

Permanent Exemption of LPG appliances from the Trans-Tasman Mutual Recognition Arrangements (TTMRA)

Regulation Impact Statement for Decision

Purpose of a Regulation Impact Statement

It is mandatory for the Council of Australian Governments (COAG), Ministerial Councils and intergovernmental standard-setting bodies to prepare a Regulation Impact Statement (RIS) for all reviews of existing regulation, proposed new or amended regulation, quasi-regulation and proposed treaties involving regulation which, when implemented, would encourage or force businesses or individuals to pursue their interests in ways they would not otherwise have done.

The primary role of the RIS is to improve government decision-making processes by ensuring that all relevant information is presented to the decision makers when a decision is being sought. A RIS is a two stage process involving a RIS for consultation and a RIS for the decision makers.

In that context, this decision RIS has been prepared as part of the process for developing policy options in response to the problem being addressed. The aim of this decision RIS is to incorporate stakeholder views elicited from the consultation process and provide recommendations for decision makers.

Further information on RISs is available from the Office of Best Practice Regulation website www.obpr.gov.au.

Background

The Trans-Tasman Mutual Recognition Arrangement (TTMRA) is an agreement between the Commonwealth, State and Territory Governments of Australia and the Government of New Zealand to mutually recognise compliance with each others' laws for the sale of goods and the registration of occupations. The agreement allows goods that can be lawfully sold in one jurisdiction to be sold in other jurisdictions without having to satisfy additional requirements. The TTMRA provides for mutual recognition and harmonisation of product standards and conformity assessment

procedures between Australia and New Zealand under the Australia New Zealand Closer Economic Relations Trade Agreement (ANZCERTA).

The Arrangement recognises that in some cases there are regulatory impediments to trade between Australia and New Zealand in the form of different standards, duplication of testing and certification requirements, or different regulatory requirements for those wishing to practise in different professions, and these should be discontinued where appropriate. The basic principle of the TTMRA relevant to gas appliances is that:

A good that may be legally sold in Australia may be sold in New Zealand and vice versa regardless of differences in standards or other sale-related regulatory requirements.

At the time of signing the TTMRA in 1996, it was recognised that the two countries had significantly different regulatory approaches to several goods¹, including gas appliances. As a result these items were given special exemption status. The objective of special exemptions is to allow examination of differences in regulatory requirements and eventually address them through mutual recognition, harmonisation or permanent exemption. Under the TTMRA, special exemptions last for 12 months, and must be 'rolled over' if they are to remain in force. Each rollover has to be approved by at least two-thirds of the Heads of Government.

The special exemption status recognised that the Australian and New Zealand regulatory schemes with respect to gas appliances were different and that work would be required to achieve harmonisation or mutual recognition. The group of regulatory agencies chiefly responsible for pursuing the Cooperation Program in relation to gas appliances and the TTMRA, is the Gas Technical Regulators Committee (GTRC). The GTRC comprises representatives from the gas regulatory agencies of each Australian State and Territory and New Zealand. The members of the GTRC are:

- Victoria – Office of Gas Safety;

¹ Other goods with special exemption status include: therapeutic goods; hazardous substances, industrial chemicals and dangerous goods; radiocommunications standards; and road vehicles.

- New South Wales – Ministry of Energy and Utilities and Office of Fair Trading NSW;
- South Australia – Office of the Technical Regulator;
- Western Australia – Energy Safety WA;
- Queensland – Department of Mines and Energy;
- Tasmania – Workplace Standards Tasmania;
- Northern Territory – NT WorkSafe;
- Australian Capital Territory – ACT Planning and Land Authority;
and
- New Zealand – Energy Safety, Ministry of Economic Development.

Gas appliances have had special exemption status under the TTMRA renewed every 12 months for the past eleven years. The significant points of difference between the New Zealand and Australian States and Territories' gas appliances safety regimes are pre-sale certification of the safety of gas appliances and the labelling of appliances certifying them as safe for installation and use.

In 2006, New Zealand conducted a review of its gas appliance safety regime. As a result of the review, New Zealand has agreed to amend its regulations to require third party pre-certification of gas appliance safety. It has also agreed to require a labelling system compatible with that used in Australia. These changes have been agreed, both to progress mutual recognition of the Australian and New Zealand gas appliance safety regimes, and to deliver a safer system for gas appliances within New Zealand.

These decisions by New Zealand have resulted in agreement by GTRC members to work proactively to progress mutual recognition of regulations relating to use of gas appliances across Australia and New Zealand, where possible. Initial discussions focussed on the mutual recognition of regulations relating to natural gas appliances. For LPG appliances, mutual recognition is not straightforward. It is proposed to allow for mutual recognition of LPG appliances tested to operate safely on universal LPG, and permanently exempt those LPG appliances not tested to operate safely on universal LPG and flueless cabinet heaters

The work to achieve the mutual recognition of natural gas appliances and LPG appliances tested to operate safely on universal LPG is currently underway. Consultations are progressing between the regulatory agencies regarding transition arrangements for the proposed new regulatory framework, which includes New Zealand amending its regulations for gas appliance safety and the Western Australian Technical Gas Regulator preparing a draft paper outlining the options for labelling requirements for all jurisdictions.

Complementing this work, Standards Australia has formed a committee which has prepared a draft outline of Joint Standards for minimum essential safety requirements for gas appliances. It is anticipated that work to achieve the mutual recognition of natural gas appliances and LPG appliances tested to operate safely on universal LPG will conclude within the next 12 months, meaning that the special exemption for gas appliances will need to be rolled over for a further 12 months. Once this work has been completed, it is anticipated that the special exemption will be removed from 2010.

