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Housing Supply Regulation Inquiry
Productivity Commission

Building the Plumbing
Workforce of the Future

Via the Productivity Commission online [submission form](#)

Industry Submission: Housing Supply Regulation Inquiry, Interim Report (July 2026)

Thank you for the opportunity to comment on the interim report of the Productivity Commission's Housing Supply Regulation Inquiry, released on 27 July 2026.

This submission is from the Plumbing Industry Climate Action Centre (PICAC) on behalf of the leading stakeholder representatives in the Plumbing, Heating, Ventilation, Air Conditioning and Refrigeration (HVAC-R) and Fire Protection Industry ('Industry'). These stakeholders are the Plumbing and Pipe Trades Employees Union, the Master Plumbers and Mechanical Services Association of Australia, the Fire Industry Alliance, the Air Conditioning and Mechanical Contractors Association and the Association of Hydraulic Services Consultants Australia.

Industry supports the focus of the interim report. Australia needs more homes in the places where people want to live and the overarching objective and four best practice principles the Commission has set out are sound. Every home the reform directions are designed to unlock will need water, sanitary, drainage, gas or electric hot water, heating, cooling and in medium and higher density forms, fire protection systems, all installed and certified by licensed practitioners in the Industry. Industry therefore has a direct interest in the reforms being designed so that housing is delivered faster without compromising the safety, quality and liveability that the report itself identifies as the purpose of regulation.

Consistent with the Commission's focus on the reform directions, the attached response makes a number of points, principally on infrastructure coordination (including firefighting water supply), fast-track pathways, pattern books and compliance verification, safe drinking water and lead free plumbing products, built-form controls, building services and homes that last and adapt, prefabricated and modular housing and independent fire testing capacity, workforce development in State-significant pathways, the licensed workforce and training capacity on which the reforms depend, regulatory harmonisation and the community outcomes of increased density. Industry would welcome the opportunity to participate in the Commission's further consultation ahead of the final report.

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Should you wish to discuss this submission further, please do not hesitate to contact me via email: [Redacted] or mobile: [Redacted]

Yours sincerely,

A colorful, stylized handwritten signature of Shayne La Combre, appearing as a series of overlapping, multi-colored strokes in shades of blue, green, yellow, and pink.

Shayne La Combre
Chief Executive Officer

Housing Supply Regulation Inquiry: Interim Report (July 2026)

Industry Submission

1. Key Points

- Industry supports the focus of the Interim Report, its overarching objective and four best practice principles and the priority the report gives to land use reform and infrastructure coordination
- Water and sewerage networks, including firefighting water supply, are housing enabling infrastructure. Water authorities should be named explicitly among the infrastructure service providers in reform directions 4.1 and 4.2 and firefighting water supply capacity should be included in the technical studies undertaken for high demand precincts under reform direction 3.1
- Fast-track pathways and pattern books (reform direction 3.2) will only reduce burden where the codified rules are complete. Fire safety system requirements for three storey and mid-rise residential development should be settled centrally when pattern book templates are developed, not project by project
- Faster approvals should not remove or bypass the compliance certification and inspection of plumbing, gasfitting, fire protection and HVAC-R work, or weaken the capacity of regulators to verify that regulated work is done by licensed practitioners
- Relaxed built-form controls (reform direction 2.6) should still leave space and access for the building services every dwelling needs, including hot water, heating and cooling plant, service risers and meters
- Prefabricated and modular housing can lift productivity, provided the regulatory settings give effect to the Industry principles for Modern Methods of Construction (MMC), including that regulated plumbing, gasfitting, fire protection and HVAC-R work, whether constructed on-site or off-site, is carried out only by appropriately licensed or registered practitioners
- Large housing developments assessed through state-significant pathways (reform direction 3.3) should carry enforceable workforce development commitments, including apprenticeships and training partnerships
- Land use and approvals reform will translate into homes only if the licensed workforce and the training capacity that underpins it, keep pace
- National regulatory harmonisation of plumbing and fire protection licensing is a productivity reform in its own right and a precondition for a workforce that can move to where housing is being built

