

Water and Sewerage (Energy Efficient Hot-Water Systems) Legislation Amendment Bill 2009

Explanatory Statement

Overview

The Water and Sewerage (Energy Efficient Hot-Water Systems) Legislation Amendment Bill 2009 (the Bill) proposes to amend the *Water and Sewerage Act 2000* and the *Water and Sewerage Regulation 2001* to provide that only efficient, environmentally friendly hot-water systems, and water saving showerheads, may be installed in new and existing homes and townhouses. The purpose of the bill is to reduce the environmental impacts and financial costs of hot water systems.

This Bill is a replacement for a previous bill - the Building (Energy Efficient Hot Water Systems) Legislation Amendment Bill 2009 - which was introduced by the Greens in April 2009, but not progressed.

The Bill sets an energy saving standard that hot water systems must meet before they can be installed. The standard would allow the installation of low emission hot water systems, such as solar, heat pump, or high efficiency five star gas. The standard would not permit electric storage heaters.

Electric hot water heaters remain the most inefficient, yet also the most common type of hot water system in the ACT. Electric hot water heaters cause around four times as many greenhouse gas emissions as the more efficient systems. Hot water accounts for around 25% of the energy used in an average home.

The energy saving standard will apply only to class 1 buildings under the *Building Act 2004*. It will cover houses and town houses, as well as guest houses such as bed and breakfasts. It will not apply to multi-unit residential apartments.

The standard will apply to hot-water systems being installed in new houses and townhouses from 1 October 2009. On and after 1 October, any person installing a hot-water system in a new house or townhouse would need to install one of the efficient systems. Implementing this standard for new houses brings the ACT into line with a number of other Australian jurisdictions.

The standard will also apply to a person replacing or installing a hot water system in an existing house or townhouse from 1 January 2010. The Bill does not require anyone to replace an existing hot water system that is still working properly. Inefficient hot water systems in the ACT will be replaced gradually. Phase outs of electric hot water systems from existing dwellings are also occurring in other Australian jurisdictions.

The bill also introduces a water flow rate standard. Under this standard, any time a hot water heater is replaced under this Act, all shower outlets that it serves will need to use water efficient shower heads. Water efficient showerheads considerably cut down water consumption and also contribute to lower water and energy bills.

Notes on Clauses

Clause 1 Name of Act

This clause is a formal provision setting out the name of the proposed Act.

Clause 2 Commencement

This clause explains that the proposed Act will commence on 1 October 2009. This date has been chosen to allow a lead-in time for new home buyers.

Clause 3 Legislation Amended - pt 2

This clause is a formal provision to identify that part 2 of the Bill amends the *Water and Sewerage Act 2000*.

Clause 4 New section 45A

This clause inserts a new definition of **plumbing code**. The new definition provides that the ACT plumbing code (see replacement section 46) is affected by proposed section 45A (2). Proposed s 45A (2) allows for an energy-saving standard for hot-water systems to be prescribed by regulation.

Section 45A (3) has the effect that the energy savings standard for hot-water systems will not apply to existing dwellings until 1 January 2010. This lead-in time will allow ACT industry and tradespeople to prepare for the expected increase in demand for energy efficient hot water.

Section 45A (4) makes it clear which version of the plumbing code is being referred to in s 45A (3) (a) and (b).

Section 45A (5) is a sunset provision which has the effect of expiring sections 45A (3), (4) and (5), which are only relevant for a limited time.

Section 45A (6) directs readers of the legislation to the *Building Act 2004* dictionary for a definition of **class**, in relation to class 1 buildings.

Clause 5 Replacement section 46

This clause substitutes section 46 to change the current reference to 'plumbing code' to 'ACT plumbing code'. The purpose of this amendment is to distinguish the code declared by the Minister to be the ACT plumbing code from the code as affected by a prescribed energy-saving standard for hot-water systems. This approach is similar to that taken in the *Building Act 2004*, section 136 in relation to the Building Code, which can be amended by the Australian Capital Territory Appendix to the Building Code of Australia. Like the ACT plumbing code, the Appendix is a notifiable instrument.

Clause 6 Dictionary, definitions of ACT plumbing code and plumbing code

This amendment inserts a new definition of **ACT plumbing code**, consequential on the replacement of section 46, and a new definition of **plumbing code**, consequential on the amendment to include new section 45A.

