

31 January 2020

## **Submission regarding options for addressing risks from open-flued gas space heaters (OFGSHs) in Victoria**

The Brotherhood of St Laurence thanks the Victorian Department of Environment, Land, Water and Planning for this opportunity to respond to the discussion paper.

Of the options proposed in the discussion paper, only option 4 with both complementary measures comes close to addressing the risks from open flued gas space heaters (OFGSHs) in Victoria. We believe the health and financial costs and risks of OFGSHs are very likely being underestimated, particularly for low-income households. Ideally, another option would be available: compulsory replacement of every OFGSH in Victoria, subsidised for low-income households. Only this would truly address the risks and minimise the ongoing costs to households.

Responses to selected questions from the discussion paper are provided below (to gain additional context, refer to the discussion paper).

### **Issues**

#### ***a) Do you think that there is a role for the Victorian Government to reduce the risks associated with CO poisoning from OFGSH use?***

Yes. The three deaths indicate that a real hazard exists requiring better regulation and public education.

The risks to public safety from OFGSHs are real and perhaps underestimated by considering the risks in isolation from each other. 112,100 homes are estimated to have Pyrox/Vulcan OFGSHs that have not been serviced in last year,<sup>1</sup> meaning that approximately 300,000 people exposed to this risk. Given the scale of the problem, the complex interaction of appliances, building fabric, public policy and behaviour, and failure of public education to date, it is unreasonable to expect any other actor other than government to resolve the issue.

#### ***b) What are your views on the issues identified in this section as key risk drivers for OFGSHs?***

We are disappointed that an active phase-out of existing OFGSHs is not one of the options being proposed, as that is the option we would prefer, along with a ban on new installations.

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<sup>1</sup> Quantum Market Research (2019) Prevalence and types of gas heating in Victorian homes. Melbourne. Conducted on behalf of Energy Safe Victoria.

The brief discussion on page 17 of the discussion paper gives three reasons why this option was not included, but these are unconvincing given what is known about OFGSH use in the community:

*'It is assumed that consumers currently using OFGSHs would continue using them for the remainder of their useful lives.*

*This is to: (i) avoid additional costs for consumers, who may not be able to afford a replacement heater before the end of the economic life of their current heater;'*

The 'economic life' of heaters is in part a function of their running cost, and OFGSHs are inefficient and therefore expensive to run, locking households into leaky homes that expose residents to extreme cold and extreme heat.

*(ii) ensure consumers have continued access to heating, recognising that the effects of exposure to cold can be a health hazard; and*

While cold is indeed a health hazard, OFGSHs effectively expose households to two other hazards: CO and extreme heat (the latter of which is exacerbated by the air leaks required for OFGSHs – see below). The dangers of exposure to CO and extreme heat should also be factored in to decision-making, not just cold.

*(iii) to account for the resistance to change amongst some consumers.*

That some consumers may want to keep their OFGSHs does not justify assumption that all will do so.

Only a forced phase-out would show that government is prioritising public safety. It should have a lead time of several years, subsidies for low-income households and clear regulatory guidance for manufacturers, retailers and gas plumbers. Analysis of likely improved health outcomes, energy cost savings for households and the cost of government concessions may find that the true cost to government is minimal.

***c) Do you think there are other significant risk drivers for OFGSHs that have not been discussed here?***

The injuries caused by sublethal exposure to CO are difficult to quantify but real. The discussion paper reports approximately 100 hospitalisations a year in Victoria from accidental and deliberate CO poisoning. Allen Consulting ascribed 21 injuries annually to CO poisoning in Australia, in addition to the 1 death per annum average.<sup>2</sup> The impacts and cost of these hospitalisations/injuries deserve some weight, rather than just noting that data is difficult to obtain.

