

## Attachment 12.5

# ACIL Allen Review of COVID-19 related adjustments

---

SA revised Final Plan July 2021 – June 2026  
January 2021

REPORT TO  
**AUSTRALIAN GAS NETWORKS**  
12 JANUARY 2021

---

# REVIEW OF COVID-19 RELATED ADJUSTMENTS

---



**REVIEW OF COVID-19 RELATED ADJUSTMENTS TO AGN SA'S GAS DEMAND  
FORECASTS**



---

<b>1</b>		
	INTRODUCTION	2
<b>2</b>		
	IMPACT OF COVID-19 ON FORECAST GAS VOLUMES	3
<b>3</b>		
	RESIDENTIAL CUSTOMER CONNECTIONS	5
<b>FIGURES</b>		
<b>FIGURE 2.1</b>	RESIDENTIAL GAS CONSUMPTION, HISTORICAL AND FORECAST	4
<b>FIGURE 2.2</b>	SMALL BUSINESS GAS CONSUMPTION, HISTORICAL AND FORECAST	4



AGN SA are currently preparing their response to the AER's Demand Determination for their South Australian Gas Distribution Network.

While the AER have accepted their demand forecast (which was prepared by Core Energy) as submitted with their original proposal, their demand forecasts require an update which would include the most recent actual consumption for 2019/20.

The 2019-20 financial year however has been impacted by COVID related lockdowns. There has been a marked increase in residential consumption with an associated decline in commercial consumption.

AGN SA have asked ACIL Allen to review the approach taken to account for the impact of COVID-19 on the gas demand forecasts.

It is important to note that this is only a review of the COVID related impacts on the demand forecasts, and not the entire demand forecast. The focus of the review is on the reasonableness of the COVID related adjustments, potentially incorporating recommendations for improvements if possible.



# 2

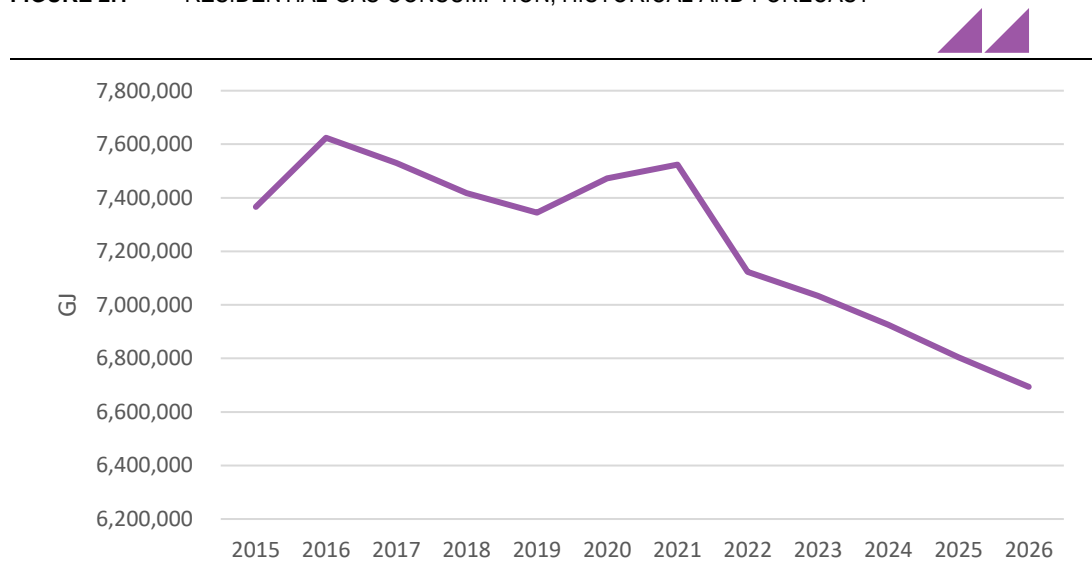
## IMPACT OF COVID-19 ON FORECAST GAS VOLUMES

The 2019-20 financial year was affected significantly by COVID related lockdowns in the second half of the financial year. A major impact of the lockdowns is that a significant proportion of the workforce has shifted to working from home. This has resulted in a spike in the residential consumption of gas and an associated drop in commercial consumption.

There has been considerable discussion in the media regarding the extent to which the working from home phenomenon will persist after the pandemic has ended. Some pundits have proclaimed a new world where the majority of meetings will be conducted via Zoom and other similar software, while others make the argument that the phenomenon will be temporary, with employers requiring their workers to go back to the office as soon as possible.

