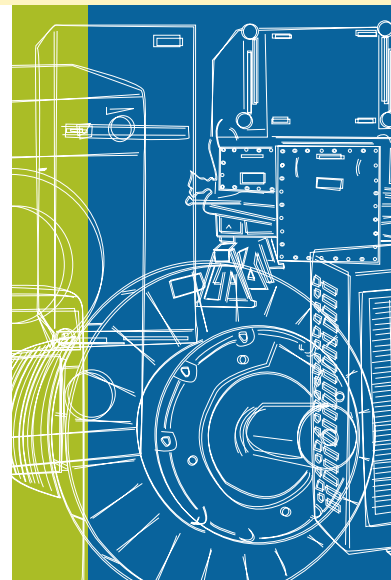
This plan goes further than any previous public description of the program. For the first time, a three-year program plan transparently identifies those areas targeted for expansion. The plan describes our agenda in this field and explains our processes for meeting those challenges.

NAEEEC believes that, with stakeholder help, the program can deliver additional greenhouse savings and further energy efficiencies in a framework of least cost to Australian industry. With the support and financial assistance of Energy Management Task Force, NAEEEC is working to meet this challenge.

Dr Tony Marker
NAEEEC Chair,
Manager,
Energy Efficiency Team,
Australian Greenhouse Office



The lead Commonwealth
agency on greenhouse
matters



Greenhouse gas emissions

The world's climate scientists have provided a clear message – that the balance of evidence suggests humans are having a discernible influence on global climate. Australian Governments recognise the importance of climate change and are committed to playing an effective part of international efforts to respond to this environmental threat.

Although Australia only contributes just over one per cent of total greenhouse gas emissions, our per capita emissions are amongst the highest in the world. Without targeted and effective action as outlined in the National Greenhouse Strategy, our emissions were projected to grow by 28 per cent from 1990 to 2010 (excluding land use changes).

The National Appliance and Equipment Energy Efficiency Program applies to more than a quarter of all greenhouse emissions (excluding land use change and forestry) from the stationary energy sector according to recent studies.

The National Greenhouse Strategy charges ANZMEC with responsibility for developing energy performance codes and standards to operate in these sectors. ANZMEC has instructed NAEEEC to implement the NGS which states that July 1999 has been set as an "indicative deadline" to secure stakeholder agreement for the revised program.

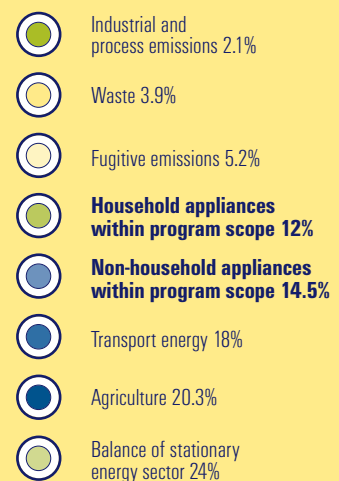
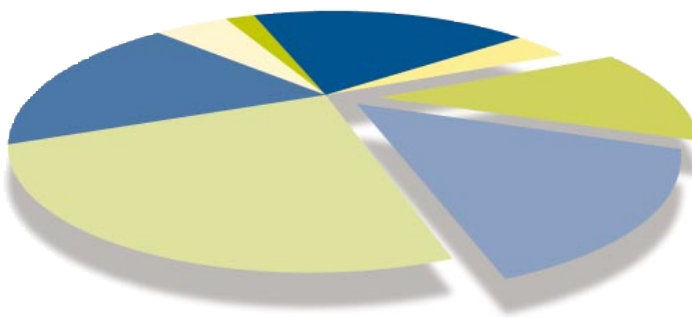
The original national appliance and equipment energy efficiency program was created under the 1992 National Greenhouse Response Strategy. The 1998 NGS includes these original measures as well as new measures first announced by the Prime Minister in November 1997. With respect to appliances and equipment, the Prime Minister said that Australia would expand and improve existing greenhouse gas abatement policies in the fields of codes and standards.

The NGS gives effect to that vision in the following terms:

"Improvements in the energy efficiency of domestic appliances and commercial and industrial equipment will be promoted by extending and enhancing the effectiveness of existing energy labelling and minimum energy performance standards."

The NAEEEC program is an ANZMEC initiative, involving the Commonwealth, and all State and Territory Governments.

The National Appliance and Equipment Energy Efficiency Program applies to 26.5% of all greenhouse gas emissions (excluding land use change and forestry) from the stationary energy sector.