Apart from the direct health impacts of CO exposure, OFGSHs have significant indirect health and economic impacts on the wellbeing of Victorians who must live with inefficient draughty buildings to reduce the hazard from their heater. The level of ventilation required for safe use of OFGSHs creates draughts and heat loss. Adding to this, the loss of heated internal air up the flue of the heater sucks cold outside air into the home. The general ventilation inefficiency persists regardless of whether the OFGSH is running or not, i.e. the costs are full-time; the benefits are part-time. This impact is doubly true (and thus inequitable) for low-income households who self-limit their heating use to minimise bills; they are spending even more time suffering the inefficiency of their OFGSH and less in enjoying its benefit. Maintaining the use of OFGSHs in the community maintains this inequitable situation.

Another risk driver is people's growing awareness about the benefits of energy efficiency and according desire to increase the air-tightness of their homes. This is a natural response to rising gas costs and concern

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<sup>2</sup> Allen Consulting Group (2012) The risk of carbon monoxide poisoning from domestic gas appliances; Decision Regulation Impact Statement. Melbourne.

about greenhouse gas emissions and the impacts of natural gas extraction, however increasing the airtightness of heated spaces will increase the hazard of legacy OFGSHs.

A risk driver not specified is the stagnant or declining real incomes for over half of the population<sup>3</sup>. This is likely to reduce the proportion of OFGSHs that are serviced every two years and increase the proportion that are kept in use past their 15-year recommended lifespan.

### **Option 1 - The Base Case**

#### ***a) What do you identify as being the key risks and benefits of this option? Do you think they have been captured in this discussion paper?***

It fails to deal with the risk. The unsatisfactory impact of past public education campaigns is demonstrated by the high proportion of households that do not service their heaters. Incremental improvement in testing standards is likely to flow through to the plumbing workforce only slowly. The sole benefit of this option is avoidance of replacement costs for households and government, at the cost of energy efficiency and comfort when heater is not in use.

#### ***b) What information or evidence can you suggest to assist in quantifying these risks and benefits?***

Greater data collection in homes to quantify the hazard for the most at-risk households, i.e. CO monitors installed over winter in homes of low-income householders with OFGSHs more than 15 years old. The DHHS Healthy Homes project may be able to provide some preliminary data here.

#### ***c) Would you support this option? Why or why not?***

No. Public and trades education has so far failed to eliminate the hazard, and there is no reason to think it will succeed now.

### **Option 2 - Ban on new installations (excluding like for like replacements)**

#### ***a) What do you identify as being the key risks and benefits of this option? Do you think they have been captured in this discussion paper?***

Minimal impact, given like-for-like replacements is the predominant type of OFGSH installation.

Allowing like-for-like replacement will only reduce two aspects of the risks of having an OFGSH: the age and type of the existing heaters. Other risk factors include:

- the servicing regime,
- the practices of home occupiers,
- the physical characteristics of the dwelling, including ventilation, weather sealing and exhaust fans – all of which can change over time, and
- the presence or absence of appropriately installed and sited CO alarms.

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<sup>3</sup> See figure 4, Trends in average wealth, p.40. <https://www.acoss.org.au/inequality-in-australia-2018-html/>

The BSL is gravely concerned that the combination of factors makes it foreseeable that there will be more deaths from homes with these heaters. We also note the Coroner's recommendation in 2018 to implement a strategy to phase out all open flued gas heaters.

**c) Would you support this option? Why or why not?**

No, it is insufficient, given the number of pre-existing open-flued heaters and the risks identified above.

**d) Would you support the immediate implementation of a ban, if a ban on new installations is deemed the preferred option in the RIS? If not, over what timeframe would you prefer to see a ban implemented?**

There has already been a long forewarning of potential changes in regulation. A ban on new installations should be implemented as soon as possible.

**e) Do you support the continuation of like for like replacements? Are there any building types where you think like for like replacements should not be allowed (e.g. schools, rentals, aged care facilities, etc)?**

No, we do not support the continuation of like for like replacements.

Should the government pursue this option, at the least, like-for-like replacement should not be allowed in rental properties, due to the split incentive between landlords and tenants, and poor compliance with servicing and lifespan guidelines by many landlords. A similar principle applies to schools and aged care facilities.