Clause 7 Legislation amended – pt3

This clause is a formal provision to identify that Part 3 of the Bill amends the *Water and Sewerage Regulation 2001*.

Clause 8 New section 28

This clause adds a new section 28 to the *Water and Sewerage Regulation 2001* to prescribe the hot water system standard identified in the new schedule 2.

Clause 9 New Schedule 2 – Hot Water System Standard

This clause inserts a new Schedule 2 into the *Water and Sewerage Regulation 2001*. The new schedule prescribes the energy savings standard that hot water systems must meet in certain circumstances.

2.1 Definitions

This section defines terms used in Schedule 2.

2.2 Meaning of compliant hot-water systems

This section sets out definitions of compliant hot-water systems.

The definitions of compliant heat pump and compliant solar hot water systems specify the performance requirements of water heaters in terms of renewable energy certificates and also in terms of the performance to an Australian Standard, AS/NZS 4234, and the ACT's climate zone. The requirements are different for different sized dwellings. Compliant gas hot water systems must have a minimum energy rating of 5 stars.

Subsection 2.2 (2) defines terms that are used only in subsection (1).

2.3 Hot-water system—installation or replacement

This section requires that only energy efficient hot water systems can be installed in a new class 1 building, or in an existing class 1 building.

2.3(2)(a) is intended to exempt the small number of rural residents in the ACT who use multi-purpose solid fuel heaters, which they also use to heat water.

2.3 (2)(b) is intended to allow the installation of replacement electric hot water systems only in rare circumstances, such as where a single person who does not have access to gas, wants to replace their system with a small electric hot water system that will use only a small amount of water. In this case the person would have to take additional measures and ensure the system is thermally insulated to prevent standing heat loss, thereby making the system more efficient.

2.3 (2)(c) is intended to allow a person whose hot water system fails while under warranty to carry out a like-for-like replacement, even if the replacement heater would not meet the efficiency standard.

2.3 (2)(d) permits the making by regulation of additional exemptions to the efficiency standard. This is permitted for circumstances where technical restraints would make meeting the standard unreasonably difficult.

2.3 (4) defines terms that are used only in section 2.2. The definitions of **non-urban land** and **R-value** mirror the definitions of those terms in the *Building (General) Regulation 2008*. The definitions of AS 4013, fuel-burning equipment and solid fuel-burning equipment are based on definitions of those terms in the *Environment Protection Act 1997*, schedule 2.

New section 2.4 Hot water system – determination of compliant hot-water systems.

The purpose of this section is to require the Minister to determine the types of hot-water systems that are compliant hot-water systems under the schedule. The determination is to be a notifiable instrument. The intention is that the public will be

able to consult that determination to find out whether particular types of hot-water systems are compliant with the standard. The section provides that a determination must be made at least once every financial year and the first determination must be made as soon as practicable after section 2.4 commences.

New section 2.5 Hot water system – determination of other hot-water systems

The section provides that the Minister may determine a hot water system for section 2.3 (1). The determination is to be a notifiable instrument. The intention of the section is to ensure that the hot water standard set by the bill does not prevent new types of hot water systems from being installed if they would otherwise meet the standard. In order to prevent regulations from watering down the requirements in the Bill, this clause provides that regulations prescribing new hot water systems may not be made unless the Minister is satisfied that the energy efficiency of the prescribed system is at least that as good as the systems already permitted under the Act.

New Section 2.6 Hot-water system—water flow performance standard

The section requires that any shower outlets served by a hot water heater replaced under this Act need to meet a performance standard of 9 litres per minute. This can be done by installing a water efficient, and appropriately rated shower head, flow controller or flow restrictor. The section does not apply to a hot-water system that is not connected to water mains.

Clause 10 Dictionary, note 2

This clause inserts new dot points of terms defined in the Legislation Act, dictionary, Part 1 that are used in the *Water and Sewerage Regulation 2001*.

Clause 11 Dictionary, note 4

This clause inserts a dot point for the definition of **hot-water system**, which is defined in the Water and Sewerage Act, dictionary and used in the *Water and Sewerage Regulation 2001*.

Clause 12 Dictionary, new definitions

This clause inserts in the *Water and Sewerage Regulation 2001*, dictionary signpost definitions for terms defined in new schedule 2.