National Appliance and Equipment Energy Efficiency Program

Through this program, the Commonwealth, State and Territory Governments throughout Australia and the New Zealand Government are working cooperatively to develop and introduce measures that improve the energy efficiency of appliances and equipment used by households and business.

Governments independently undertake a range of activities to promote the manufacture and purchase of energy efficient appliances and equipment. Through this national cooperative program, all Governments are working together to ensure national consistency and effective cooperative action. An example of this cooperation is the national coordination of state based regulations for the long running and successful appliance energy labelling scheme.

Improving the energy efficiency of appliances and equipment is a key element of Australia's efforts to reduce greenhouse gas emissions. The release of the National Greenhouse Strategy in November 1998 emphasised the importance of this program and provided the impetus to expand the program and review its procedures to improve its overall effectiveness.

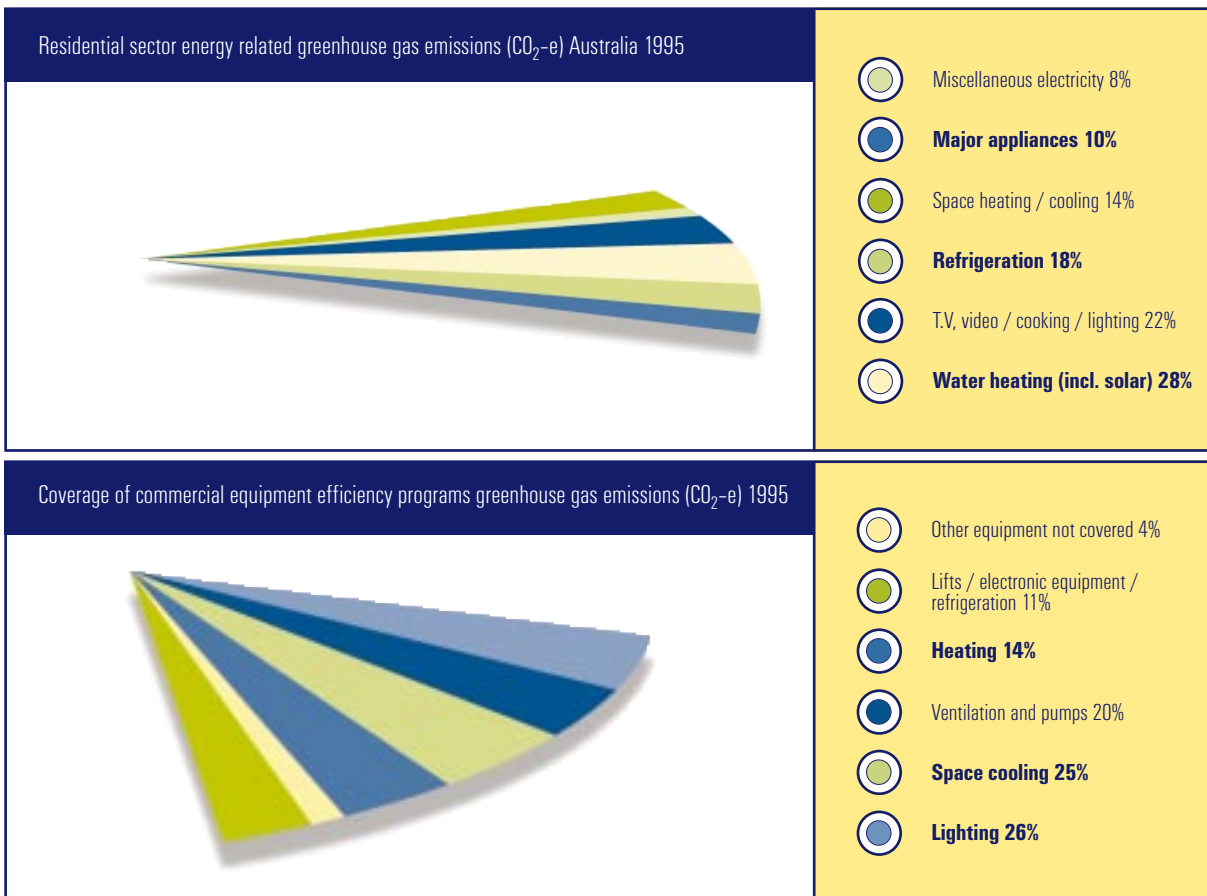
Until the release of NGS, the majority of activities undertaken through the national program have been in the coordination of regulatory measures for mandatory appliance labelling and

assessing the feasibility of minimum energy performance standards (MEPS). However, with the expansion, the program will include voluntary participation programs and promotional activities to encourage the supply and purchase of high efficiency products.