**f) If this option was the preferred option in the RIS, are there any measures the government should consider to support industry transition?**

No. The limitations of OFGSHs have been well known for many years, and arguably government should pursue manufacturers to recover the costs of managing the safety hazards of their devices.

### **Option 3 - Ban on all installations**

**a) What do you identify as being the key risks and benefits of this option? Do you think they have been captured in this discussion paper?**

- Risks:
  - That some householders with postpone replacement of heating longer in order to retain their OFGSH, exposing them to greater risk.
  - That some householders may not enjoy the same level of subjective heating as their OFGSH provided, and suffer ill-health as a result.
- Benefits:
  - Improved energy efficiency of homes that are able to be better weather-sealed once their OFGSH is removed.
  - Improved air quality and safety.
  - Start shrinking (instead of growing) the problem, reducing the number of OFGSHs in Victorian homes.

**b) What information or evidence can you suggest to assist in quantifying these risks and benefits?**

Modelling of the benefits of removing OFGSHs using FirstRate or Scorecard tools to establish energy savings, reduced energy consumption and bills by householders, and any reduction of concession payments.

Quantification of the benefits from reducing air leakage, along with cheaper heating from modern air conditioners, may well show that replacing OFGSHs is beneficial to household energy costs as well as removing a known hazard.

**c) Would you support this option? Why or why not?**

Yes. It is the best proposed option for reducing a known hazard to the community.

**d) Would you support the immediate implementation of a ban, if a ban on all installations is deemed the preferred option of the RIS? If not, over what timeframe would you prefer to see a ban implemented and why?**

Yes, as soon as possible.

**e) Would you support a ban on future installations in all building types, if a ban on all installations is deemed the preferred option of the RIS? If not, which building types (e.g. schools, rentals, aged care facilities, etc) would you like to see a ban confined to?**

Yes, all building types.

**g) Do you have any other comments about this option?**

It is the only option that begins to deal with safety issue and the energy efficiency impacts of maintaining OFGSHs.

**Option 4 - Phase out through standards-based approach**

**a) What do you identify as being the key risks and benefits of this option? Do you think they have been captured in this discussion paper?**

- Its key risks are:
  - Certainty of further significant delay, potentially four years, undesirable in context of very slow development of regulation for this hazard.
  - Potential under-delivery of desired outcome, as no certainty on what the Australian Standards (AS) process will eventually provide. Some forms of OFGSHs may well remain in the market.
- Its benefit is national effect of AS compared to merely Victorian regulations. However, given that only Victoria and Tasmania have heating-dominated climates with corresponding focus on draught sealing, this is arguably appropriate.

**c) Would you support this option? Why or why not?**

No, or at least not as sole measure, because too much delay and uncertainty in outcome.

**d) If this option was the preferred option in the RIS, how long do you think industry should have to transition to a new standard and why?**

None, there has already been sufficient lead time.

**e) If this option was the preferred option in the RIS, are there any measures the government should consider to support industry transition?**

No, there has already been sufficient forewarning & lead time.

## **Option 5 – Victoria safety requirements**

This option is preferable to Option 4 purely in terms of likely timeline, i.e. it should delivery improved standards for new installs faster. However, it shares the other drawbacks of Option 4, most significantly that it does nothing about the hazards for existing OFGSHs.

### **Summary Questions: Core Options**

***a) Which option(s) would you support? If you do not support any option, is there some alternative option that you believe should be considered?***

We support compulsory replacement of every OFGSH in Victoria, including subsidies for replacement in low-income households.

Of the proposed options, the most preferable is Option 3, a ban on all installations.

***b) Do you have any other comments about the core options outlined in this discussion paper?***

We believe that Option 1 is an inadequate response given the demonstrated hazard to human health presented by OFGSHs.

Option 2 is similar to option 1, given that majority of installs are like-for-like replacement.