- Increased density should be managed so that it does not adversely affect existing and future homeowners, infrastructure should keep pace with density, and the implications of reduced on-site parking requirements should be carefully considered
- Faster housing delivery must still result in safe drinking water systems. Industry supports the use of certified lead free plumbing products in all new housing and restates its concern at the deferral of the National Construction Code lead free requirement from 2026 to 2028.
- Increasing supply should produce homes that are durable, fit for purpose and economical to maintain and designed so that people can age in place and remain living independently for longer.
- Prefabricated and modular housing depends on timely, independent fire testing in Australia. CSIRO's proposed exit from its North Ryde Fire Technology Laboratory puts national testing capacity at risk and delays in testing and certifying new products could themselves slow housing delivery.

2. Support for the Direction of Reform

Industry agrees with the report's central finding that Australia does not build enough homes in the areas where people want to live and with the distinction the report draws between regulation that is necessary to ensure the safety, quality and liveability of new housing and regulation that unduly constrains supply. Plumbing, gasfitting, fire protection and HVAC-R work is regulated because the risk resides in the work itself.

Plumbing is a series of connections and cross connections, an ecosystem which is only as safe and robust as its weakest link and the consequences of failure, whether carbon monoxide from a gas installation, waterborne disease such as legionella, or a fire protection system that does not perform, can be catastrophic. Industry's interest in this Inquiry is that housing is delivered faster without those standards and protections being weakened.

Industry's longstanding position is that good regulation achieves its regulatory objective without imposing unnecessary costs or compliance burden on the economy. Where regulation is not well designed it can act as something of a blunt instrument, imposing regulatory burden on a whole sector to address issues which often only apply to a limited number of sector participants and over time that accumulation of burden can have a smothering effect on productivity. That is consistent with the Report's second principle, to regulate only where necessary and with its account of regulatory thickets. Industry also supports the proposition in reform direction 3.4 that decision makers make greater use of technology, including AI, in the approvals process.

National, State and Territory regulations and regulatory approaches which can act as a blocker to efficiency should reflect the new operating environment and embrace and utilise AI, electric and digital technology, provided that the technical judgement of licensed practitioners and referral authorities on safety critical matters, is not displaced.

Industry notes that the National Construction Code and the supply of labour to the Construction Industry are outside the terms of reference and has confined its comments to matters within the reform directions that bear directly on the Industry's work, with observations on workforce capacity at sections 9 and 10. Industry made a submission to the Commission's Inquiry into building a skilled and adaptable workforce in September 2025 and refers the Commission to that submission on skills and licensing matters.

3. Infrastructure Coordination: Water, Sewerage, Firefighting Water Supply and Energy (reform directions 3.1, 4.1 and 4.2)

The report identifies infrastructure coordination as a high priority for reform and cites Torana Estate in Sydney, where housing construction was postponed for several years by delayed sewerage connections. The interim report does not, however, address firefighting water supply.

Hydrant flow and pressure and the capacity of the reticulated main, determine whether higher density residential development can proceed and be occupied. Broad based upzoning of established detached housing areas, as proposed under reform directions 2.1 and 2.2, will increase firefighting water demand on networks that were not sized for it. Where that constraint is discovered late, at certification, the remedies are pressure boosting, on-site storage or an upgrade of the main. Each is expensive and can force redesign. The problem is the same in character as the delayed sewerage connections at Torana Estate.

The energy transition adds a further dimension. In Victoria, from 1 January 2027 new homes and most new commercial buildings must be all electric and from 1 March 2027 gas hot water systems in existing homes must be replaced with an electric alternative at end of life. Victoria has approximately 1.5 million gas connections which potentially all need to be decommissioned by a licensed gasfitter.

Upzoned precincts will therefore carry both a higher dwelling density and a shift of hot water, heating and cooking load onto the electricity network at the same time. Infrastructure planning under reform directions 4.1 and 4.2 should account for that combined demand, and for the licensed gasfitting, plumbing and electrical work involved in the changeover, alongside water and sewerage capacity.

