



Pathway to Electrification

**Consultation Regulatory Impact Statement (RIS) –
Regulation to prohibit new gas connections**

Stakeholder workshops

Summary report

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Acknowledgement of Country

The consultations that inform this report were conducted on the unceded lands of First Nations peoples. The Social Deck acknowledges the traditional custodians who have lived on and cared for Country for thousands of generations, and recognises their continuing connection to land, waters and community. We pay our respects to them and their cultures, and to elders past and present.

Introduction

The ACT Government has announced its Pathway to Electrification and plan to phase out fossil fuel gas by 2045. This is affirmed in the Parliamentary and Governing Agreement for the 10th Legislative Assembly and in the ACT Climate Change Strategy 2019-25.

Natural gas accounts for more than 20% of emissions in the ACT. As a key initial step in the transition away from fossil fuel gas, the government is developing a regulation to **prevent new mains gas connections** for greenfield residential developments in the ACT and commencing a project to advance all-electric infill developments, with a goal of no new gas connections to future infill developments from 2023. This will help avoid new developments being locked into using gas in the future.

The Social Deck has been engaged to lead, plan, deliver and facilitate targeted stakeholder engagement on Gas Transition activities with identified stakeholder groups. This includes targeted consultation to support the development of a draft Regulatory Impact Statement (RIS).

The first phase of targeted engagement included five stakeholder workshops to support the development of the **draft RIS for the introduction of the regulation to prevent new mains gas connections**. The workshops were segmented by stakeholder type/groups:

- Workshop 1: Building and construction
- Workshop 2: Community organisations/Councils
- Workshop 3: Households
- Workshop 4: RTOs / Trades*
- Workshop 5: Trade Associations

*Workshop 4 was initially intended for retail, hospitality and large gas users, however representatives from these stakeholder groups were unavailable to participate.

There were 26 participants across the workshops.

The workshops were all held online and the agenda separated into three separate sessions:

1. Current uses for mains gas
2. Impact of preventing new mains gas connections
3. Implementation of the new regulation

This report summarises the key findings emerging from each workshop and articulates some common themes across the workshops.

Scope

While participants were encouraged to consider the implications of **no new mains gas connections** specifically, the broader impacts of the transition away from gas were often discussed. This was largely a result of the interlinked nature of the issues discussed, and the flow on effect of the introduction of the regulation to other events and behaviours.

This report focusses on reflections about the introduction of the proposed regulation, however does include some commentary of the broader issues raised in relation to the Pathway to Electrification.

Common findings across all workshops

General perceptions about the Pathway to Electrification

Throughout the workshops, stakeholders shared their perceptions about the Pathway to Electrification. In general, there was broad acceptance and support for the Pathway, with most people able to see the logic behind the approach and the main benefits. Most stakeholders had a strong, existing awareness about the Pathway to Electrification, and there was a common view that these changes have been coming for some time.

- “I think electrification is a good thing going forward, provided there is enough infrastructure.”
- “I don’t think it’s fundamentally problematic.”
- “From a builder’s point of view, putting in an electric stove instead of a gas one is no big deal...it’s one less trade we have to engage.”
- “I think it will be readily accepted by builders as long as there are the right pathways.”

Concerns about the broader commitment to electrification were mostly related to making long-term commitments about something where technology is evolving.

- “I understand the message is that hydrogen is “not a goer” but I’d like you to be sure about that. ACT Government loves to talk about renewables, but in reality, that’s because we get it from another state that is using non-renewables. We hear that hydrogen isn’t an option but there once was a time when natural gas was [an option]. So, we need to be as flexible as possible.”

Current uses of mains gas

Participants of the workshop were asked how they (or the people they represent) currently use mains gas. The table below provides an overview of the main uses that were identified by stakeholders and includes some of the more common nuances associated with each user group.

Groups that use mains gas	Details
Hospitality businesses / restaurants	<ul style="list-style-type: none">• There is a spectrum of gas use (i.e. a café might easily transition but a Chinese restaurant may not)
Multicultural communities	<ul style="list-style-type: none">• Gas use is very common within these households due to cooking preferences (for example, the heat required for wok cooking)
Builders, plumbers and gas fitters	<ul style="list-style-type: none">• Gas is within all building typologies and so forms a large part of the day-to-day work for these trades
Households	<ul style="list-style-type: none">• Particularly for heating, hot water and cooking• More likely to continue to be used in low-income as the transition occur
Specific industries that require high heat	<ul style="list-style-type: none">• For example, smash repair shops have existing equipment which is heavily reliant on gas and expensive to replace with an alternative

Impacts of preventing new mains gas connections

While each stakeholder workshop emphasised slightly different impacts of the regulation, there were several themes that were consistently raised by all groups.