Activities implemented or initiated before 1999 included:

- Coordinate compliance monitoring and review of mandatory energy efficiency labelling for most major electrical appliances (refrigerators, airconditioners, dishwashers, clothes washers and dryers);
- Introduce MEPS for residential refrigerators and electric storage water heaters from 1 October 1999;
- Promote the voluntary Energy Star program for office equipment nationally;
- Establish MEPS for three types of equipment (packaged air conditioners, lighting ballasts and motors);
- Develop voluntary, promotional programs to promote highly efficient motor drives and lighting systems.

These existing activities represent a strong foundation upon which to build the program for 1999 – 2001.



Note: The four main product groups are electric motors (which impacts on almost half of these end use categories), packaged air conditioners, lighting ballast and office equipment.

National Appliance and Equipment Energy Efficiency Committee

National Appliance and Equipment Energy Efficiency Committee oversees the delivery of this national program and comprises representatives from the Commonwealth, State and Territory Governments as well as New Zealand. NAEEEEC advises the Energy Management Task Force and through it the ministers sitting on the Australian and New Zealand Mineral and Energy Council. In the appliance and equipment fields, NAEEEEC is responsible for:

- implementing the appliance and equipment initiatives agreed in the National Greenhouse Strategy;
- providing assistance to all States and Territories, as required, in the development and implementation of technical, legal, regulatory and administrative aspects of national appliance and equipment energy efficiency initiatives;
- coordinating the national development and implementation of energy efficiency programs of a non-regulatory nature and enhance existing regulatory programs. These may include voluntary labelling initiatives, market transformation projects, and similar voluntary actions;
- coordinating national marketing and communication projects to support new and enhance existing energy efficiency programs;
- reviewing appliance and equipment energy consumption, initiating reviews of and modifications to existing standards, and developing new standards and test procedures where necessary;
- monitoring program performance and achievements;
- providing an information exchange forum on enforcement/compliance requirements and community information and marketing initiatives;
- administering an effective, coordinated testing regime confirming products are accurately labelled or meet MEPS;
- coordinating national consultative processes with industry and other interested parties in the development and implementation of energy efficiency and greenhouse gas reduction programs.

Industry consultation

The support and involvement of related industries is essential for the success of the National Appliance and Equipment Energy Efficiency Program.

The appliance labelling program has thrived with the support of product suppliers since its inception. More recently, NAEEEEC has actively promoted the involvement of other stakeholder groups. As one example, NAEEEEC creates steering committees involving representatives from key stakeholders to monitor and direct each major project or consultancy. Through this measure, stakeholders not only have an avenue to gain information about the project but a real opportunity to influence its direction.

A stakeholder forum was held in March 1999 to gain feedback on the proposed future direction for the national program. Industry strongly supported the general direction proposed for the national program. The comments received through the forum and submissions have been used to refine the program presented in this document.

“The Energy Management Task Force provides the funding for NAEEEEC to undertake this program.”

Program coverage

The National Appliance and Equipment Energy Efficiency Program will include consumer appliances or industrial equipment identified as a likely contributor to the growth in energy demand or greenhouse gas emissions.

Each product will be subject to a feasibility assessment and public consultation before the final decision is taken to include new products in the program. Assessments will include technical and economic analyses as well as consideration of the most appropriate measures (voluntary, mandatory or a combination of both) to ensure the most appropriate energy efficiency program is tailored for that specific product.

A broad range of products will be considered for inclusion in the program, using the following criteria:

- potential for national energy savings
- potential saving of greenhouse gas emissions
- environmental impact of fuel type
- opportunity to influence purchase
- market barriers
- access to accepted energy testing or measurement procedures
- administrative complexity of programs

Voluntary and promotional programs

Previously, the main focus of the National Appliance and Equipment Energy Efficiency Program was on the development of regulatory measures. However, the potential for voluntary programs has also been recognised as an effective means to facilitate the supply and purchase of energy efficient appliances in certain circumstances. For example, the importance of promotional activities to support both regulated and voluntary programs, such as appliance energy labelling, has also been highlighted as an important factor in achieving energy efficient improvements. Such measures are now being incorporated into the program and are expected to play an increasingly important role in the future.