Industry therefore recommends, in response to information requests 4.1 and 4.2, that:

- water authorities be named explicitly among the infrastructure service providers in reform directions 4.1 and 4.2, alongside road and transport agencies

- firefighting water supply capacity be included in the technical studies undertaken for high demand precincts under reform direction 3.1, alongside flood risk, bushfire risk and biodiversity mapping, so that constraints are identified and funded upfront rather than discovered at certification
- upzoning be sequenced so that water, sewerage, drainage and energy infrastructure keeps pace with the increased density it enables, consistent with reform direction 4.2.

4. Fast-Track Pathways, Pattern Books and Compliance Verification (reform directions 3.2 and 3.4)

Industry supports reform direction 3.2. Deemed-to-comply assessment only reduces burden where the codified rules are complete. If fire safety requirements for three storey and mid-rise residential development are not carried clearly in those rules, the work comes back into the process at the point where there is no time to resolve it. Settling fire safety system requirements centrally (when pattern book templates are developed), rather than project by project, would be a real productivity gain and strengthens the case for the fast-track pathway.

The same logic applies to the hydraulic services (water supply, sanitary plumbing, drainage and stormwater) and mechanical services design of pattern book dwellings, which can be resolved once in the template rather than on every application, provided the template is developed with input from appropriately qualified practitioners.

Industry supports the use of coordination bodies with power to sequence referrals and resolve conflicting advice under reform direction 3.4. Where the conflicting advice involves a life safety referral, for example fire authority advice on hydrant capacity or bushfire risk, the coordination body's decision should be informed by the relevant technical authority rather than set it aside.

Industry also asks the Commission to distinguish clearly between planning approval, which the reform directions seek to streamline, and the compliance certification and inspection of regulated building services work, which should not be streamlined away. Robust licensing frameworks are essential for maintaining quality and safety, but it is equally important that there is adequate compliance with and enforcement of those licensing requirements. Fast-track and deemed-to-comply pathways should leave intact the requirement that plumbing, gasfitting, fire protection and HVAC-R work is certified by the licensed practitioner who performed it and remains subject to audit and inspection by the relevant regulator, including on site during construction.

Industry has raised with governments the limitations on the capacity of some regulators to access sites during construction and to verify that the practitioners performing regulated work are appropriately licensed. A faster approvals system will only deliver safe housing if those verification functions keep pace with it.

5. Safe Drinking Water: Lead Free Plumbing Products

Faster housing delivery must still result in safe drinking water systems. There is no safe level of lead exposure, and the risk is greatest for children under four years and pregnant women. The health impacts, including cognitive impairment and developmental harm, are irreversible. Plumbing fittings typically remain in service for 20 to 50 years, so the products installed in the homes built under these reforms will determine exposure for decades.

The National Construction Code 2022 (NCC) introduced new requirements for copper alloy plumbing products in contact with drinking water, limiting lead content to 0.25 per cent from 1 May 2026 ([Source](#)), bringing Australia into line with the United States, United Kingdom, Canada and the European Union, which have been lead free for more than a decade. In December 2025 the Australian Building Codes Board extended that transition to 1 May 2028, citing the housing agenda and the risk of insufficient certified product in the market ([Source](#)). That decision was made notwithstanding the Board's own Regulatory Impact Statement, which found that the health risks required regulatory action. Industry has opposed the extension and has put its concerns directly to the Chair of the Building Ministers' Meeting. Victoria has elected to proceed with the original 1 May 2026 date, Tasmania has advised Industry that it has regulated to the new standard since June 2025 and Queensland Health has incorporated lead free requirements into its capital infrastructure requirements.

Industry asks the Commission to make clear in its final report that the housing supply agenda should not be used as a reason to defer product safety requirements of this kind. Housing delivered faster with lead containing fittings is not a productivity gain; it transfers a health cost to the households that occupy those homes. Industry supports the use of certified lead free plumbing products in all new housing now, encourages the remaining States and Territories to follow Victoria's lead and recommends that governments specify certified lead free products in the pattern books, social and affordable housing programs and State-significant developments that the reform directions promote.