Theme	Details
Rising costs and low-income households	<ul style="list-style-type: none"> Reduced demand for gas will drive gas prices higher (referred to as the “gas death spiral”) due to the maintenance of existing infrastructure with less people covering the cost of that infrastructure The gas death spiral will impact those still left on gas and this will disproportionately impact low-income households As the workforce moves to electrification, tradespeople still working in gas will be more sort after and can charge higher costs for services, disproportionately impacting low-income households. Decreased competition in the energy market resulting in higher costs for consumers generally
Energy supply	<ul style="list-style-type: none"> Concern that the electricity grid cannot meet the increased demand Concern about a reliance on one energy source Concern that alternative energy supplies (like hydrogen) have not been fully considered and will not be possible if the gas infrastructure is not maintained
Supply chains	<ul style="list-style-type: none"> There will likely be an increasing demand for electrical appliances and components and supply chains may not be ready to meet this demand.
Safety risks	<ul style="list-style-type: none"> If people are unwilling or unable to connect to gas, they may switch to alternatives such as woodfire heating or LPG gas (which can have air quality and safety risks) If people are struggling with the pressures of rising gas costs, they may be less likely to engage a qualified gas fitter and households may be less regulated The combination of increasing appliances relying on electricity in households and a lack of education may result in fire risks
Workforce impacts	<ul style="list-style-type: none"> Potential lack of qualified electricians to supply the demand for electrification Potential decline in apprentices and tradespeople working in gas with an increasing need for disconnection services Potential lack of training pathways to support electrification Potential for increased workforce opportunities in the short-term (gas disconnections) and longer-term (renewables)
Decreasing competition	<ul style="list-style-type: none"> Decreasing competition in energy supply may result in one or two providers dominating the market

Things to consider in implementation

There were varied considerations for implementation of the no new mains gas connection regulation, many specific to industries or stakeholder groups. However, there was consistency across some aspects of implementation, particularly in the 'preparing to implement' stage.

Theme	
Timing / phasing	<ul style="list-style-type: none">• Transparency of timelines – being clear about the timeframes, any phasing and the consequences of non-compliance within those timings• Setting a date and sticking to it.• Allowing enough time for public awareness raising and workforces to grow, adapt and re-train where necessary
DAs and BAs	<ul style="list-style-type: none">• Existing applications should be honoured and proceed as planned. It is unreasonable to require changes at this stage of the process• Reducing barriers and/or providing incentives for developers to switch from gas to electrification during this period
Educating consumers	<ul style="list-style-type: none">• Sufficient time, effort and resources need to be directed toward raising public awareness of the change, the benefits and suitable alternatives to existing systems and appliances.• Consumers should be empowered through informed decision making• Messages need to come from trusted sources, and in appropriate formats, through the right channels at the right time
Alternative energy options	<ul style="list-style-type: none">• Further exploration of hydrogen as an alternative is needed• Concerns over removing infrastructure that may be needed in the future

Workshop 1 – Building and construction

Date: Tuesday 16 November 2022

Total number of attendees: 8

Attendees included representatives from:

- Housing Industry Association
- Master Builders Association of the ACT
- Green Building Council of Australia
- Australian Institute of Building
- Building Designers Association of Australia
- Planning Institute of Australia
- AMC Architecture
- GHD Woodhead

Workshop summary

Impacts of preventing new mains gas connections

Cost increases

While most stakeholders in this group accepted the inevitability of the new regulation, a key issue identified was the broader impact of preventing new gas connections in terms of energy pricing.

One stakeholder stated,

“I think there’s a chance you are creating a monopoly in a particular industry and there is reduced competition.”

Another stakeholder spoke about the potential “tipping point” for gas prices which might be triggered by the introduction of this regulation.

“We may end up with a spike in gas prices and we have to be careful about not leaving people behind. My gut feeling is that it will happen quite quickly...there will be a defensive position taken to protect energy providers’ financial position. It could quickly get out of control.”

While the group acknowledged that the electrification of homes would be more cost efficient in the long-term, some stakeholders noted that the initial benefit sits with the homeowner rather than the person making initial design decisions. This consideration is important to understanding how decisions are made by different users of gas.

“One aspect in relation to cost is the cost incurred for installing all electric appliances...the installer may not get the benefit - the homeowner usually does. So there needs to be consideration of the cost-benefit of all electric appliances but the beneficiary often isn’t the person making the initial design decision.

Another stakeholder commented on the cost of the transition for the building industry in general.

“I don’t know if we can do this cost-effectively. I think it would increase building costs – but I don’t know what the choice is.”

Energy supply

During the workshop, participants discussed energy supply and there was significant concern that electrical supply would not be able to meet the increasing demand triggered by the new regulation.

- “There will be a critical time where electrical supply won’t mean demand.”
- “I think supply needs a lot of work and demand response – what measures are you putting in place to deal with supply issues.”
- “...there are issues around supply that could be fundamental.”
- “You see South Australia with big issues during Summer in terms of grid supply.”

Safety hazards

Stakeholders discussed a range of safety implications resulting from an increasing move towards all electric buildings. These were raised in relation to a lack of preparedness in terms of community education and regulatory frameworks to support electrification more broadly, rather than in relation to the proposed new regulation specifically.

- “The Fire Brigade are concerned about battery storage in basements. When we say there’s not technical issues, we are talking about the design-built level. Some more recent developments are starting to have double adapters trying to charge vehicles, there’s a fire risk there and there are issues at that level.”
- “Just echoing issues around safety and fires (carparks with double adapters). More work has to happen on the standards which are not necessarily set-up for this. We are also starting to see issues around solar panels and the quality of those. There’s a whole piece there...none of them are reasons not to do this but there needs to be a strong look at the standards around these issues and are they keeping pace with what we are doing here. It’s an NCC thing.”

Workforce shortage

Stakeholders during the workshop reflected on how the new regulation might impact various trades. A key concern was the potential for significant workforce shortages.

- “Gas plumbers can’t just slot into another trade... to become an electrician is a four-year apprenticeship... so there’s a bit of work in ensuring we have tradespeople to do the work.”

Other stakeholders recognised the importance of understanding which trades are likely to be impacted and ensuring sufficient training opportunities for people to transition to meet the growing demand in electrification.