Mutual recognition of natural gas appliances and LPG appliances tested to operate safely on universal LPG will cover the largest set of gas appliances. The remaining set of appliances, where mutual recognition has not been possible, concerns LPG appliances not tested to operate safely on universal LPG and flueless LPG cabinet heaters.

There are a number of unresolvable issues regarding LPG appliances not tested to operate safely on universal LPG. There are differing compositions of LPG used in Australia and New Zealand. The Gas Regulators view is that this means some LPG appliances that can safely operate on Australian LPG (propane) if operated on New Zealand LPG (propane-butane mix), and vice versa, would pose an unacceptable safety risk to respectively New Zealand and Australian consumers. As well, flueless LPG cabinet heaters are effectively prohibited in Australia because of the unacceptable safety risk they pose but are a major category of gas appliances sold and manufactured in New Zealand.

The current special exemption is in place until April 2009 but the Ministerial Council on Energy has strongly indicated that further exemptions should be avoided and that mutual recognition, harmonisation or permanent exemption should be finalised.

A consultation RIS, prepared by the Department of Resources, Energy and Tourism on behalf of the GTRC, was released for public comment on 24 September 2008. The purpose of the consultation RIS was to examine the costs and benefits of three options put forward to resolve the issue of the treatment of LPG appliances under the TTMRA: mutual recognition; harmonisation; or permanent exemption, and to elicit stakeholder views on the options.

This decision RIS provides an assessment of the three options presented in the consultation RIS, drawing on information gathered during the public consultation period. A fourth option, relating to the mutual recognition of universal LPG appliances was proposed by stakeholders during the consultation process. This RIS includes this fourth option in addition to those outlined in the consultation RIS and presents a recommended option for decision makers.

1. Statement of the Problem

The area of difficulty concerning the inclusion of all LPG appliances under the TTMRA is the unacceptable risk to consumers of using LPG appliances designed to operate on a different LPG composition than that which is commonly supplied in New Zealand or Australia. These issues are brought about by the different composition of LPG in the two countries.

LPG is mainly propane (C₃H₈), propene (C₃H₆) or butane (C₄H₁₀). Propane is the predominant component of LPG used in Australia, and a mix comprising propane and butane (to a maximum of 50 per cent) is used in New Zealand. Appliances built to burn LPG comprising mainly propane can be hazardous when used to burn propane/butane mixtures, and vice versa.

In other words, there could be an unacceptable risk to some Australian consumers if LPG appliances meeting the necessary safety standards to operate on the New Zealand LPG composition are used in Australia using Australia's LPG composition; and there could be unacceptable risk to some New Zealand consumers if LPG appliances meeting the necessary safety standards to operate on the Australian LPG composition are used in New Zealand using New Zealand's LPG composition. For appliances tested to operate safely on universal LPG, whilst there maybe some performance issues with using the appliances on a LPG composition the appliance has not been designed for, there are no safety issues. For appliances not tested to universal LPG there is an unacceptable safety risk which cannot be addressed under the TTMRA which provides a good that may be legally sold in Australia may be sold in New Zealand and vice versa regardless of differences in standards or other sale-related regulatory requirements.

LPG differs from natural gas in that it is stored in pressurised vessels. It must only be used in appliances that have been specially designed and certified for use with LPG, and these appliances can be either permanently fixed appliances or portable appliances. Common LPG appliances include: barbeques, patio heaters, gas lanterns and other household appliances such as gas cook tops, portable gas heaters and instant gas hot water systems.

Although the composition of the LPG is different in each country, the gas fittings and the gas storage cylinders used by the equipment appear the same, with the gas cylinders being marked as containing only LPG, and appliances for use with LPG.

An appliance sold in Australia is designed to use propane and if that appliance is then sent to New Zealand for sale, and it has not been tested to ensure its safe operation with universal LPG, then it will be unsafe since in New Zealand, the fuel available for use in the appliance is a mix of propane and butane.. This mix has a higher heating value, and would therefore overload the gas rating of the appliance resulting in flame impingement from a softer flame and sooting. There would also be a risk of carbon monoxide formation from incomplete combustion. Carbon monoxide, being a poisonous gas, can be fatal if inhaled in sufficient quantities.

The risks to Australian consumers from using a New Zealand appliance (designed to use a butane/propane mix) and not tested to ensure safe operation with universal LPG would primarily relate to the adverse impact on flame stability resulting from the use of the alternative fuel. This in turn increases the risk that the appliance may overheat and potentially cause an explosion due to a tendency for the flame to lift and being more prone to extinguishing.

Nearly all appliances manufactured for Australian domestic use have been designed and calibrated to operate solely on propane and there is not a requirement in the standards that they must be tested to ensure safe operation with universal LPG. To use a LPG mix of butane and propane in an appliance calibrated to operate on propane, and not tested to operate safely with universal LPG, will usually have a number of side effects, including: appliance malfunction; a fluctuating flame temperature; a changing flame colour; a soot residue build up on cooking utensils etc, and in rare cases; carbon monoxide release. Also, due to the different densities of propane and butane, propane will tend to burn first once the gas is exposed to room temperature, leaving the heavier butane gas in the bottle to burn last.

