



**CONSERVATION
COUNCIL**
ACT REGION

Submission re Evoenergy GN21 gas network plan

APRIL 2020

TO: Evoenergy, consumerfeedback@evoenergy.com.au

The Conservation Council ACT Region is the peak non-government environment organisation for the Canberra region. We have been the community's voice for the environment in the Canberra region since 1979. Our mission is to achieve an ecologically sustainable and net-zero carbon society through advocacy, education, research and engagement with the community, the private sector and government.

We represent more than 45 member groups who in turn represent over 20,000 supporters. We harness the collective expertise and experience of our member groups and networks. We work collaboratively with Government, business and the community to achieve the highest quality environment for Canberra and its region.

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Introduction

The Conservation Council ACT Region welcomes the opportunity to comment on ‘Evoenergy gas network 2021 draft plan: Evoenergy gas network 2021–26 access arrangement review’ (GN21 draft plan).

The IPCC and global climate scientists have made it clear that humanity must rapidly and urgently reduce greenhouse gas (GHG) emissions to have a reasonable chance of keeping the Earth’s temperature from increasing by more than 1.5°C above pre-industrial levels.

Recent research has found that the vast majority of atmospheric methane originated from modern human use, not from natural Earth processes as previously thought ([National Geographic 2020](#)). This means that we have the power to significantly reduce atmospheric methane concentrations by cutting our use of methane. The most effective way to decarbonise gas consumption is to stop extracting, making and using it.

In response, the ACT Government has demonstrated commendable leadership through the implementation of its 100% renewable electricity target by 2020 and the setting of nation-leading, ambitious, legislated GHG emissions reduction targets. In addition, the Conservation Council acknowledges the commitment outlined in the ACT’s Climate Change Strategy 2019–25 to phase out the use of natural gas by 2045, making the ACT the first jurisdiction in Australia to start to address the long-term demand for gas.

The ACT’s Climate Change Strategy notes that “from 2020, the use of gas is expected to make up 21% of the ACT’s greenhouse gas emissions. Transitioning to 100% renewable electricity presents an opportunity to transition away from gas by electrifying our heating and cooling systems”. At the end of 2019 the renewable electricity target was met, and in addition, the ACT Government has implemented Draft Variation 373 to the Territory plan, which removed the mandatory requirement to install gas in new suburbs. Even the NSW Government has set a long-term climate target that implies a transition off gas. Given this, and the limited potential for substituting meaningful amounts of hydrogen or biogas into the network, it would be prudent for Evoenergy to begin to plan for closing the gas network.

In the GN21 draft plan, Evoenergy has mapped at least three potential future pathways for achieving net-zero emissions in anticipation of Government policy, including complete transition away from gas to renewable electricity by 2045. Early consideration has already been undertaken of a phase-out option commencing in the next five-year period, and Evoenergy has made the commendable decision to cease rolling out gas infrastructure to new ACT suburbs from 2021.

However, despite the ACT’s clear policy direction and intention to phase out gas, it appears that Evoenergy are waiting for a stronger policy signal from the Government about transition timeframes, and the commercial preference under current policy conditions appears to be retaining the network, supplying ‘renewable’ gas, with some shift to electricity.

Notwithstanding Evoenergy’s decision to cease rollout to new suburbs, the GN21 draft plan clearly identifies Evoenergy’s intention to continue to grow its customer base through market expansion within existing suburbs. This constitutes \$34.8m of capital expenditure over the five-year period on “new services, mains, and meters to connect new customers” including “new homes, medium/high density residential developments, and commercial and industrial customers”. This is problematic because it will result in more, not less, GHG emissions, and,

in particular, locks in gas consumption in multi-unit developments, which will make the transition to electricity more challenging into the future.

The Conservation Council has concerns about sustaining the gas network with the aim of supplementing 'natural' (ie fossil) gas with hydrogen or so-called 'renewable' biogas at some unspecified point in the future. Ultimately, using gas contributes to climate change and other environmental impacts, and imposes unnecessary costs on households. The ACT already has a viable, zero-emissions electricity supply, so the Territory's priority should be to rapidly transition from gas to all-electric suburbs.