Option 4 divests responsibility to a body not focussed on the complex circumstances relevant to Victorian consumers. Australian Standards technical committees are technically skilled but underpowered to consider the intersection of government policy (e.g. Sustainability Victoria & Scorecard advocating weather sealing, National Construction Code mandating wall wrap in new builds), energy cost trajectories, growing awareness of energy efficiency in the community and the growing vulnerability of particularly aging low-income households.

### **Mandatory installation of CO alarms**

***c) Would you support this measure? Why or why not?***

Yes, as an interim measure until all OFGSHs are phased out. The CO alarms clearly signals to the community that OFGSHs are hazardous and have ongoing costs and maintenance requirements.

We note that the proper installation including placement and testing of the CO alarms is essential.

***d) Would you support mandatory installation of CO alarms in all buildings with an OFGSH? If not, in which building types (e.g. rentals, new buildings, hotels etc) do you think should be required to install a CO alarm?***

Yes, all buildings.

***g) Are there any measures the Victorian Government should consider to support consumers to improve uptake of CO alarms?***

Strong public education campaign, subsidised models available during phase-in, followed by spot checks and fines of private rentals and public facilities. Subsidised installation in low income households. However, our preference is to have the support for the replacement of heaters rather than installation of CO alarms.

### **Mandatory servicing requirements**

***a) What do you identify as being the key risks and benefits of this measure? Do you think they have been captured in this discussion paper?***

Too many householders will not comply with requirement, particularly low-income households.

**b) What information or evidence can you suggest to assist in quantifying these risks and benefits?**

Organisational and staff experience visiting over 600 regional and metropolitan low-income households in various energy efficiency programs. Poor servicing is more the rule than the exception.

**c) Would you support this measure? Why or why not?**

Yes, but it is not sufficient, because vulnerable households likely to not comply, creating dangerous complacency in government and industry.

We strongly recommend the replacement of the heaters.

**d) In your view, is the current recommendation to service gas heaters every two years appropriate? Why or why not?**

Defer to gas heater manufacturers on whether it is sufficient frequency, but lack of compliance makes it somewhat immaterial.

**e) Should servicing be: (a) mandatory; or (b) incentivised through increased public awareness?**

Mandatory, with significant penalties for noncompliance by residential landlords.

**f) In which building types (e.g. rentals, aged care facilities, owner-occupied homes, etc) do you think servicing should be mandatory?**

All.

**g) Are there any measures the Victorian Government should consider to support consumers to get their heaters serviced?**

Concessional/subsidised rates for servicing for low-income households.

**Summary questions: Complementary measures**

**a) Do you think complementary measures are necessary? Why or why not?**

Yes, they are necessary, because none of the proposed options eliminate the existing hazards.

**b) Do you think these complementary measures should be mandated, or incentivised through other mechanisms, such as increased public awareness?**

Mandated, because the health and safety of large numbers of people is being impacted.

**c) Do you think the anticipated impacts of each complementary measure, including their risks and limitations, have been captured in this discussion paper?**

Yes.

**d) Would you like to make any other comments about the complementary measures outlined in this discussion paper?**

It seems likely that compliance with a mandatory CO alarm requirement would be higher than a servicing requirement, due to lower cost and little ongoing action required. Therefore, if forced to choose between the two, an alarm requirement is preferable.

**Options and measures analysis**

**a) Which core option and complementary measures do you think will be most effective in reducing the risks of CO poisoning as a result of OFGSH use?**

Option 3 – ban on new installs, & both complementary measures.

***c) Are there additional options or complementary measures that would be effective in reducing the risks of CO poisoning as a result of OFGSH use that we have not identified in this discussion paper?***

The most important measure we identify is support for low income households to replace their OFGSH as part of a mandatory phase out of all OFGSHs.

Please contact Liam Cranley (e: [liam.cranley@bsl.org.au](mailto:liam.cranley@bsl.org.au) m: 0439 503 350) or Damian Sullivan (e: [dsullivan@bsl.org.au](mailto:dsullivan@bsl.org.au) m: 0405 141 735) for further information about this submission.

Yours sincerely,

**Damian Sullivan**

Senior Manager, Energy, Equity and Climate Change