- “Training needs to be considered...there may be labour shortages to actually do this work.”
- “...Mapping of trades that are affected, looking at demographics, ages and understanding that and then using it as advocacy piece with federal government (who can contribute to training and support packages).
- “[I’d] like to further highlight resourcing the transition with appropriate trades and ancillary services as an issue.”

Things to consider in implementation

Timing / phasing

In relation to the timing of the transition, there was broad support for providing certainty and transparency in setting a date for industry to move towards.

Examples

- “From a planning perspective – you set the date. In the lead-up, there’s a transition timeframe. First gate is that it’s optional (people get in if they want to), then you have a hard cut-off for those who haven’t taken up the optional window. After a robust cut-off date there is 12 months of education. That afterwards period for education is really important (sometimes we forget about that).”
- “If you’re keen to do it in 2023, perhaps aligning it with the NCC. It gives a reasonable amount of time towards the end of the year (October) – this might be a sensible time.”

Another stakeholder highlighted some concern for the date being too soon without adequate preparation,

- “There’s a lot of work still to be done... That won’t get done until 2025 and is a fair way off. The discussion at the building codes committee, as far as jumping ahead and saying we are moving away from gas and going to electric...in the case of retro fitting class 2 – 9s, it’s going to be a lot of work and it won’t be until 2025 until we have capacity to make those changes.”

Participants also discussed the possible phasing of the implementation of the proposed regulation. While there was general agreement that the regulation should be phased rather than have a hard start date, there was some differing thoughts on how the phasing might work.

- “At the Forum last week with EVO energy, they said that phasing gas out on an ad hoc basis would generally cost more. But if you phased out residential gas region by region, they have done modelling work to show that a district style arrangement would be more cost efficient.”
- “EVO energy going district by district worked well with Asbestos and they learned as they went as well.”
- “I don’t know if this would be a geographic phasing – I think it could be across the board for industry or building type. I think it needs to be based on industry or commercial/industrial type.

Development/Building Applications

In relation to existing DAs and BAs, there was general consensus from the group that once the DA is in place (no matter when this was put in place), it should be bound by the existing rules or regulations of that date. In other words, there should be no variations to existing DAs or BAs once the new regulation is put in place to prevent new gas connections.

- “I think your DA or BA is the point where things need to be in place. We would argue that when you have your first approval, that’s the system you should be under.”
- “The cost in amending plans and changing specifications contractually, there’s time constraints and those kind of impacts (while in the construction phase)... Once you have the DA, that’s it - move forward.”
- “To put it simply, if the government say “this is a date where there will be no new connections”...just set the date and if you’ve got a DA in before that date, ...it’s as simple as that. It might be a bit harder for larger buildings with a longer period for DA but smaller developments, it’s as simple that. DA or BA exempt.”

However, stakeholders suggested that there should be strong incentives to during the DA or BA process, to encourage developers to make the transition to all electric.

- Would it be reasonable during the DA process to assist to support, incentivise electrification? Would that be too much extra resources for government?

Consumer education and choice

All participants noted that education will be a critical support required to implement the new regulation. Some also provided useful insights regarding what motivates consumers.

- “The education piece is critically important. There are electrification guides out there and ACT has your energy journey website which is great. I think that tool is great and using that for education. It’s already there.”
- “I think there’s a shift in social behaviour to adopt electrification (not just industry but more broadly). Most people are accepting. There needs to be a defined pathway on educating the community and the timing.”

- "...it [education] is not about telling the whole community because the whole community isn't building a new home. Having information in the right places and reach that specific consumer."
- "In detached homes, I don't think it's builders or designers that push people in particular directions. It's as simple as what people want in terms of the decisions made. People want a gas fireplace, they might prefer a gas cooktop..."
- "... it brings you back to what types of heating can broaden the choice for consumers. Our climate is quite nuanced so how you best deal with that at a mum and dad level is important."

Alternative energy options

Stakeholders during this workshop stressed the importance of considering alternative energy options, particularly in the form of hydrogen as another green option.

- "One of the things from a design standpoint – one of the decisions clients will make is whether they go exclusively electric or position themselves in the future for hydrogen. Double infrastructure on the off chance we can transition to hydrogen. I don't see there being many negative impacts but there will be serious choices to make with respect to the lack of clarity around hydrogen."
- "I do get nervous when there is a national policy in place...and then we can't recoup those costs. I understand the message is that hydrogen is "not a goer" but I'd like you to be sure about that. ACT Government loves to talk about renewables, but in reality, that's because we get it from another state that is using non-renewables. We hear that hydrogen isn't an option but there once was a time when natural gas was [an option]. So, we need to be as flexible as possible."
- "(We should be) fuel agnostic as to what powers homes and the manufacturing sector. I would be concerned about us putting all our eggs in one basket. In the ACT there is a need to do this quickly, hence hydrogen not a goer. Certainly there is investment being made in Victoria (plans in the Riverina). At this stage they are talking 10% hydrogen within the gas mix. These things can move quickly with technology. There are certainly people investing in it...so I wouldn't completely discount it."

Holistic approach

A key consideration discussed regarding the implementation of the new regulation was the importance of a holistic approach to electrification.

- "Automobiles will have the ability to act as batteries so the infrastructure has to be matched with infrastructure for vehicle charging. Maybe it's worthwhile getting ahead of that and having a holistic approach to electrification. The systems working together to make it easier and broaden the benefits of that process."