6. Built-form Controls and Building Services (reform direction 2.6 and information request 2.1)

Industry does not object to the removal of built-form controls that limit choice without a clear public benefit. In responding to information request 2.1, Industry notes that some controls the report proposes to relax, including setback requirements, site coverage ratios, minimum dwelling sizes and storage requirements, also determine where the building services every dwelling needs, can be located and maintained.

Heat pump water heaters, air conditioning condensers, hydronic and ducted heating plant, gas and water meters, fire services and service risers all need physical space, clearances for airflow and noise, and access for maintenance and replacement. Industry's MMC principles include that replacement and repair access and costs are factored into design decisions, especially when complexity increases or when 'built in' and Industry has separately raised with the Commonwealth the importance of noise requirements for heat pump water heaters as density increases.

Industry recommends that where built-form controls are relaxed, planning schemes and pattern book templates provide for the location, clearance and access requirements of building services, so that the removal of one control does not create a new compliance problem for the next stage of the process.

Increasing supply should also produce homes that last. Industry submits that the objective of the reforms should be homes that are durable, fit for purpose and economical to maintain over their life, not only homes that are approved and built quickly. Building services are the part of a dwelling that most need maintenance, repair and eventual replacement and the points above about space and access for those services are as much about the whole of life cost of a home as about the compliance of the initial build.

Homes should also be designed so that people can age in place and remain living independently for longer. NCC 2022 introduced liveable housing design requirements for new houses and apartments, based on the silver level of the Liveable Housing Design Guidelines, to increase the stock of accessible housing for older Australians, people with disability, their families and carers ([Source](#)). Industry supports that objective and asks that the built-form and pattern book reforms in the report be designed to accommodate, rather than trade off, accessible and adaptable dwelling designs, including bathroom, laundry, kitchen and hot water layouts that can be adapted as occupants' needs change.

7. Prefabricated and Modular Housing

The report notes that chapter 3 reviews how the housing regulatory system can support more productive methods of construction such as prefabricated and modular housing. Prefabrication, modular construction and other offsite manufacturing techniques are becoming increasingly common in the construction and assembly of plumbing systems, bathroom pods for example, and can significantly enhance efficiency, reduce onsite labour requirements and accelerate project completion. MMC also brings consumer protection and regulatory oversight challenges which need to be recognised and addressed by regulatory frameworks.

Industry has developed a series of principles which should apply to the adoption and regulation of MMC across plumbing, fire protection and HVAC-R work. In summary:

- consumer protection and the health and safety of building occupants and the wider community should be the primary consideration; consumers should be aware that prefabricated systems are used; the liability of builders and developers should be the same as for on-site construction
- there should be a clear chain of responsibility through appropriate certification from design through to installation and commissioning
- the design, manufacture, installation and commissioning of prefabricated plumbing, fire protection and HVAC-R products and systems should be carried out only by appropriately licensed or registered practitioners
- prefabricated systems entering the market should be fit for purpose and compliant
- replacement and repair access should be factored into design decisions
- there should be a clear regulatory framework and oversight for all prefabricated plumbing, fire protection and HVAC-R work
- there should be appropriate insurance coverage and warranties (product warranties are not sufficient protection).

Prefabrication changes where the work is done. It does not change the nature of the risk, or the need for the work to be performed and verified by people qualified and licensed to do it. Industry set out these positions in detail in its September 2026 submission to the Australian Building Codes Board on the proposed National Voluntary Certification Scheme for Manufacturers of Prefabricated Construction and asks that the Commission's final report reflect them in any recommendations on prefabricated and modular housing.

Prefabricated and modular housing also depends on access to timely, independent fire testing in Australia. Fire-rated walls, floors and service penetrations, passive fire-stopping around pipework and ducts, water based suppression systems and the interaction of active suppression with passive elements are all validated through full scale testing at National Association of Testing Authorities (NATA) accredited facilities. CSIRO's Fire Technology Laboratory at North Ryde is one of only two major NATA accredited fire testing facilities in Australia. CSIRO has announced its intention to exit the site and following stakeholder consultation, has extended the lease to 30 June 2027 while transition options are considered ([Source](#)). Industry lodged a submission to CSIRO in June 2026 asking that the closure be reconsidered or that a transition mechanism preserve the capability without a gap in service.