Programs based around endorsement labels for products that meet a high level of energy efficiency have been successfully introduced overseas. Through these programs, suppliers and Government can promote energy efficient products to consumers or business users. Retailers and distributors of products also have a significant role to play in promoting energy efficient products and will be involved in nationally coordinated activities.

Programs to promote highly energy efficient industrial motors and commercial lighting are currently being developed. These will be introduced in conjunction with MEPS to prohibit supply of inefficient products. The Energy Star program for office equipment, developed by the United States Environment Protection Authority, is also being introduced nationally.



Mandatory measures

In October 1999, nationally consistent laws relating to appliance energy labelling requirements and minimum energy performance standards for domestic refrigerator and electric hot water systems will come into effect. The introduction of these regulations is a significant milestone for the National Appliance and Equipment Energy Efficiency Program. The program has advanced the possible introduction of MEPS for packaged air conditioners, lighting ballasts and motors, and a significant revision of the appliance energy labelling scheme.

Responsibility for introducing regulatory measures lies with individual State and Territory Governments. However to be effective, any regulation for energy efficiency needs to be nationally coordinated to achieve consistency in the regulatory requirements placed on industry. The use of Australian and New Zealand Standards within the framework of regulations is a key means of achieving national consistency.

In broadening the scope of the national program, the feasibility of introducing regulation for a range of products will be considered. Regulatory options will only be used if the economic benefit of doing so can be clearly demonstrated. Any proposed new legislation must be subject to a Regulatory Impact Statement (RIS), which includes economic analysis and community consultation. Governments will only support legislative intervention:

- where the community benefit outweighs the costs; and
- where the objective can only be achieved by regulatory means.



“NAEEEC has expanded the program to include more products with voluntary as well as mandatory measures”

Legislative goal: Matching best practice

In the consumer appliance and industrial equipment sectors, Australia is increasingly becoming part of a global market. Our manufacturers are exporting throughout the world and importers have easier access to our markets. Increasingly, Australian and New Zealand Standards are developed in an environment of international harmonisation. The development of 'international' products means that specific Australian rules for these products are becoming less relevant and could constitute unintended trading barriers

For internationally traded products that contribute significantly to Australia's growth in greenhouse gas emissions, consideration will be given to developing MEPS for Australia that match best practice levels imposed by our major trading partners. Where appropriate, reaching this established level may be achieved through a staged process that progressively introduces more stringent requirements over time.

Timeframe for the introduction of MEPS

The timeframe for developing and notifying MEPS has been established as a target. It should provide certainty to the process and should give industry an appropriate notice period to undertake any necessary modifications to production procedures. This proposed timeframe will be flexible enough to take into account specific circumstances that may arise.

Timeframe for the introduction of MEPS

1. DEVELOPMENT STAGE	Timetable
<ol style="list-style-type: none"> 1. Initial planning and review of the energy impacts and assessment of the feasibility of mandatory and / or voluntary measures. (A separate timeframe and development process will be undertaken for voluntary measures) (3 - 6 months). 2. Cost/benefit analysis of potential legislative options (3 - 6 months). 3. Industry consultation on potential legislative proposals (3 - 6 months). 4. Development of Australian and New Zealand Standards for inclusion in regulations (9 - 12 months). 5. Ministerial approval required before introduction of any new regulations. 	Up to 2 years
2. NOTIFICATION STAGE	
<p>Period of notification will depend on the level of manufacture undertaken in Australia. Longer periods would apply if Australian industry is required to undertake substantial development or re-tooling</p>	1 - 3 years
3. DURATION STAGE	
<p>This is the 'stability period' in which no changes to regulations are made (ie MEPS levels unchanged). Longer periods will pertain if best practice is attained.</p>	Minimum of 4 years
4. RENEGOTIATION STAGE	
<p>Once introduced, discussions will commence on the progressive enhancement, in cases where best practice is not already met. Otherwise, the international situation will be monitored by NAEEECC at regular intervals.</p>	To be determined on a case by case basis