- “Urban consolidation is really important to find a way to be able to allow the adoption of electric for new buildings and change the way the residential pattern works in the city. One house at a time, is not going to achieve the broader aspirations around sustainability.”
- “I want to encourage the ACT government to approach this holistically. I would love to see a sample audit of all building typologies across Canberra, to see what it looks like holistically before hitting the button on new builds. For me it’s hard to answer the question on timing when we don’t have the whole picture.”

Incentives

Incentives were discussed as a means to support the transition, both in terms of community adoption but also for moving industry towards electrification.

- “Incentives for adapting retro fitting...That’s a good way to socialise the benefits.”
- “There should be incentives for all new developers to transition to electric. So it’s positive. It’s encouragement rather than a stick...”
- “Incentives might not be financial...it could be some go to design solutions that are adequate... having technical solutions at hand.”
- “At a commercial level, I think the market would like to see greater commitment to green leases from ACT Government and Federal.”

Workshop 2 – Community organisations / councils

Date: Tuesday 15 November 2022

Total number of attendees: 4

Attendees included representatives from:

- Conservation Council
- Care Financial
- Canberra Multicultural Community Forum
- Weston Creek Community Council

Workshop summary

Impacts of preventing new mains gas connections

Rising costs for consumers

This stakeholder group was primarily concerned with the rising costs as a result of the no new gas connections regulation, particularly the impact this will have on low-income households.

The financial impact was discussed not only in terms of increasing gas prices (the “gas death spiral” as referred to by one participant) but also in relation to any future enforcement measures (i.e. fines).

- “The fewer people reliant on gas network means a small portion of people to pay for that infrastructure. That impact on the people left behind.”
- “Regulations usually mean greater cost. We just need to keep in mind who is going to pay. Marginal costs can have a profound impact on people’s lives.”
- “Enforcement needs to be looked at in terms of impacts and risks. These mechanisms need to be carefully thought out. If you have someone struggling with high costs and transition, this will disproportionately impact low income (if you slap on a fine). A lot of the messages and punishments are targeted at middle to high income. We want people to be on board and whatever stick is applied should not disproportionately impact those who have limited education.”

Community buildings

This stakeholder group discussed the use of community buildings and interestingly felt that this regulation will not have a great impact on groups running these buildings.

- “Multicultural communities use community centres – it would not have an impact because most of the community centre kitchens are electrified.”
- “I’m on the committee for our local community centre and we have seen it coming and we’ve been converting everything over to electric. I’m wondering whether the community sector has already figured it out. There was time during Covid to do these sorts of things. We could see where it was heading and we had some time and some funds. And we’ve seen a return for the investment... we have a neutral electricity bill.”
- “I think community facilities just comply with whatever is supplied. I don’t think the communities will be concerned whether gas or electric, they will just adapt to whatever.”

Safety hazards

Some participants noted that there might be adverse effects on health and safety as a result of changing behaviours in the community as gas is phased out.

Examples

- “I’ve heard people just say, “we will move to wood heating”, which is not what the government wants. I think this policy has zoomed ahead and we are exposing people to greater emissions from wood heating and you’ve also got the fire pit issue.”
- “Without gas, the risk of portable gas which is not safe will have impact on people and environment.”

Energy supply

An issue with electrical energy supply was also noted during this workshop as a potential impact of increasing demand on the grid. There was some concern and reflections about possible anxiety within the community about an increasing reliance on electrical energy.

- “We need to be able to guarantee grid stability before taking away anything.”
- “If there is not gas, what happens if the electricity fails?”

Things to consider in implementation

Timing / phasing & development/building applications

When participants discussed the timeframes for implementation, there was general consensus that the regulation should be implemented without delay and with limited leniency for DAs and BAs.

- “I thought you just had a date and you are moving towards it?”
- “There just needs to be certainty for industry.”
- “The fact that this stage of regulation - “no new connections”, that’s enough of a phase. I understand developments that are going through DA but anyone starting needs to be recommended to not install. We’ve got a huge task to get existing off gas so we need to be strong about drawing a line and saying “no new”.”
- “As far as DAs that are already in place, this is not a new idea. We’ve been talking about phasing out for many years. We strongly recommend that all current DAs be reviewed so no new gas is installed.”

Exemptions

When prompted about possible exemptions from the regulation, there was some leniency but participants were not necessarily aware of which industries or businesses might require these exemptions.

- “I think an exemption may be appropriate, but I can’t imagine there would be a large number of businesses that have no option. So they would apply for exemption with a sunset clause... A small number of activities that don’t currently have a viable electric option.”
- “Valuable to investigate which industries require gas still. Waiver process would be one way to deal with it.”

Educating consumers

Under this theme, participants raised the need for consumer education to ensure the community are able to make informed decisions. Throughout the workshop, participants also highlighted the importance of who delivers the information, how it is delivered (i.e. translated into different languages) and through what channels.

- “Once again, I’m hearing that this is ahead of the game compared to other initiatives. The other initiatives have to land sooner rather than later because the community will just go “what the hell is going on”. Greater education around what you can do to make yourself warm or cool.”
- “They need to engage suitably qualified organisations to deliver the message. You’re trying to shift people’s attitude. I don’t think government is that well equipped [to deliver the message] because you [government] introduce an element of mistrust in certain groups of people.”

- "...a toolkit to help facilitate purchasing decisions. There is an assumption that people make rational choices. Solar is a good example of what can go wrong. People need to be empowered to make good decisions. This then needs to be communicated through languages and in a way that's easy to understand."
- "With education – it may need to be in different languages."
- "Identifying channels that exist and getting them to carry the message. Choice Magazine already have articles, making those sorts of resources available."
- "We need to demonstrate that there is a benefit to people... you will be warm, the lights won't go out and it might cost less and not more."
- "People are motivated by different things (economic or environmental), and I don't think they are mutually exclusive, so we need a conversation that recognises this."