New prefabricated systems, volumetric modules, mass timber and modular construction are precisely the products that must be tested and certified before they can be used at scale in housing. If national fire testing capacity is reduced, delays in testing and certifying new products could themselves slow housing delivery. Industry asks the Commission to recognise independent fire testing capacity as housing enabling infrastructure, and to support a national, independent, NATA accredited fire testing capability with no gap in service as part of the productivity agenda for prefabricated and modular housing.

8. [State-significant Pathways and Workforce Development \(reform direction 3.3\)](#)

Industry supports the use of State-significant pathways where a clear need for State-led assessment is demonstrated. Workforce considerations are often an afterthought in planning approvals. Industry has recommended, in the context of large NSW infrastructure developments, that proposals assessed through State-led pathways be required to submit a Workforce Development Plan as part of project approval, including projected workforce numbers by trade and phase, apprenticeship and trainee commitments, training partnerships with Industry Registered Training Organisations (RTO) and diversity targets and that those commitments be enforceable rather than voluntary.

Industry has also recommended, consistent with the NSW Government's Future Skills Guarantee, that apprentices make up a minimum of 20 per cent of the workforce during the development phase. Large scale investment of this kind has a positive power to leverage broader change well beyond the individual project: it can drive up apprentice and trainee numbers, set and enforce targets for equity and diversity, and broaden the range of people entering the Industry. Industry made this case in its April 2026 submission to the NSW Legislative Council Inquiry into data centres, recommending that major infrastructure approvals be used to secure workforce development plans, higher apprenticeship and trainee numbers and increased participation of women, First Nations Australians and people from culturally and linguistically diverse backgrounds. The same levers are available through government procurement policies and Industry supports using either major infrastructure approvals or procurement policy, or both, to achieve these outcomes. The same approach should apply to large housing developments and precincts assessed under reform direction 3.3 and to social and affordable housing delivered through streamlined pathways (information request 3.4), so that the housing build itself grows the licensed workforce needed to sustain it.

9. A Skilled, Licensed Workforce and Training Capacity

Industry acknowledges that labour supply is outside the scope of this Inquiry but raises it because the reform directions assume that the construction capacity exists to build the homes that upzoning and faster approvals would enable. BuildSkills Australia's Housing Workforce Capacity Study finds that a further 116,700 workers will need to be mobilised beyond the current baseline to meet the National Housing Accord target by 2029 ([Source](#)).

Productivity is skills and training dependent and overall training capacity must expand to enable it. Industry RTOs like PICAC play an economically critical role in aligning skills with Industry requirements and governments need to support their financial viability and sustainability.

New skills to enable productivity should augment and not replace, established Certificate III apprenticeship level training for plumbing, HVAC-R and fire protection, because in these licensed occupations competence is critical to community safety. Making more effective use of the skills of existing workers makes sense, but those workers are at present mostly fully utilised, so upskilling alone will not address the broader skills shortages; casting a wider recruitment net and attracting more apprentices into these in demand occupations should also be part of the strategy.

The Industry is changing rapidly and its skills needs are evolving with it. Governments need to grow the overall training capacity of the system and support Industry RTOs like PICAC, not only TAFEs. The two serve complementary purposes. TAFEs are well suited to volume training. Industry RTOs like PICAC are specifically set up and equipped to deliver the lower volume, higher sophistication skills that Industry stakeholders identify as their need and which TAFEs are not equipped to deliver. The independent training sector is also the larger part of the system: National Centre for Vocational Education Research data shows that in 2023, 5.1 million students were enrolled in nationally recognised Vocational Education Training, 77.6 per cent of them with private training providers and 15.1 per cent at TAFE institutes.