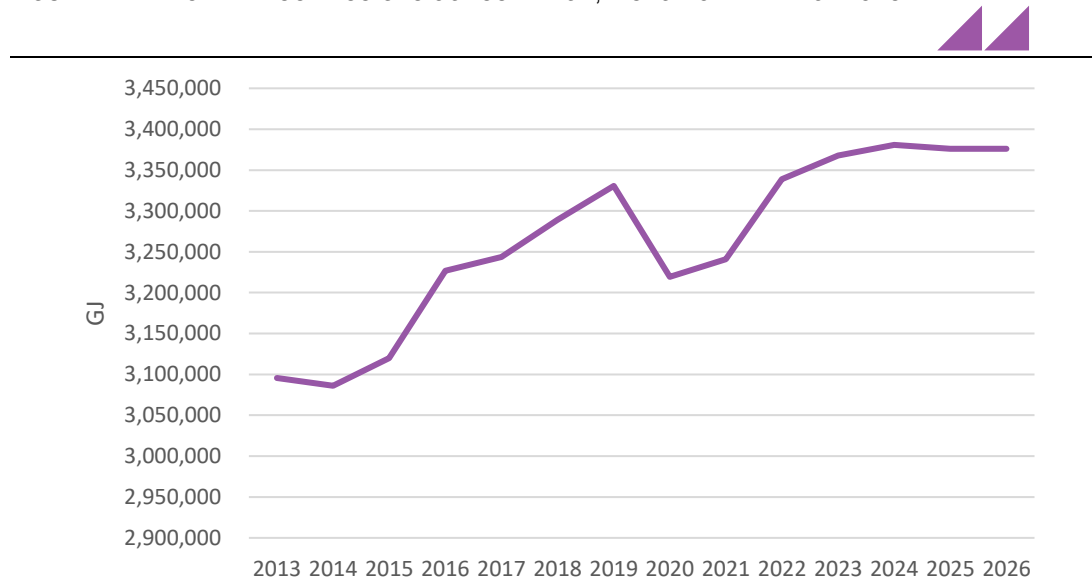
It is not possible to know with any certainty what the outcome will be, nor are there any historical precedents on which to base an analysis. ACIL Allen however, considers that the advent of an effective vaccine, when rolled out to the wider population, should give people the confidence to return to the office and that the benefits of people collaborating face to face should incentivise employers to encourage their return.

Core Energy have made an upward adjustment in 2020-21 in residential gas consumption and a downward reduction in commercial gas consumption. Actual residential consumption in 2019-20 increased by 1.74% to 7,472.8 thousand GJ from the previous year. This increase was due to the behavioural shifts induced by the COVID-19 policy response and goes against a persistent negative trend residential gas consumption. Core Energy have forecast a further increase in residential gas demand in 2020-21 of 0.69% to 7,524.3 thousand GJ. This further increase reflects a continuation of the COVID-19 lockdowns over the 2020-21 financial year. However, in 2021-22, Core Energy forecast a decline of 5.3% in residential gas consumption which brings the level of residential consumption back to the historical trend, effectively assuming that any COVID 19 related impacts will not persist in the forecasts after 2020-21 financial year (see **Figure 2.1**).

**FIGURE 2.1** RESIDENTIAL GAS CONSUMPTION, HISTORICAL AND FORECAST

SOURCE: AGN

The reverse pattern can be observed in the commercial gas consumption chart shown in **Figure 2.2**.

**FIGURE 2.2** SMALL BUSINESS GAS CONSUMPTION, HISTORICAL AND FORECAST


SOURCE: AGN

Below trend volumes of commercial gas consumption in 2019-20 and 2020-21 are then followed by a return to the historical trend as the COVID-19 related impact dissipates.

It is our view that Core Energy's assumption of a return to normality in 2021-22 is reasonable given the imminent rollout of an approved and effective vaccine, even if a considerable amount of uncertainty remains. We consider that while the impact of the COVID-19 related lockdowns could spill over into 2021-22 and even beyond that, the fact that the incidence of COVID-19 has been very limited in South Australia with the majority of businesses now operating normally with few, if any restrictions, and most employees back at work, suggests that the impact of COVID-19 is likely to be temporary rather than permanent.

We therefore conclude that the adjustments made by Core Energy are reasonable.





# 3

## RESIDENTIAL CUSTOMER CONNECTIONS

In this section, we review AGN's forecasts of residential customer connections, specifically the impact of COVID-19 on residential connections going forward. New residential connections in AGN SA's distribution network are derived from the Housing Industry Association's (HIA) forecast dwelling commencements for South Australia with a one year lag.

In their latest set of forecasts (dated November 2020), the HIA forecast a 19.1% increase in detached houses commencements in 2020-21 from 7,775 to 9,257, followed by a 20.5% decrease in 2021-22 to 7,361, in line with the number of commencements in 2018-19. The HIA identifies several reasons for the dramatic shifts in the forecasts. First, the introduction of the HomeBuilder program subsidising investment in new housing is projected to significantly boost new dwelling commencements in 2020-21. This increase is reversed in 2021-22 after the HomeBuilder program is removed.

The HIA also cite changes in consumer preferences and structural shifts away from multi-story units and flats towards fully detached dwellings. The loss of international students is a key factor behind this shift. HIA project a 40.5% decline in semi-detached, flats and unit dwelling commencements between 2019-20 and 2020-21 from 2,988 to 1,779 dwellings. These then decline a further 7.7% in 2021-22 to 1,642 dwellings. Unlike detached houses which bounce back to 2018-19 levels in 2021-22, semi-detached, flat and unit commencements take significantly longer to recover, only reaching 2018-19 levels in 2025-26. The HIA are predicting a much more protracted downturn in semi-detached, flat and unit commencements.

It is our view, that the HIA's forecasts are reasonable based on the analysis that they have presented. Demand for detached housing is expected to recover strongly on the back of the HomeBuilder subsidy and their assessment of a structural shift away from flats and units is to be expected.

Core Energy, in adapting the HIA forecasts to the AGN SA gas distribution network have made an additional adjustment to the residential connection numbers to smooth out the large increase in 2021-22 and large decline in 2022-23 by averaging the numbers from the two years. The reason they provide for doing this is to address significant uncertainty surrounding the timing of the new commencements and associated South Australian and Federal Government housing support schemes. Once again, ACIL Allen consider that this is not an unreasonable approach given the significant uncertainty associated with the forecasts and the unprecedented nature of the current crisis.