Additional supports

Throughout the workshop, there were other suggestions about how the ACT Government might be able to support consumers throughout the transition.

- "ACT gov needs to think about private rental market. There is a lot of different regulation that make it difficult to support renters. Very old rental buildings particularly. The minimum energy efficiency standards will help but needs to be regulations in place to stop landlords putting gas appliances in. And that will help support private renters."
- "For people moving to new areas without gas, there needs to be support to access information. For those that are reliant on gas, I think there needs to be some price capping or better concessions...because they are the people that cannot afford to get off gas. That smaller group will need additional support and attention from government."
- "Engage with appliance retailers for point of sale."

Workshop 3 – Households

Date: Wednesday 16 November 2022

Total number of attendees: 8

Basic demographic information is listed below:

- 5 males and 3 females
- 3 people in a townhouse, 2 people in a duplex, 2 people in a standalone house, 1 person in an apartment.
- 6 people had a combination of gas and electricity and 2 people had only electricity.
- In the next five years, 3 people were planning to build a new home, 2 people to renovate existing homes, and 1 person to knockdown/rebuild.

Workshop summary

Future decision-making

Throughout this workshop, there were a number of useful insights about the drivers and barriers that will impact future decision-making for households in relation to the installation and use of gas. This includes perceptions of costs, safety and convenience.

- “I want to build in the next five years. From my past experience in an electric apartment, I had more peace of mind when I didn’t have gas... I didn’t have to worry about leaks and kids. Also, heating and cooling costs a bit less. Our gas bill is quite expensive. I would take that into consideration.”
- “...irrespective of the policy, I had already made the decision not to have gas. I’m looking at building a highly energy efficient house... it’s also cost efficient, and the architect advised me of this. He said the electric options meant there was no need for gas. The only consideration was gas cooking.”
- “I’m the oldest here and my next move will be to a senior’s village. My consideration will be whether it’s provided as part of a system. I have no problem with using gas...if I could use gas for cooking, I would much prefer it because it’s better in my opinion. It will be a minor factor in my choice because there are other more important things.”
- “I’m not sure with electricity about whether we will have instant hot water but I’m keen to explore. I would also be keen to look into upgrading now and would look at subsidies, as long as it’s a viable alternative. I have seen the gas bills coming in and they have skyrocketed – it’s a big pressure on the family budget.”
- “In the next five years I will look at electric only and solar. You can save a lot. The extra connection for gas is \$90.”

- “I bought my house three and a half years ago and while I looked at the energy it wasn’t a major decision. I did consider it in terms of gas cooking and hot water and realised I would want to swap them out as soon as they broke down which I then did. All the things you hear about gas being responsive and faster... it’s the opposite to my experience.”

Impacts of preventing new mains gas connections

Rising costs

There was a general concern amongst households that there would be a rise in costs due to decreasing gas connections. This was both in terms of the gas energy market, future disconnection fees and the costs of tradespeople in a declining gas industry.

There was also some apprehension about the viability of alternative energy options in terms of their cost.

- “Whilst there’s no negatives for me in terms of the policy, there’s a broader concern that people who have existing gas connections... for those left behind and unable and unwilling to transition - they will be subjected to a steep rise in costs as the demand falls.”
- “For business, I’m wondering if we are getting rid of competition? Now, there might be three electricity and three gas providers. Do we effectively take away half the market?”
- “In relation to the impact of the cost of removing gas connections... Will that become easier and cheaper or more expensive? I haven’t thought that through but if that’s gets expensive there will be less of an incentive.”
- “For the tradies still in gas, their price will go up and the end user’s cost will go up.”
- “I think the major issue is that whether socially you believe that nature solar and wind powered electricity is actually cheaper. The evidence is that it’s not cheaper and I think gas supplies should be used to help Australia maintain its lifestyle. Any transition should look at the cost because at the moment the price of electricity is outrageous.”
- “I understand we are focusing a lot on solar energy at home. The solar energy feed in tariff is going down and hitting rock bottom – you need to sell the electricity on your roof for 5 c and buy it back for 20c. Why should someone go solar when the feed in tariff is going lower every year. The battery prices are going through the roof and there is not subsidy plan.”

Concern about viability of alternative appliances

There was some concern that appliances, in particular electrical hot water systems, do not provide the same function as the current gas systems.

- “My only concern is if everything is electric is whether the system can provide enough for the hot water system....Whether it will have the same function?”
- “I don’t know about the hot water options but if electricity has one I would prefer that.”

Things to consider in implementation

Timing / phasing

The majority of the household participants felt that the 2023 introduction for the new regulation was fast, however this wasn’t necessarily seen as a negative thing.

One participant thought the phasing should be geographical in nature.

- “It seems quick but I think there won’t be as much of a backlash.”
- “In my view, the transition is quick from a different perspective. The transition timeline was handed down (I understand global warming commitments) but understanding on gas vs electricity is not yet understood by the public. If I am building a new house, I’m not sure how electricity will benefit me as opposed to gas.”
- “[Phasing should be] A case by case basis – older suburbs vs new suburbs where there is not existing infrastructure.”