The problem could be addressed by changing the specification for LPG in either Australia or New Zealand (or both) so that the specification was compatible. This would have potential significant cost implications for existing LPG users and the LPG infrastructure.

While it is possible to retrofit existing appliances to operate on both types of fuels, the cost of doing so would be uneconomic. Appliances that are modified in this way do not perform as well, including that they may be less fuel efficient which would add to the cost of this option and have implications for Government energy efficiency planning in both Australia and New Zealand. As well, a change in the specification of the fuel available in the local marketplace may tempt users to risk unsafe home adjustments.

If the LPG specification was changed and appliances were not retrofitted (a risk given the cost), there would be increased safety risks to consumers from using such appliances. This is particularly an issue since consumers already bear a certain level

of risk in the use of these appliances, which have contributed to fatalities and other potentially dangerous situations. For example, leaking LPG can precipitate explosions and fires causing fatalities in confined spaces such as caravans, garages and basements. LPG is potentially more hazardous than natural gas owing to its greater density making it heavier than air, and its propensity to collect at ground level rather than be dispersed upwards as is the case with natural gas. LPG also has a lower level of required ignition energy than natural gas and any potential ignition source, intentional or otherwise, can lead to a potentially dangerous situation.

Another area of difficulty regarding the inclusion of LPG appliances under the TTMRA concerns flueless cabinet heaters. These are portable LPG room heaters with the gas cylinder being integral to the appliance. Flueless gas heaters discharge the products of gas combustion into the room they are heating.

Australian Perspective

The use of cabinet heaters in Australia has been effectively banned since the 1980s, because of their poor safety performance, the health effect of combustion products, the effect of high water content in the air giving rise to damp conditions and because of their portability the opportunity to use them in inappropriate locations (i.e bedrooms and bathrooms). Cabinet heaters have fewer safety devices such as oxygen depletion sensors and tilt switches and often lower levels of NO_x controls when compared with flueless natural gas heaters all of which need to be connected to a fixed bayonet point via a flexible hose thereby restricting the appliance from being positioned in an unsafe location. Australian jurisdictions are concerned that the inclusion of LPG appliances under TTMRA would allow flueless cabinet heaters to be sold in Australia, overriding existing laws restricting their sale and use.

Australian jurisdictions have signalled their concerns as follows:

1. Usage

Inappropriate usage of mobile LPG appliances can cause injury, death and damage to property. The safety problems deriving from the poor maintenance, home modification or misuse of LPG appliances cannot be overcome without extensive education of gas appliance users. In particular, the problems associated with people's actions and decisions leading to the lack of ventilation of a room would be difficult to

overcome. Successful education of LPG appliance users would minimise, but not eradicate, issues associated with the inherent problem of gas composition.

2. Ventilation

The use of flueless gas space heaters in certain locations is restricted in Australia because of concerns over a lack of adequate room volume and ventilation to dilute the products of combustion to a safe level. Cabinet heaters being highly mobile appliances, can be used in small rooms such as bedrooms which are of particular concern as the inhabitant may fall asleep, and other rooms that have insufficient ventilation. Use in such rooms can cause illness and asphyxiation from the inhalation of pollutants produced during combustion (e.g. carbon monoxide or nitrogen oxides) and depletion of available oxygen in the air. Condensation problems are also an issue.

3. Storage of cylinders

Concerns have been raised about the possible risk of leaks from connection points and the risk of gas ignition during cylinder exchange times. In some jurisdictions, storage/use of cylinders inside dwellings is illegal, but in others, AS 1596 is referred to from their regulations which allows 10kg of LPG indoors per dwelling in Australia and 20kg per dwelling in New Zealand.

4. Health

Australian health authorities also concur with Australian regulators on the prohibition of the use of cabinet heaters for residential heating because of the poor safety performance of cabinet heaters, the health effect of combustion products and the effect of high water content in the air giving rise to damp conditions affecting occupants, particularly children and the elderly.

5. Safety Track Record

The Australian regulators consider that New Zealand has a poor track record regarding the safe use of these appliances given the number of incidents relating to cabinet heaters and would cite this as a reason to not permit them.

For example, for the period from 1998 to 2007, New Zealand reported 65 accidents resulting from the use of cabinet heaters (fatalities and injuries) that were notifiable under the *Gas Act*.

New Zealand Perspective

In New Zealand, there are approximately 400,000 portable cabinet heaters in homes (equating to about a quarter of homes having a cabinet heater available to use). An Energy Safety survey from July 2006 showed that of people who own or use a LPG cabinet heater in their home, 43 per cent use this kind of heating as their main source of household heating (approximately 11 per cent of homes). The survey showed that 91 per cent of people who used cabinet heaters had only one cabinet heater in their household. However, those who used cabinet heaters as their main source of heating were more likely to have more than one cabinet heater in their home.

Almost half (44 per cent) of the respondents to the survey reported using their cabinet heater because it provided quicker heating than other sources and 41 per cent believed gas is cheaper than other options. One in ten keep a heater as a back-up heating supply.

The survey concluded that there is a general perception among cabinet heater users that these heaters are safe to use. Contributing to this understanding is the fact that the incidence level of safety issues is low – on a personal level very few users have experienced significant safety-related issues with their cabinet heater.

In summary, cabinet heaters are a source of main household heating in a significant number of New Zealand homes. They also are used as back up heating for emergencies (e.g. electricity cuts or snowed-in households), as supplementary heating to other heaters such as wood burners and for heating rooms which are only occupied intermittently. They can also incorporate sophisticated safety features and the level of incidents each year is very low given the number of heaters in the market.