With Evoenergy yet to submit its GN21 draft plan to the Australian Energy Regulator, there is an opportunity now to revise the plan with a proactive strategy to phase out the network, immediately begin the transition of customers from gas to electricity, and achieve significant emissions reductions over the next six years consistent with the ACT's legislated interim target of 50–60% reduction below 1990 levels by 2025. However, once the network access arrangements are set for the five-year period 2021–26, there will be less scope to redirect short-term capital investment plans, and the opportunity to achieve early emissions reductions will be missed, requiring more dramatic reductions later.

The ACT Government should provide certainty for retailers, developers and the Canberra community by setting and communicating a clear timeline to phase out gas, so they can then make appropriate purchasing decisions when replacing appliances or when constructing new dwellings. Not having a detailed timeline for transition risks creating additional stranded assets, both at a network level and at a personal household level.

But even in the absence of a detailed Government timeline, Evoenergy are clearly aware of the policy direction, thus the next five-year Access Arrangement period should at the very least, have no market expansion in the ACT, or for that matter NSW, given how the region's future use of gas is closely aligned with the ACT.

In addition, Evoenergy could take the initiative and become a world-leading energy company, setting in place a long-term strategy across all assets to facilitate zero-emissions energy. This would be an even more remarkable feat given Evoenergy's ownership structure via the ActewAGL Distribution Partnership consisting of 50% ownership by Jemena Ltd (in turn owned by China & Singapore Government corporations) which has a strong commitment to expanding the gas industry in Australia.

The Conservation Council supports a rapid phase-out of gas over the next ten years as a way to support meeting our interim emission reduction targets, and as a meaningful response to the urgency of the climate change crisis. Further discussion can be found in the Council's submissions regarding the [ACT Government's Draft Variation 373](#) (March 2020) and the [ACT Sustainable Energy Policy 2020-25 Discussion Paper](#) (October 2019).

Recommendations

The Conservation Council recommends that Evoenergy:

- Revise the GN21 to strategically phase out the gas network by 2030;
- Immediately cease all new gas infrastructure and all new connections and reconnections in all suburbs, including newly-constructed dwellings and multi-unit buildings;
- Minimise capital expenditure except to maintain safety, and proactively manage depreciation of assets likely to become stranded;
- Reconfigure the electricity network to support a range of dynamic technologies including localised and distributed electricity generation, 'smart' metering, demand management, large and small-scale batteries and electric vehicles as well as to accommodate increased demand due to phase-out of the gas network;
- Develop and communicate a clear timeline for transitioning customers off the gas network, with priority given to protection of vulnerable customers;
- Not sustain the gas network with 'renewable' gas substitutes or emissions reduction offsets;
- Revise tariffs consistent with 'polluter pays' and equity principles so as to reduce gas consumption and support vulnerable customers.

Evoenergy's consultation questions

We are seeking your feedback on the assumptions we have made on how ACT Government policy will impact the use of gas in the ACT and surrounds. What are your expectations of how the use of gas will change in the next 5 – 10 years?

It is clear that Evoenergy has considered a number of scenarios or potential pathways for the gas network, and the Conservation Council appreciates that business planning is challenging when technology options might appear uncertain. However, what is not uncertain is that the IPCC's has given the world just 10 years remaining of the global carbon budget and that the world needs to rapidly decarbonise to have a chance at a safe climate in the decades ahead. The Conservation Council deems the ACT Government's 2045 target for net-zero emissions as too little too late.

Even assuming that the ACT's Government net-zero emissions by 2045 target is adequate, the ACT Government must be looking to decarbonise the gas sector more quickly so as to have any chance of meeting interim targets. The Government likely recognises that making households all-electric is far easier than eliminating emissions from some other activities and sectors such as reducing private vehicle use, making it entirely feasible that it could bring forward the phase-out date for the gas network within the next five years when the next climate strategy is due.