Development/Building Applications

There was broad agreement that DAs and BAs should remain in place without being beholden to the new regulation. However, some participants noted that well placed incentives and market solutions would mean that many developers would not proceed with gas connections due to the possibility of less buyers in the future.

- “To be honest, once the document is approved there should not be another coming and overriding that approval. The time and money have already been invested...if another part of government then comes and tries to override it.. that will not be good.”
- “This doesn’t impact on me personally... but philosophically, I have a problem with trying to plan something in your life...you like to have certainty. And then something gets taken away from you. I would think a developer would be seriously thinking about their decision as it might make the sale of the residences less attractive. Anyone who is building a new place and puts in gas... they are running the risk that there will be spikes in gas and less resale value. I think developers might voluntarily change their mind. And if they had to put in a variation or new application, government shouldn’t charge them for it.”
- “I don’t think government should impose choices that are not necessary. Why can’t people make decision for themselves.”

- “My view – I wouldn’t think of compensation but I would think of incentives.”
- “If you remove the barriers for developers to change the decision, at whatever stage that building is at, it will remove the cost barrier.”

Education and messaging from trusted sources

On many occasions, participants raised the importance of education from trusted sources to ensure the community can smoothly transition to electrification.

The group provided useful insights about who is best placed to deliver information about gas and potential issues.

- “The nervousness is very true but it’s part of any change management. Educating people is important – only that can remove that nervousness. There are options and people need to be shown that. When people are planning to build a house and it comes from government or a policy they will be less likely to take on board than if it were from a professional like the builder or architect.”
- “I recently had my gas heating fixed and the guy said that he wouldn’t have gas in his house – this influenced my decision.”
- “... the education campaign should make sure the public are aware of what qualifications/certification the tradespeople need to have to be able to safely remove/transition from their gas service. Any change like this opens the opportunity to fraud and scams.”
- “There are some issues with trust in tradies. There are ones that could take advantage and I worry that people might get into a panic about making a switch and unscrupulous people might take advantage of that rush with unfair pricing.”

End-to-end service to support consumers

There was broad consensus from the group that households could transition more easily if there was an end-to-end service that specialised in all electric systems.

- “One of the reasons why it’s been a longer exercise for me to make the switch is that it can be a bit overwhelming to make all these different calls to trades people...phase 3 power... who can install the induction cooktop... what is the cost going to be? One thing government could do to make that process easier is partner with companies to provide that end-to-end service. The practical aspects are important.”
- “The cost is the main issue for most people and then the logistics ...the last few years has been a nightmare to get tradies on time etc.”
- “Agree with comments re end-to-end service. Could government consider sponsoring some apprenticeships and taking on new technology? And also, in government sponsored housing, could they take on some coordination?”

Workshop 4 – RTOs and trades

Date: Friday 18 November 2022

Total number of attendees: 3

Attendees included representatives from:

- Canberra Institute of Technology
- Work Safe Smart
- Motor Trade Association

Workshop summary

Impacts of preventing new mains gas connections

Training and workforce

During the workshop, stakeholders identified training and workforce as a key area that will be impacted by the regulation. There was concern that less people will be inclined to upskill in gas fitting if the future is moving away from gas, which this regulation would signal. This would then flow-on to a shortfall of qualified gas fitters to provide disconnection services.

- "...we won't be able to train people in skills they can't use."
- "I just met with a class last week - a group of apprentices. They were discussing whether they should be doing gas or not...they had heard there was no future in gas. I suspect licensing training will peter off. We may have a shortfall of qualified people to do that decommissioning."
- "....The training required to issue a license has gas fitting as both core and elective options. There is no option to complete without the gas requirement.... So there needs to be work around training packages."

Participants also discussed the increasing demand for qualified electricians in the context of a national move towards electrification. They noted that there would need to be a number of changes to the existing training options to ensure they adequately respond to shifting needs.

- "There will be a workforce issue that could bring the whole thing to a halt. To do it so quickly along all the other states is going to be an issue."
- "Increase in electricians and what that might mean...how we might accommodate that. We need a clear understanding of how to shift resources to accommodate the increase (for example, teachers, technology)."

Businesses reliant on gas

There was discussion on how the regulation might impact on existing businesses reliant on gas. Participants thought that there would be increasing work for gas fitters in the short-term however there was some concern for companies reliant on gas in the long-term.

Smash repair shops were also identified as a business that would be negatively impacted by a shift towards electrification.

- “The disconnection will bring a lot of work for gas fitters. The work to remove is all licensable and there will be significant work.”
- “We have a number of companies that have specialised in this part of the plumbing industry. And there is concern for their future. I don’t know how well they feel supported through this change. There might need to be some work to support them through this transition. My feeling is that there is some panic and unrest around this industry.”
- “We are transitioning the auto moto industry – generally it won’t be a problem. The problem is the smash repair shops. There is technology where you can use an infrared tool but it becomes a training issue (to show people how to use it) and it’s worth \$300,000 and I can’t see people who own spray panel shops will race out to buy this.”
- “I think there is potential that business will be selective about where they set up based on availability of gas.”

Low-income households

Participants also identified concern for low-income households who may be negatively impacted by the transition. Discussions regarding these households were more in the context of the transition rather than the specific regulation preventing new gas connections.

- “I was in a session last night talking about GSI rules and one of the gas fitters was talking about customers who are low-socio economic. Some of these homes...he knows they are not going to be able to afford to go electric. They might go without heating...he already does some pro bono work and he thinks this will increase.”
- “...people will be upgrading gas appliances that have come to end of life and switching gas off. The increasing cost is a real one and it will impact everyone associated with it. Those people that don’t have disposable income will be having to make decisions about a blanket or a heater.”
- “...customers that can’t afford to make the switch to electricity and then they can’t get a gas fitter to the house.”
- “The people that go last to electricity are the people that can least afford it.”