LPG heating is popular and its use has increased in recent years with greater encouragement for people to better heat their homes alongside increased electricity prices and declining use of wood and coal burning appliances.

The New Zealand industry note that they have sought to ameliorate safety issues associated with cabinet heaters by sourcing a 'clip-on' connection system from

Europe which has solved the problem of leakage between cylinders and heaters due to the POL connection system used in the 1970s. More recently, the QCC connection system has been developed which offers extra safety features such as thermal and excess flow cut outs.

Australia has a widespread reticulated natural gas (NG) service available to consumers, which makes the use of cabinet heaters a less attractive heating option especially considering the risks associated with their use, as identified by Australian jurisdictions. In New Zealand, mainline gas is confined to main towns and cities in the North Island, and therefore from the New Zealand perspective, to not allow the use of cabinet heaters would impose significant social and economic costs.

Stakeholders were asked during the consultation process to provide specific data on the magnitude of the safety risk posed by the use of different LPG compositions in LPG appliances. No feedback on this was received during the consultation process. All jurisdictions collect and report data on deaths and incidents as a result of LPG appliances, and this was reported in the consultation RIS. It was felt by the stakeholders that this data can be misleading, given that each jurisdiction collects the statistics slightly differently, and it does not provide a comparison between the risks of using LPG when compared with natural gas or electricity.

The Australian and New Zealand Governments are seeking to satisfactorily resolve the issue of the trade in LPG appliances between Australia and New Zealand, through either mutual recognition, harmonisation or permanent exemption so that acceptable performance levels of gas safety and supply quality for retailing and end use application can be achieved, and agreed by all jurisdictions. The resolution of this matter would also end any uncertainty resulting from the continual rollover of the special exemption.

2. Objectives

The objective of the proposed regulatory reform is to resolve the issue of the treatment of LPG appliances under the TTMRA.

Resolving the issue of LPG appliances will:

- Obviate the need for the continued rollover of the special exemption for LPG appliances; and
- Allow for free trade in gas appliances and a large number of LPG appliances where there are not safety issues; and
- Result in a solution that is acceptable to both Australian and New Zealand Gas Safety Regulators.

3. Statement of Options

Mutual Recognition

Mutual recognition would address the regulatory differences between Australia and New Zealand in regard to LPG appliances by allowing them to be traded freely between Australia and New Zealand. Appliances would need to only comply with the standards and regulations applying in the country where they were produced.

Legislation implementing the TTMRA overrides any laws, with certain exceptions, that regulate the manufacture or the sale of goods. Examples of laws overridden by the scheme include²:

- Requirements relating to the production, composition, quality or performance of a good (such as product standards);
- Requirements that a good satisfy certain standards relating to presentation (such as packaging and labelling);
- Requirements that goods be inspected, passed or similarly dealt with (such as conformance assessment requirements); or
- Any other requirement that would prevent or restrict, or would have the effect of preventing or restricting, the sale of the good.

Harmonisation

Harmonisation would address the regulatory differences between Australia and New Zealand in regard to LPG appliances by aligning the different standards or regulations

² Council of Australian Governments Committee on Regulatory Reform, *A User's Guide to the Trans-Tasman Mutual Recognition Arrangement*, 1998.

(for both appliance and LPG specification requirements) between the two countries and requiring both Australia and New Zealand to follow the same substantive regulations. Harmonisation may mean that each jurisdiction (that is, New Zealand and Australia and within Australia) may have specific requirements but the regime adopted would be fundamentally the same.

Harmonisation would mean either:

- Australia adopting the New Zealand model;
- New Zealand adopting the Australian model; or
- Adopting a new hybrid model that accommodates some or all of the requirements of each country.

Permanent Exemption

Permanent exemptions exist to deal with jurisdictional regulatory differences or situations where all parties agree that mutual recognition could jeopardise public health or safety.

A permanent exemption from the application of the Trans-Tasman Mutual Recognition Act 1997 (Australia) (the Act) may be made under Section 45. Schedule 2 of the Act lists laws that are permanently exempt from the Act. Schedule 3 of the Act lists laws that have a special exemption from the Act. The Governor-General may make regulations that amend Schedule 2, however a regulation cannot be made unless all the then participating jurisdictions have endorsed the regulation. Also, if the regulation deals with laws specified in Schedule 3 and will not take effect within 5 years after commencement of the Act, the regulation may be made if at least two thirds of the then participating jurisdictions have endorsed the regulations.

Permanent exemptions (as listed in Schedule 2) have been provided for laws relating to:

- Quarantine
- Endangered species
- Firearms/weapons;
- Fireworks;

- Indecent material;
- Ozone protection;
- Agricultural and veterinary chemicals;
- Risk categorised foods
- Gaming machines;
- Beverage containers (SA);
- Tasmanian laws on possession, sale or capture of abalone, crayfish and scallops.

Adopting a permanent exemption option for LPG appliances would effectively mean retaining the current position in terms of regulation of these appliances in both countries.

4. Impact Analysis and Assessment of Options

4.1 Mutual Recognition of all LPG Appliances

The purpose of the TTMRA is to give effect to principles of mutual recognition. In the case of LPG appliances, the key principle is that a good that may be legally sold in Australia may be sold in New Zealand and a good that may be legally sold in New Zealand may be sold in Australia, regardless of the differences in standards or other sale-related regulatory requirements between Australia and New Zealand.