Alongside Industry partners, PICAC identifies training needs and designs and delivers the training, so it is training by the Industry, for the Industry. In many instances Industry RTOs like PICAC have achieved better outcomes than TAFEs, including higher student and employer satisfaction, better completion rates and stronger employment outcomes. Demand stimulus measures such as Free TAFE add demand without adding training capacity, and by limiting fee free places to TAFE rather than to any quality provider they can exacerbate rather than relieve skills shortages. A viable, well supported Industry RTO sector is vitally important if Australia is to meet its housing and infrastructure targets.

In response to information request 5.1, Industry submits that workforce and training capacity is a co-dependency of the reform directions and should be recognised as such in the final report's sequencing of reforms.

10. Regulatory Harmonisation and Workforce Mobility

The report observes that most housing regulation is set by States and Territories and applied by Local Governments and seeks the Commonwealth's support in moving jurisdictions toward best practice. Industry notes that the same fragmentation applies to the occupational licensing of the workforce that builds housing.

Industry is broadly supportive of the objective of mutual recognition and a national licensing framework for plumbing, HVAC-R and fire protection work in Australia and recognises the link between this level of regulatory harmony and productivity. Under current arrangements there are licensed plumbers who need to hold an individual licence in every State of Australia and must pay licence fees each year to each regulator. A national licensing model and mutual recognition would make sense and could be effective if there was an existing level of regulatory harmonisation across the States and Territories upon which the national licence or mutual recognition could be based.

The problem is that the requisite level of regulatory harmonisation across jurisdictions does not exist. Over a decade on from the National Occupational Licensing Scheme, the State and Territory regulatory schemes for plumbing and fire protection work still differ considerably in the broad regulatory approach adopted (self-certification versus staged inspections), the scope of licences across the various streams of work, the licensing qualification criteria which apply and whether some work (for example stormwater, mechanical services and fire protection) is regulated at all.

The Australian Building Codes Board has developed a National Registration Framework for building practitioners as model guidance for the States and Territories ([Source](#)). The constraint on mutual recognition is not the absence of a national model but the pace and consistency with which States and Territories adopt it and the fact that plumbing and fire protection licensing continues to be set jurisdiction by jurisdiction. Industry encourages the Commission to press the States and Territories on adoption of nationally consistent registration and licensing settings for the building services workforce, as part of the same best practice agenda the report sets for housing regulation.

Industry asks the Commission, in considering how the Australian Government can best support States and Territories to shift toward best practice (information request 5.1), to recognise that harmonising the licensing of regulated building services work is part of the same reform task, because a workforce that cannot move freely to where housing is being built is a constraint on supply in its own right.

11. [Housing for Aboriginal and Torres Strait Islander People \(information request 1.1\)](#)

Industry does not have evidence to offer on how land use controls and approval processes affect access to housing for Aboriginal and Torres Strait Islander people and communities and defers to Aboriginal and Torres Strait Islander organisations on that question. Industry does note that the delivery and maintenance of safe, healthy housing in those communities depends on a local licensed workforce.

Industry has developed culturally informed training pathways for First Nations students and students from culturally and linguistically diverse backgrounds. First Nations Australians, a group which faces significant disadvantage in Australian society, has been and will continue to be a focus of Industry effort. The Industry has had some great success in this area, and its tailored programs have delivered dozens of highly trained, skilled and qualified First Nations plumbers and fitters, many of whom have gone on to start their own plumbing businesses. Industry would welcome the opportunity to contribute to the Commission's consultation with Aboriginal and Torres Strait Islander organisations on the workforce dimension of outcome 9 of the National Agreement on Closing the Gap.

12. [Community Outcomes Of Increased Density](#)

Industry supports the report's recognition that the regulatory system should balance economic, social, cultural and environmental outcomes and give weight to the interests of both current and future residents. In implementing reform directions 2.1 to 2.6, governments should ensure that regulatory changes do not negatively impact existing or future homeowners through issues such as privacy, overlooking and overshadowing, that infrastructure keeps pace with increased housing density, and that the implications of reduced on-site parking requirements are carefully considered.