Safety hazards

There was significant concern about potential safety hazards if people are unable to use gas in their homes and workplaces, where there is a strong preference of need to use gas.

- “People will start going out and buying a gas bottle and putting them in the house. There’s also bottled heaters which are illegal, but you can get them and they will bring them inside the house. People have gas operated fridges and are dying overnight. People get creative and use gas bottles for all sorts of things but people will do this even more.”
- “They will come up with other cooking solutions and that might be gas bottles on benches.”
- “Another option people will take is bottle gas options with LPG...panel shops could do this.”
- “Anybody who uses natural gas can move to LPG.”
- “The challenges are going to be real. People will be coming up with innovative work arounds to continue doing what they do and there only needs to be a couple of accidents.”

Supply of materials and appliances

Stakeholders raised the potential issues with supply chains resulting from an increase in new all electric buildings.

- “When it comes to making decisions about access to suitable equipment and the energy sources that powers that equipment, one of the things we will need to be mindful of is access to equipment that allows for this change to occur. Alternative means to do the same work...”
- “I was talking to Multiplex. One of the challenges they are experiencing is the access to new equipment and supply chains. Some of those greenfield sites ...you’re going to have 1000 dwellings ...goods might be difficult in terms of the supply chain - and there are costs associated with that. We are a small jurisdiction in the national picture.”

Things to consider in implementation

Phasing

One stakeholder thought that phasing could be done via postcode, with consideration to which suburbs may be more likely to transition with relative ease.

- “The other thing about the roll out - think about via postcodes. Bear in mind that wealthier post codes might have the ability to uptake earlier. Maybe postcode is better than industry because there will be those little anomalies everywhere.”

Development/Building Applications

While one stakeholder felt that people would be unlikely to proceed with a new gas connection during the DA process (knowing that there is a move to electrification), there was consensus that changes to the DA should not be enforced and should be the decision of the applicant.

- “If I was a business or building a house...I would be looking for solutions other than gas. There is no way in the world...even if I was allowed to...the uncertainty about the future of gas means I wouldn't even consider it [proceeding with a gas connection].”
- “It's a little more difficult with the DA – you have already invested in this development, and you are going to have to backtrack and almost start again...you've forked out and invested in this building. It comes back to individual choices.”
- “My first thought is that if it's approved, it's approved. Down the track you will have impact on the value of that property, it's resale. That would be something to think about. What it's worth when you move it on.”

Exemptions

Potential exemptions identified by the group were smash repair shops. One stakeholder identified the different areas in which smash repair shops operate.

“We've got panel shops operating in back yards (licenced by the ACT Government). I don't know what they are using. They'd be using gas. My reasoning would be only to exempt smash repairs in commercial areas – but that's tricky because you have panel shops that are in part residential. So by business type. If the regulation was changing and the technology for heating a booth...my guys will want to make the transition to the latest technology but it's just the price at the moment. That's my only concern.”

Exploring other energy alternatives

The group felt that the ACT Government should be continuing to explore hydrogen as an alternative energy source and considering blended gas options.

- “We don’t have energy options in ACT because we are not looking at hydrogen. Evo energy provides for both energy sources. They have gas assets sitting in the ground that we are potentially talking about decommissioning.”
- “To question whether electrification is the only path to get to zero emissions. Toyota is not going down that path – they are going down hybrid. Diesel now can be produced out of algae. Are we throwing the baby out with the bath water?”
- “There might need to be a transition to work with blended gas if we were to switch in hydrogen. Interesting that QLD is investing in hydrogen research.”

Incentives and disincentives

There was discussion about the possibility of both incentives and disincentives. While one stakeholder felt that a “big stick” approach would be most effective, there was concern from others that policing would be difficult and the people most likely to be impacted would not be able to afford a fine.

- “There needs to be more than education. It could stop people being able to earn money. We go out and try to educate but they don’t do it ...the only way you do that is with a big stick. There needs to be fines and we need to police that.”
- “The problem is that people will make work arounds and you’re not aware of them because they’ve done it illegally, so you don’t have the mechanisms in place to police it. And then when you find out it’s often too late. And the fines are often at the people who can’t afford to pay them. The people who’s behaviour we need to change can’t afford the consequence.”
- “There might need to be financial support through rebate schemes to assist. For businesses.”

Education and consultation

Education and consultation at a grassroots level was also discussed as a way to support the transition to electrification.

- “Information about why gas is so dangerous and mitigating risk of different uses. But it’s also support, to everybody that is a customer of the gas network.”
- “...it will need to be pretty granular. Expect to have a fair few conversations at a granular level.”

Workshop 5 – Trade associations

Date: Friday 16 November 2022

Total number of attendees: 3

Attendees included representatives from:

- NSW Plumbers Union
- Master Plumbers
- National Electrical Communications Association

Workshop summary

Impacts of preventing new mains gas connections

Planning and design

The no new gas connections regulation was thought to have major impacts on the planning and design of buildings, particularly in terms of the space required.

- “The problem with heat pumps is that they don’t recover fast so you need a lot more space to hold the water. So, there’s implications for space and design.”
- “You have to plan for the space, the appliance. You might do the design and then you give it to EVO and they might say they don’t have the capacity in our networks. EVO energy has a big say in it.”
- “Space is a big issue. I’ve been to a building with solar hot water and it will never produce enough hot water for that building. I don’t understand how they got approval.”