There are a number of potential benefits of mutual recognition. These are³:

- Lower costs to businesses and improved competitiveness, and lower compliance costs from being able to manufacture to a single standard;
- Greater choice for consumers;
- An impetus for both countries to consider the appropriateness of existing regulation in the light of all participating governments' objective of removing unnecessary barriers to trade;
- Greater discipline on regulators contemplating the introduction of new standards, regulations and registration requirements; and
- Greater cooperation between regulatory authorities.

³ Council of Australian Governments Committee on Regulatory Reform, *A User's Guide to the Trans-Tasman Mutual Recognition Arrangement*, 1998.

Costs

The major cost associated with mutual recognition of all LPG gas appliances relates to safety. Allowing LPG appliances into Australia that are not tested to operate on universal LPG and are set up to use other than a propane gas composition would greatly increase the safety risk associated with the use of such LPG appliances; and vice versa, allowing LPG appliances into New Zealand that are not tested to operate on universal LPG and are not set up to use a butane-propane LPG composition would greatly increase the safety risk associated with the use of such LPG appliances.

If all LPG appliances were to be mutually recognised, and a common LPG specification was not in place, Australian and New Zealand consumers would bear an increased risk of injury and/or fatality when using such appliances.

Benefits

The intended benefit of mutual recognition is to encourage trans-Tasman trade, resulting in improved competition and a greater choice for consumers. Goods need only to comply with the standards or regulations applying in the country in which they are produced, or through which they are imported before they can be sold in the other country.

At present, the major New Zealand manufacturers of gas appliances produce goods that comply with Australian standards and codes. These manufacturers sell appliances in Australia that carry a certification badge which identify them as complying with the relevant Australian standards. As noted, New Zealand is changing its gas appliance safety regime. With the new regime there will be a requirement for pre sale third party testing. A benefit of mutual recognition will be that such testing will only have to be to the regulatory requirements of the New Zealand regime as compared to testing to both the New Zealand and Australian regimes.

If mutual recognition of all LPG appliances under the TTMRA occurred, it would mean that other New Zealand manufacturers producing appliances that currently do not meet Australian standards would be able to sell their appliances in Australia, including appliances not tested to operate on universal LPG.

Similarly, Australian manufacturers supplying goods to New Zealand are complying with New Zealand standards and regulatory requirements including that an appliance must operate safely on New Zealand specification LPG. If mutual recognition of LPG appliances under the TTMRA occurred, it would mean that the Australian manufacturers would only have to meet the Australian regulatory requirements. With the move to New Zealand requiring pre sale third party testing this will be a cost savings benefit. For other Australian manufacturers producing appliances that do not meet New Zealand standards and regulatory requirements, they would be able to sell their appliances in New Zealand, including appliances not tested to operate on universal LPG.

Recommendation

Given that there is a serious safety risk associated with using those LPG appliances in Australia and New Zealand that either do not meet local standards, or have not been tested to operate safely on universal LPG, the benefits accruing from increased trade would be far outweighed by the risks posed to Australian and New Zealand consumers from mutual recognition. Therefore, mutual recognition of all LPG appliances is not recommended.

4.1.2 Mutual Recognition of Universal LPG Appliances

During the consultation process, the New Zealand industry proposed that an alternative option to mutual recognition of all LPG appliances is to mutually recognise LPG appliances tested to operate on universal LPG and to permanently exempt other LPG appliances including LPG cabinet heaters. This option would allow for the free trade of LPG appliances tested to operate safely on universal LPG between Australia and New Zealand, whilst maintaining the restriction on cabinet heaters in Australia.

Costs

This option addresses the safety concerns outlined in option 4.1.1. There may be a cost to consumers associated with the performance of an appliance not specifically to

run on 100 percent propane or a propane-butane mix if used with the different gas composition. This is a matter that would be expected to be addressed by firms seeking to sell appliances in a particular market. There is no safety cost. It is understood that at present only a small number of mainly commercial appliances are designed to operate on universal LPG. Australia does not routinely test its gas appliances for safe operation on universal LPG. There may be a cost to manufacturers to test and certify appliances for safe operation with universal LPG. This would be a decision taken by the manufacture on a case by case basis, weighing up the benefits of the TTMRA environment. It would not be compulsory to test appliances to ensure safe operation on universal LPG. Ultimately, if mutually recognised, LPG appliances tested to operate safely on universal LPG will be brought under the new regime whereby all mutually recognised gas appliances carry a common label, recognised by all jurisdictions.

Benefits

The current special exemption requires that gas manufacturers in either country test the appliance according to the requirements of the intended marketplace. The new New Zealand gas appliance regime, being progressed by the New Zealand Government, will allow for the mutual recognition of natural gas appliances. This will mean that Australian and New Zealand suppliers will be able streamline their approvals procedures and reduce costs of supplying appliances across the Tasman, as manufacturers will only have to satisfy one set of requirements for both countries. Including LPG appliances tested to operate safely with universal LPG within this category of mutually recognised appliances would similarly allow Australian and New Zealand supplies to streamline their approvals procedures and reduce the cost of supplying appliances across the Tasman, as manufacturers will only have to satisfied one set of requirements for both countries. The benefits may only affect a small number of manufacturers at present but over time it is expected there will be more appliances tested to operate safely on universal LPG.

Recommendation

It would be possible to achieve mutual recognition for LPG appliances tested to operate safely on universal LPG. This is consistent with the principles of the TTMRA. For other LPG appliances there remains unresolved safety issues as noted above.