WORK PROGRAM FOR THE NEXT THREE YEARS

High Priority – work already commenced or scheduled to commence in 1999

- Facilitate and coordinate the introduction of nationally consistent labelling regulations and MEPS regulations for refrigerators, freezers and electric water heaters, effective from October 1999;
- Review and revise appliance energy label rating levels and label design as well as develop a supporting market transition program;
- Commence negotiation to increase MEPS levels for refrigerators, freezers and electric water heaters for implementation in 2004;
- Establish timetables for the introduction of MEPS for packaged air conditioners, electric motors and fluorescent lamp ballasts;
- Work with industry to improve the existing gas appliance MEPS and labelling programs;
- Develop and implement a program to promote energy efficient motors;
- Develop and implement a program to promote energy efficient commercial lighting, and also address lamps and luminaires;
- Implement a national program to promote and support the voluntary Energy Star program for office equipment;
- Investigate the feasibility of developing a voluntary program to promote energy efficient home entertainment equipment (ie TVs and VCRs) and other household electronic equipment with standby functions;
- Maintain and expand the check testing of products by accredited laboratories and other joint monitoring and enforcement activities.

Medium priority – scheduled to commence in 2000

- Develop and implement strategies (regulatory and/or voluntary) to improve the energy efficiency of:
 - water heating, including all fuel types and all down stream hot water usage;
 - commercial refrigeration;
 - electric non storage water heaters;
 - evaporative air conditioning;
 - industrial and commercial equipment (ie packaged boilers, packaged air compressors and distribution transformers);
- Develop and implement voluntary measures that involve market intermediaries, (including retailers of whitegoods, installers/plumbers for water heating, specifiers/engineers for non household products).

Low Priority – scheduled to commence 2001

- Review existing or develop and implement new strategies (regulatory and/or voluntary) to improve the energy efficiency of:
 - Dryers, dishwashers, clothes dryers;
 - Space heating and cooling equipment (all fuel types);
 - Electric cooking appliances;
 - Swimming pool, equipment (ie motors, pumps, gas and solar pool heaters).

These priorities may be refined in later years depending on the funding available to the program at that time.

National Appliance and Equipment Energy Efficiency Committee membership

The Commonwealth, New Zealand, each State and each Territory are represented on NAEEEC and participate in its deliberations. Representatives are drawn from officials within Government departments, agencies and statutory authorities or from persons appointed to represent those 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.

The **Australian Greenhouse Office** is the lead Commonwealth agency for greenhouse matters. The Australian Greenhouse Office (AGO) is responsible for monitoring the National Greenhouse Strategy in a cooperative effort with States and Territories and with the input of local Government, industry and the community. An AGO officer is the chair NAEEEC and others provide support for its activities.

The NSW **Ministry of Energy and Utilities** provides policy advice to the NSW Government and operates a regulatory framework aimed at facilitating environmentally responsible appliance and equipment energy use. The Ministry is represented on the ANZMEC Energy Management Task Force through which the appliance and equipment related elements of the National Greenhouse Strategy will be progressed.

The NSW **Sustainable Energy Development Authority** was established in February 1996 with a mission to reduce the level of greenhouse emissions in New South Wales by investing in the commercialisation and use of sustainable energy technologies.

The **Office of the Chief Electrical Inspector** is the Victorian technical regulator responsible for electrical safety and equipment efficiency. Its mission is to ensure the safety of electricity supply and use throughout the State. The corporate vision of the Office is to demonstrate national leadership in electrical safety matters and to improve the superior electrical safety

record in Victoria. Over the next three years, the Office's strategic focus is to ensure a high level of compliance is sustained by industry with equipment efficiency labelling and associated regulations.

Energy Efficiency Victoria is a state Government authority with a charter to facilitate the implementation of cost effective energy efficiency and renewable energy use within Victorian businesses, homes and Government agencies.

The Queensland **Department of Mines and Energy** Electrical Safety Office has responsibility for energy efficiency initiatives in this state.

The Western Australian **Office of Energy** seeks to promote conditions that enable the energy needs of the Western Australian community to be met safely, efficiently and economically.

The South Australian **Office of Energy Policy** seeks to ensure the coordinated development and implementation of policies and regulatory responsibilities for the safe efficient and responsible provision and use of energy for the benefit of the "South Australian community."

The **Energy Efficiency and Conservation Authority** is an independent agency of the New Zealand Government charged with identifying and implementing practical measures to reduce energy consumption – "Helping New Zealand use energy wisely."

The Tasmanian Government's interest is managed by the **Tasmanian Office of Energy**.

The Australian Capital Territory's interest is managed by the ACT **Department of Urban Services**.

The **Department of Industries and Business** is responsible for the administration of regulations in the Northern Territory regarding various aspects of safety, performance and licensing for goods and services including electrical appliances.