Workforce and training

The stakeholders in this workshop felt that there would be an increasing demand for both electricians and plumbers as a result of the new regulation.

There was also concern that there would be too much work for the existing workforce in the ACT.

- “From electrical perspective...I’m going to have more work.”
- “From a plumber’s perspective - our work will just get more. It won’t be a negative effect. If anything, it will be positive.”
- “There’s a general trade shortage.”
- “When they did that job summit in Canberra, they said there would be 170k new electrical jobs in the next ten years.”

Infrastructure and energy supply

There was significant concern about whether the existing infrastructure will be able to support an increasing reliance on electricity and the overloading of houses.

- “We keep talking about electrification of the nation but we need to think about distribution and we need to make sure we have what we need to transition. I’m not sure the poles and wires out the front of house are ready for that.”
- “The peak times are the issue. If everyone gets up between 6-7 and turns their shower on in a high rise...that’s something you will need to consider. You won’t be able to have a shower schedule in the building.”
- “New appliances. It will create some issues with the demand of houses. The house might be using 35amps per house now (with some gas) but that will jump to 65 amps and then with EVs you’re starting to get a really electric heavy house. And there’s a big cost and additional rules and regulations when you get up to 100 amps.”
- “The difference between instantaneous [hot water] and overnight storage....it will put big pressure on street mains or the switchboards. Instantaneous chews a lot of electricity. I don’t think there’s a great alternative to gas.”
- “The return temperature back to the hot water is also a big drain because it’s always on.”

Rising costs

Participants also referred to the increasing cost of gas as less people join the network.

- “What happens when gas becomes very expensive, and people can’t afford the transition?”
- “If you take 60% users of gas off network, the cost will be dramatic because the cost of maintaining network is the same.”

Safety hazards

One stakeholder identified possible safety issues if people prefer to use gas and source gas through other means.

“LPG gas – there’s people that like to cook with gas. They might be used with less regulation. They will sit the gas on top of cupboard and cook with it. That will be a real issue in terms of fire safety and monoxide poisoning in confined spaces. You see a little bit today but there will be more.”

Things to consider in implementation

Timing

There was some discussion about the timeframes for the regulation and the inevitability of people moving away from gas. The main concern identified was making sure the supply chains are able to support increasing demand.

- “Regardless of the timeframe the government puts on this, people are already making the change. People are hearing things in the media and doing it sooner.”
- “I’ve seen timeframes...you can say five minutes or five years and you’ll end up with the bottle neck. I think it’s just making sure we are resourced. I’m not worried about cabling because ours is manufactured overseas. But appliances, systems and making sure the energy supply is there.”

Compliance

The importance of compliance during the implementation phase was discussed at length by participants. There was concern that existing regulations and standards are not sufficient in supporting effective and efficient electrical energy use.

- “There’s a lot of people doing electric installation for hot water systems and they often don’t work. I went to a government building where we actually had to disconnect the solar because it didn’t work with the system. The builders are meeting a minimum compliance, but they don’t care if it actually works for you or not... No one is actually checking how the hot water is being made...it’s a visual inspection.”
- “I think the wiring rules don’t look at the theory that you might have multiple chargers over the same time. They moved away from discounted hot water calculation from off peak. I think there could be some work done to modernise those calculations. There’s no governance to have an energy management system. We need to be smarter as an industry about how we regulate. Distributors are bad at applying a best-case scenario... they are very risk adverse. The EV council is pushing a handbook for EV charging which is really useful. If you do it, it complies. Maybe we need something like that but broader.”
- “There needs to be some guidance or compliance to influence strata managers. Most of the checks are visual.”
- “We don’t have good regulation standards to back up what we do. Adding EV will be another component and we keep adding to the load of a house...you don’t want to get to a situation where everyone has to put in a switchboard in their house.”
- “Compliance – in the ACT we should maintain plumbing inspectors but give them more time to spend on site and give them guidance (more time and resources). I don’t think self-regulation works.”

Development/Building Applications

Stakeholders recognised that there would be significant costs associated with changing DAs or BAs from gas to electric and felt that no matter what decision was made, the end user would bear the costs.

- “It would be hard to change and if you have an existing DA it should be honoured.”
- “It’s going to cost a lot more money I reckon...for the end consumer. Not the developer...the developer doesn’t care. But for the end consumer it’s going to cost a lot. One way or another, it’s always the consumer that pays.”

Alternative energy sources

There was considerable discussion throughout this workshop of the benefits of hydrogen as an alternative green energy source. While the group accepted that electrification was part of the future, there was concern that existing gas infrastructure would not be maintained and this would then limit energy opportunities for ACT in the future.

- “Now we are at the crossroads, and we need to look at hydrogen. Our gas fitters are going to be trained for hydrogen and we are missing the boat here. In peak times, we can use solar and wind and in non-peak we can use hydrogen. Let’s talk about it complimenting, not stand alone. But now we are saying no so there won’t be the infrastructure to support this clean energy. You need to think about green energy as a whole.”
- “What we are working on now is British standards for hydrogen. It seems like the rest of the country is going in a different direction.”
- “Agree about looking at where hydrogen fits because it’s evolving quickly.”
- “Our position is that we want to push forward with hydrogen. So we want the pipes in the ground. Pipes have to be in the ground.”
- “Yeah if you don’t have the infrastructure in the ground...we saw what happened with the NBN.”