Therefore mutually recognising just LPG appliances tested to operate safely on universal LPG is recommended.

4.2 Harmonisation of LPG Appliances

In certain circumstances, inconsistent regulation between different jurisdictions can result in a hindrance to trade due to the increased cost of approvals or the banning of certain products. Harmonisation would bring Australia's and New Zealand's gas regimes into closer alignment and allow for the trade in LPG appliances between the two countries.

Achieving a harmonised position on LPG appliances would entail each country agreeing to the level of safety that would be the basis of the regulation, and how safety can be assured. This would also require either the harmonisation of the LPG specifications between Australia and New Zealand, or mandating that new LPG appliances be designed to operate on universal LPG, and phasing-out or converting the existing stock of LPG appliances that operate on either propane or a propane/butane mix. Harmonising regulations and products across all jurisdictions can result in substantial implementation costs, which may be higher than the benefits of harmonisation, particularly where the regulatory differences are not significantly impeding cross-border trade.

Costs

These costs may include:

- Administrative costs incurred by government and industry in reviewing the various Australian and New Zealand standards and regulatory requirements;
- Costs in establishing a new regulatory regime. These costs are in:
 - developing and establishing the new regulation;
 - implementation and enforcement of the regulation by government;
 - in adoption and compliance by the industry; and
 - consumers learning and understanding the new regulatory regime.

- Substantial costs associated with changing the LPG infrastructure in one, or both countries, and/or other costs associated with converting propane (or propane/butane) appliances to operate on universal LPG.⁴

Benefits

The benefits of harmonisation may include:

- Products legally sold in New Zealand would be made available for sale in Australian jurisdictions and vice versa;
- LPG appliances would be brought under the TTMRA thereby meeting TTMRA objectives of promoting trade and providing a greater variety in goods and services.

Recommendation

LPG Australia notes in its submission that harmonisation of the LPG appliance industries in Australia and New Zealand is achievable, but the resulting benefits relating to the increased range of LPG appliances would be miniscule. It is anticipated that the implementation costs of the harmonisation option would be substantial. It is possible that measures could be taken to ensure that safety of LPG appliances could be assured. However, it is not viable for either nation to change the composition of its LPG, and designing and/or retrofitting new and existing LPG appliances to operate on a new LPG composition would be uneconomic. For these reasons, harmonisation is not considered a feasible option for the resolution of the treatment of LPG appliances under the TTMRA.

4.3.1 Permanent Exemption of All LPG Appliances

Permanent exemptions are appropriate where it is not feasible or cost effective to apply mutual recognition, or when all parties agree that mutual recognition would jeopardised public health and safety. The outcomes of the consultation process showed that not all stakeholders viewed permanently exempting all LPG appliances as the best option for resolving the treatment of LPG appliances under the TTMRA.

⁴ It should be noted that converting all LPG appliances to universal LPG may also result in an additional adverse outcome relating to emissions standards.

Costs

At present there is no data collected specifically on LPG appliances, including the value of LPG appliances manufactured in Australia and the value of trade in these appliances between Australia and New Zealand. Therefore, it is not possible to be specific about the possible impacts of the difference in treatment of natural gas appliances and LPG appliances on trans-Tasman trade.

Stakeholder feedback garnered through the consultation process has shown that permanently exempting all LPG appliances would constitute maintenance of the status quo. During the time that the special exemption has been in place, there have not been significant cost implications for Australian and New Zealand gas appliance manufacturers. However, once the new New Zealand gas regime comes into effect and natural gas appliances are mutually recognised, manufacturers will have to continue to bear the cost of satisfying both the Australian and New Zealand regimes for all other LPG appliances, including those tested to operate safely on universal LPG.

Benefits

The major benefit associated with the permanent exemption of all LPG appliances is that it would be relatively simple to administer and enforce.

Recommendation

Permanently exempting all LPG appliances is not recommended. During the consultation process the New Zealand industry proposed a feasible option could be to mutually recognise LPG appliances tested to operate safely on universal LPG. Following discussions between Australian and New Zealand Regulators, it was agreed that work could be undertaken to achieve mutual recognition of LPG appliances tested to operate safely on universal LPG, and that this could be done in the context of the work being done to achieve mutual recognition of natural gas appliances. Given that it is possible to work towards mutually recognising LPG appliances tested to operate safely on universal LPG, it is recommended that the work already underway to achieve this continue, as it will enable manufacturers and consumers to capture the gains of having a greater number of appliances available for sale across the Tasman under the TTMRA environment. This would also allow some of the duplicated costs

incurred by manufacturers in having to satisfy two testing and certification regimes to be reduced.

4.3.2 Permanent Exemption of LPG Appliances Not Tested to Universal LPG and Flueless Cabinet Heaters

Given that agreement has been reached to work toward mutually recognising LPG appliances tested to operate safely on universal LPG, the category of LPG appliances that would be permanently exempt under this option include flueless cabinet heaters and LPG appliances designed specifically to operate on either propane or on a propane/butane mix. Drawing on the available data relating to gas appliances and consultation with relevant stakeholders, it is possible to conclude that the benefits of permanent exemption for these LPG appliances would outweigh any costs associated with the change, and will have a minimal impact on trans-Tasman trade. The basis for this claim is threefold: the proposed permanent exemption would constitute the maintenance of the status quo for the affected appliances; there is minimal domestic-oriented industry in Australia and New Zealand, and a relative lack of trade in these appliances between Australia and New Zealand; and safety concerns due to the differing composition of LPG across jurisdictions.