The Conservation Council has called on the ACT Government to phase out the use of gas by 2030. Evoenergy's business planning should also be aligned with the science of climate change, and in that regard, Evoenergy should plan to decommission the ACT's gas network by 2030 and include consideration of this right now in its 2021–26 access arrangement plan, rather than waiting another six years and risking having to close down the network in a rush.

We acknowledge that this direction would be at odds with Jemena's business plan more widely in Australia. Jemena (owned by China and Singapore Government corporations, 50% owner of Evoenergy) has a clearly stated intention to expand the national gas network and supply. In July 2019, Jemena commenced construction of the 60km Atlas Gas Pipeline in Queensland. Jemena is 'working hard ... to bring new gas to Australian homes and businesses', and 'gas will play an increasingly important role in complementing intermittent renewable technologies'. ([Jemena news, 8 July 2019](#)). It highlights that any decisions taken by Evoenergy with regard to the ACT gas network are being driven by the ACT Government, and not by corporate partner Jemena.

Box 3.1 in the GN21 draft plan implies that the entire current energy demand for gas will be transferred one-for-one to the electricity network. The Conservation Council contends that this will not be the case because modern electric space heating and water heating appliances are up to four-times more efficient at converting energy to heat, reducing the required demand per household. In addition, buildings can be made more energy efficient through insulation, double-glazing, draft-stopping, curtains, awnings, and correct orientation for passive solar efficiency. The typical experience of households that convert from gas to electric appliances is that overall energy consumption reduces, and especially in winter when space heating is switched from ducted gas to efficient heat pump technology. Already we know that gas consumption from new houses is lower per household due to gas being utilised less for space heating than it used to be.

Substitutes to sustain the gas network should not be used as a reason to delay action to reduce emissions

Evoenergy has outlined two scenarios for decarbonising the gas network: firstly, to transition to 100% renewables; and secondly, to gradually transition to "renewable gas".

The Conservation Council would caution against conflating the use of hydrogen and bio-methane for the purposes of the document or in the ongoing conversation with the community. The two options are different and separate, and while they could both possibly be utilised to reduce direct emissions marginally in the short term, neither is likely to be suitable in the long term.

Neither the future promise of hydrogen, nor the channelling of our local resources into bio-methane, should be used as a reason to delay definitive action now to reduce GHG emissions using existing technologies, or as a justification for maintaining gas networks, particularly as its viability is not yet proven.

See further discussion below.

Do these themes [from community consultation] reflect your views and priorities as we plan for the 2021–26 access arrangement period and beyond?

Evoenergy conducted community consultation in late 2019. It has been widely commented by mainstream media that the bushfire and summer storm season of 2019–20 significantly raised public awareness and concern about climate change and the urgency with which society needs to act, such that if Evoenergy were to repeat the consultation, the company may find elevated concerns about the sustainability of gas as an energy source. The Australian and global publics are increasingly opposed to the unnecessary environmental risks posed by gas industry activities, and are withdrawing their social licence. Hundreds of Canberrans signed the Conservation Council's recent petition to the ACT Government calling for no new gas. The

insurance and finance industries are similarly becoming more risk-averse about funding fossil fuel projects.

The Australian public will transition away from gas as Government policy, while community campaigners and early adopters of all-electric homes lead cultural and behavioural change, shifting the old narrative about gas being “cheap, reliable and natural” to the new reality of being increasingly expensive, a polluting fossil fuel, environmentally damaging to extract, and in shortening supply. Statements by the public such as “gas is a better form of heat” or “gas is better for cooking” or even “gas is clean and needed as a transition fuel” are tired mantras taught to earlier generations in times when renewable electricity barely existed and electric appliances were clunky and inefficient. But times have changed and the public will learn new narratives as the climate imperative grows. Evoenergy, as a supplier of both gas and electricity, is well-placed to smoothly steer Canberra households through the transition, balancing the strategic directions of both networks with advantageous oversight of the shift in demand from gas to electricity.