The special exemption for gas appliances has been rolled over for eleven successive years with few significant negative effects on the gas appliance market in Australia and New Zealand. Notwithstanding efforts to harmonise regulations pertaining to natural gas appliances, the permanent exemption of LPG appliances not tested to operate safely on universal LPG and unflued LPG cabinet heaters would constitute maintenance of the status quo and it is not anticipated that industry or consumers would incur any additional costs as a result.

Costs

It may be the case that the only cost associated with permanent exemption is that it is inconsistent with the objectives of the TTMRA and the benefits of mutual recognition would be foregone. Due to the small size of the trade in gas appliances between Australia and New Zealand, the forgone benefits for both Australia and New Zealand associated with the permanent exemption option would not be great.

In 2005, the Department of Industry, Tourism and Resources commissioned a report by ACIL Tasman on the trade in gas appliances and the regulation of gas appliances in Australia and New Zealand. The report found that:

Australian exports of gas appliances in 2004 were:

- \$45 million in total
- \$10 million to New Zealand.

New Zealand exports of gas appliances in 2004 were:

- \$29.5 million in total
- \$16.3 million to Australia.

Total Australian exports of domestic gas appliances have not grown in aggregate over the 1990 to 2000 period despite a temporary surge after 1998 which was attributable to an increase and then decline in exports of gas cookers and gas heaters probably driven by exchange rate movements. Australian exports of domestic gas appliances to New Zealand grew by around 3 per cent per annum on average over the period and did not experience the surge after 1998. New Zealand exports of domestic gas appliances increased in total by around 12 per cent per annum on average over the period.

New Zealand exports of domestic gas appliances to Australia increased by around 12 per cent per annum over the period with a surge occurring after 1997. Australian exports of gas appliances in total and to New Zealand are below trend for growth in exports of manufactured goods and domestic appliances between 1990 and 2004.⁵

New Zealand exports of gas appliances in total and to Australia are above trend for growth in exports of manufactured goods and generally in line with growth in exports of domestic appliances.

Given that the special exemption has been in place for quite some time, it is difficult to determine the impact it has had on trade flows. However, the trans-Tasman gas appliance trade has generally been low, and has typically been more significant for

⁵ACIL Tasman 2005, *Australia New Zealand Gas Appliance Trade and Regulation*.

New Zealand than Australia. Further, New Zealand exports of domestic gas appliances to Australia have increased since 1998, while Australian exports of domestic gas appliances to New Zealand have decreased since 1998, in all years except 2002.

LPG appliances are a subset of all gas appliances, and in the absence of data on these appliances it can be assumed that the size of the trade in LPG appliances is significantly smaller than for all gas appliances. The Gas Appliance Manufacturers Association of Australia has estimated⁶ that of the Australian gas appliance market, the split between natural gas and LPG would be on average, between 95 – 97 per cent natural gas. Given the small percentage of LPG appliances that comprise the market, it would therefore be expected that the trade in LPG appliances between Australia and New Zealand would be extremely small. Furthermore, given that the special exemption for gas appliances has been in place for the last eleven years, many major gas appliance manufacturers in New Zealand that wish to export appliances to Australia already have their appliances certified to Australian standards, and undertake trade with Australia. Thus, permanently exempting LPG appliances not tested to universal LPG and flueless cabinet heaters is expected to have little or no impact on manufacturers.

It should be noted that the foregone benefits of mutual recognition are more significant if the regulatory differences between Australia and New Zealand reflect national historical or institutional arrangements, rather than the objective assessment of risks to public health, safety and the environment.⁷

In the case of LPG appliances, the regulatory requirements require recognition of the different compositions of LPG in Australia and New Zealand. The different LPG compositions mean that appliances that can operate safely in one regime if not tested to operate safely on universal LPG cannot safely operate in the other regime. These regulatory differences, are based on safety concerns, and outweigh the benefits of mutual recognition.

⁶ Interview

⁷ Council of Australian Governments Committee on Regulatory Reform, *A User's Guide to the Trans-Tasman Mutual Recognition Arrangement*, 1998.

However, it should be noted that the foregone benefits of mutual recognition would include a reduction in compliance costs for LPG appliance manufacturers who are currently required to test and certify the appliance in question to both Australian and New Zealand standards if the appliance is to be sold in both countries. If the appliances were mutually recognised, testing and certification would only be required to be conducted in the home country. Quantitative estimates of the size of these costs have not been provided by stakeholders. The mutual recognition of LPG appliances tested to operate safely on universal LPG, will allow manufacturers of such appliances to take advantage of this cost benefit.

Benefits

The major benefit associated with permanent exemption of LPG appliances not tested to operate safely on universal LPG is the avoidance of safety issues relating to the differing composition of LPG across jurisdictions. Permanent exemption is also recommended for flueless cabinet heaters, which Australian regulators consider pose an unacceptable safety risk for Australian consumers. As these appliances are not currently available to Australian consumers, permanently exempting them would not change the status quo and avoid the inevitable safety issues that would arise with their use. The other benefit accruing from permanent exemption is regulatory certainty for manufacturers, importers, retailers and consumers.

Recommendation

It is anticipated that permanently exempting a narrow number of defined LPG appliances from the TTMRA will result in benefits to industry and the community that would outweigh the cost of prohibiting trade in LPG appliances between Australia and New Zealand. The definition of permanently exempt LPG appliances would be set out in each jurisdiction's legislation. The narrow exemption will enable potential cost reductions that may be achieved by gas appliance manufacturers through only having to satisfy one set of certification and testing regulations and yet mean safety for consumers by permanently exempting appliances that would be a safety risk.

5. Consultation

The consultation RIS was released for public comment in Australia and New Zealand on 24 September 2008. The RIS asked a number of questions of stakeholders (see Appendix A for a list of the questions asked). The response to the consultation process was poor, with two submissions received.

The two respondents to the consultation process were LPG Australia and the New Zealand LPG Association, the Gas Association of New Zealand and the Gas Equipment Suppliers Group, who responded in a joint submission. A summary of both submissions is provided below:

LPG Australia Submission

LPG Australia supported a permanent exemption of all LPG appliances given that a special exemption has been in place for 11 years, and is of the view that making the exemption permanent would have no direct impact on consumers or industry. The submission notes that benefits of mutual recognition relating to the increased range of available LPG appliances would be miniscule, but the added costs of multi-country compliance (testing and approval) would be substantial for some appliances and modest for others. All costs would be borne by the consumer for no real gain.

Joint New Zealand Submission

The joint submission from the New Zealand industry does not support the permanent exemption of all LPG appliances and believes that an alternative option of mutually recognising LPG appliances tested to operate safely on universal LPG may be a feasible solution. It supported the permanent exemption of LPG cabinet heaters. The submission also notes that the special exemption of gas appliances should be rolled over for a further three years, to enable the changes to New Zealand's gas regulations to come into force. The permanent exemption of LPG appliances could then be reconsidered at that stage, once the impact of the new regulations was known.

The submission notes that while there has not been significant cost implications resulting from the continued rollover of the special exemption in the past, once the mutual recognition for gas appliances comes into force, suppliers of LPG appliances

tested to universal LPG will have to continue to bear the cost of satisfying both the Australian and New Zealand regimes.

The submissions are referred to throughout this RIS. The additional option of mutually recognising LPG appliances tested to operate safely on universal LPG has been included in the RIS. Other stakeholder concerns have been highlighted and addressed where appropriate.

6. Evaluation and Conclusion

Following outcomes of the consultation process, and extensive analysis by GTRC, it is considered that there is no feasible alternative but to allow for the mutual recognition of LPG appliances tested to operate safely on universal LPG and to apply a permanent exemption to LPG appliances not tested to operate safely on universal LPG and flueless cabinet heaters. This view is based on safety considerations, not trade and competition. It is therefore recommended that option 4.1.2 and option 4.3.2 be adopted.

Permanent exemption is viewed as the only feasible option to resolve the issue, and it is preferred as, on balance, it will result in the resolution of the issue of LPG appliances at the least cost to the industry and will result in safety requirements being met to the satisfaction of both Australian and New Zealand regulators. It is agreed that given the different LPG compositions in Australia and New Zealand a permanent exemption under the TTMRA for LPG appliances not tested to operate safely on universal LPG is the only practical solution to achieving mutual recognition for all other gas appliances. The very different situations outlined for each country regarding the use of cabinet heaters make it irreconcilable for the appliance to be either used or banned in both countries.

Mutual recognition is not viewed as a feasible alternative due to the safety risk that consumers would face if LPG appliances not tested to operate safely on universal LPG and set up to use a different gas composition were allowed in Australia or New Zealand. Harmonisation is not viewed as a feasible option due to the substantial costs that would be incurred to harmonise regulations and the LPG composition of both countries (including associated costs to change infrastructure and existing appliances).

7. Implementation and Review

Following the completion of the public consultation period, this decision RIS has been developed taking into account outcomes of the consultation process. Once completed, the Department of Resources, Energy and Tourism will advise the New Zealand Government who will then have an opportunity to examine the RIS. The first step of the implementation process requires the Standing Committee of Officials' approval of the RIS. The RIS will then be presented to the Ministerial Council on Energy for approval. Amendments seeking to add laws to the permanent exemption schedule of the TTMRA Act require the agreement of not less than two-thirds of the participating parties. Once agreement has been reached, the Minister for Resources, Energy and Tourism will write to the Prime Minister seeking approval for the permanent exemption. If approved, the Prime Minister will write to the TTMRA Heads of Government seeking their approval.

Once a permanent exemption has been approved, the TTMRA Act allows for permanently exempt laws to be amended or replaced, as long as this does not increase the scope of the exemption. The exemption will be reviewed periodically as the TTMRA requires the parties to the agreements to conduct five-yearly reviews.

Questions asked in the consultation RIS

1. Is there any specific data available on the magnitude of the safety risk posed by the use of different LPG compositions in these appliances?
2. Views are sought from gas appliance manufacturers on the impacts that mutual recognition of LPG appliances may have on their current operations. Would mutual recognition provide significant benefits, or other benefits other than those raised above?
3. Views are sought from consumers on whether mutual recognition would substantially increase choice in the range of LPG appliances sold in Australia.
4. What additional costs may be incurred as a result of harmonisation? Is quantitative data available to accurately determine the size of these costs?
5. What additional benefits may arise from harmonisation?
6. Would it be economically feasible to mandate that all new LPG appliances be designed to operate on universal LPG, and phase-out the existing stock of appliances that operate on either propane or a propane/butane mix?
7. Can harmonisation be achieved?
8. What additional costs may be incurred as a result of permanent exemption?
9. What additional benefits may arise from permanent exemption?