Looking after vulnerable, low-income, rental and public housing households as the network is phased-out is a high priority. Evoenergy should collaborate with the ACT Government and ACT Council of Social Services and other community organisations to prioritise and facilitate support for these households to replace their gas appliances with electric appliances over the next five years so that they are not left using the network when the bulk of other customers have already left, and therefore disproportionately bearing the costs of the network. Because gas customers are already connected to the electricity network, the most efficient means of making energy affordable and delivering long-term energy independence that relieves energy poverty and improves health outcomes for vulnerable customers is to convert from gas to all-electric households.

The Conservation Council agrees with Citizens’ Jury recommendations 2 and 3 that Evoenergy should collaborate with the ACT Government to develop a communication plan to inform the ACT and NSW consumers about the transition.

Regarding Citizens’ Jury recommendation 4 that Evoenergy advocates for emissions offsets for gas, the ACT Government’s Climate Change Strategy has already “committed to achieving its emissions reduction targets and net zero emissions goal without the purchase of carbon offsets”, a position endorsed by the Conservation Council.

We would welcome your views on our proposed approach to calculating depreciation.

The entire network needs to be depreciated by 2030, with expenditure to date written off as a sunk cost, recognising that even under the ACT Government’s current target of net-zero emissions by 2045, the network will eventually become a stranded asset. Knowing there is an end date, it makes little sense to continue expanding the network, connecting new customers or expending any more capital than absolutely necessary to maintain the network safely until all customers can be disconnected and the network can be decommissioned. Evoenergy acknowledges this scenario in section 5.2.2 – it should be the guiding scenario for the GN21 Plan. The more proactive Evoenergy can be about implementing this scenario, the greater control the company may have over the value that can be recovered from existing assets, rather than taking the risk of financial shocks should government emission-reduction or carbon-pricing policies be strengthened or the divestment movement have greater influence over sustainable and ethical finance and investment.

As much as possible, Evoenergy should recover materials from decommissioned infrastructure for repurposing and recycling and should factor these costs and/or savings into financial planning.

We are seeking your views on our proposed approach to simplifying tariffs.

Tariffs should be determined with equity and capacity to pay in mind, and with the long term view to reducing gas consumption, not increasing it. Declining usage rates for large demand customers that “encourage utilisation of the gas network, and minimise the bill impacts of higher usage during peak times of the year” is completely contrary to the global need to reduce greenhouse gas emissions and the “polluter pays” principle. Pricing of gas should be scaled to deter high consumption, not encourage it. High-consumption users should be paying more for network access than those who use less gas, not the other way around. Tariff structures should also ensure that demand customers support network maintenance costs whilst residential “volume” customers transition off the network.

Do you have any feedback about our proposed capital expenditure program? Does our approach seem reasonable? Are there any specific elements you would like to know more about?

The Conservation Council supports the direction outlined in the GN21 Draft Plan to stop the rollout of gas networks to new suburban developments. Now that the ACT Government has removed the mandate for such provision and per capita gas consumption is decreasing due to consumer demand falling in new suburbs, new pipelines are unlikely to be economically viable for Evoenergy in any event. In the event that developers insist that Evoenergy install new pipes because they believe that homeowners still want gas, unless Evoenergy has specifically planned for this expenditure, the costs are likely to be passed onto to new homeowners who are unlikely to want to wear the extra costs, which will ensure that rollout does not proceed. The ACT Government could remove this uncertainty for developers in the ACT by prohibiting all new gas.

However, given the broader ACT Government direction with regard to phasing out gas, it is untenable that Evoenergy would pursue \$34.8 million of capital expenditure to connect new customers in existing residential areas, including “new services, mains, and meters to connect new customers” including “new homes, medium/high density residential developments, and commercial and industrial customers”. “Market expansion” makes up more than half of the proposed \$66.2 million capital expenditure in the GN 21 draft plan. This is clearly at odds with the ACT Government’s policy direction, and risks leaving consumers connected to the gas network and installing and using gas appliances when in a relatively short period of time, they would be required to transition off those appliances. It is especially concerning with regards to multi-unit developments, as there are likely to be higher technical challenges for unit owners to switch to electricity once gas appliances have already been installed. Even in NSW, where Government policy on gas has not been as clearly articulated, given the impact on the gas network services of ACT policy, market expansion is not prudent.

We are interested in your views on our proposed customer number and volume forecasts. Does our approach seem reasonable in light of the ACT Government’s Climate Change Strategy and commitment to explore alternatives to natural gas?

Unless directed otherwise by government policy or their own research, the average family may well do what is familiar and connect, or remain connected, to the gas network. If Evoenergy and builders continue to promote gas, customers who don’t have the time or

resources to access further information may simply accept that that is still the norm. However, many Canberrans are already discovering that there are unnecessary costs and environmental impacts associated with using gas as an energy fuel in their homes, and are disconnecting from the network or closing their accounts, making customer numbers challenging to predict.

The GN21 draft plan appears to assume a gradual and linear decrease, but diffusion of innovation analysis of previous technology transitions, such as the adoption of smartphones shows a bell curve with a steep rush as the majority follow the early adopters, often far faster than analysts predict. Evoenergy needs to be prepared for this, actively and strategically planning an orderly transition, perhaps commencing with the oldest suburbs where infrastructure is aging and houses are being renovated or rebuilt. No household will want to be the last customer left on the network, paying more than their neighbours for energy.

Regarding “low emissions” alternative sources of gas, the Conservation Council regards the GN21 proposal to substitute fossil gas with “green” hydrogen and/or “renewable” biogas as an attempt to maintain business as usual under the guise of making small emissions reductions from the gas network. The Conservation Council opposes this pathway on the basis that gas is simply unnecessary for heating buildings, water or cooking when the ACT already has 100% renewable zero-emissions electricity and the technologies already exist for households to become efficiently all-electric. We do not need gas as a “transition fuel”, and the planet cannot afford for Canberra households to maintain gas as a “right-to-choose”, luxury, polluting commodity. Any cost–benefit presentations about “renewable gas” options must plainly compare the full carbon emissions of gas options with all-electric options, so that the public are not misled into believing that “renewable” equals zero-emissions.

Creating and then using hydrogen as a fuel source for buildings is less energy-efficient than directly using renewable energy and would reduce emissions from the gas network by just 2–20% before requiring householders to invest in appliances and Evoenergy to spend further capital in converting infrastructure. Certified “green” hydrogen may become viable in the future as a fuel source for transport or industry, or storage for renewable electricity, but is not needed for houses.

Biogas from any source is predominantly composed of methane, a powerful greenhouse gas, and emissions from its production, transport and consumption contribute significantly to global warming. While recovering methane from landfill or sewage treatment plants to make electricity is preferable to releasing methane into the atmosphere, ultimately, using gas contributes to climate change and other environmental impacts, and imposes unnecessary health and financial costs on households. The most effective way to reduce all these impacts is to cease using gas. In addition, converting purpose-grown or ‘waste’ organic materials to biogas potentially competes with other land-use and waste management priorities.

Finally, more jurisdictions around the world are introducing legislation to curtail fossil fuel industries, and the ACT Government has, in every climate change strategy update over the past 13 years, progressively increased its ambition and/or shortened its timeframes to reduce greenhouse gas emissions. It would be reasonable to expect further policy changes that will impact the gas network, for instance the Sustainable Energy Policy due in June 2020, so Evoenergy would do better to preempt these rather than wait and risk being forced to make more rapid changes than commercially desirable.

In conclusion, the Conservation Council supports a rapid phase-out of gas over the next ten years as a way to support meeting our interim emission reduction targets, and as a meaningful response to the urgency of the climate change crisis.