

July 2023

NCC 2022 modern housing provisions Impact Analysis update – Queensland housing

SUBJECT / ISSUE

The construction industry in Queensland has been seeking to delay the implementation of NCC 2022 changes on the basis of the increase of construction costs over the last couple of years.

The key figures in the Regulation Impact Analyses (RIS) for both residential energy efficiency and livable housing have been revised taking into account the increase in construction and energy costs.

KEY POINTS

Residential Energy Efficiency

- Construction costs for houses in Queensland have increased by 21%¹ over the past two years.
 - This figure is based on CoreLogic's Cost Index from July 2021 when the Residential Energy Efficiency RIS costings were developed.
 - Note, this is a conservative number because it combines the overall national cost increase in 2021-2 with Queensland's cost increase in 2022-23.
- By simply multiplying the present value cost in the RIS by this percentage, the capital cost of the provisions increases to \$859 per house in Queensland.
 - This still produces net benefit for Class 1 dwellings in Queensland at the household level because the total benefits were \$876.
- During the same period, electricity prices increased in Queensland by 31.07%, which increases the benefits of the provisions.
 - This figure is based on Southeast Queensland electricity network Default Market Offer.
- The table below provides the updated costs and benefits of the provisions based on the above increases in the cost of construction and electricity in Queensland.
 - Note, this is not an accurate re-analysis of the RIS numbers, but nevertheless provides a basic representation of the affect of these cost increases.

¹ CoreLogic Construction Cost Index, July 2023, <https://www.corelogic.com.au/news-research/news/2023/growth-in-australian-construction-costs-lowest-since-2020>; July 2022, <https://www.corelogic.com.au/news-research/news/2022/no-relieve-for-home-builders-as-construction-costs-continue-rising> and April 2022, <https://www.corelogic.com.au/news-research/news/2022/construction-costs-rising-at-the-fastest-annual-pace-since-introduction-of-the-gst>.

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Distributional impacts for houses built in Queensland in 2023

| | Capital costs | Energy bill savings | Other benefits | Net impact | Household BCR |
|------------------------|---------------|---------------------|----------------|------------|---------------|
| RIS figures | \$710 | \$790 | \$86 | \$166 | 1.23 |
| Updated figures | \$859 | \$1035 | \$86 | \$262 | 1.31 |

- The RIS included an estimated impact of NCC 2022 changes on median house prices.
- In most recent CoreLogic home value index (June 2023), the Brisbane median house price has increased to \$725,397 and the regional Qld median house price has increased to \$572,866.
- Applying the updated capital cost to these updated median house prices, the percentage increase is around 0.15% for Brisbane and around 0.12% for regional Qld (refer table below).
 - Note, the capital cost is likely to vary between Brisbane and regional Qld, but this data is not available.

Impact of the residential energy efficiency provisions on 2023 median house prices in Qld

| | Location | Original median house price | Updated median house price incl. NCC 2022 | % increase due to NCC 2022 |
|------------------------|--------------|-----------------------------|---|----------------------------|
| RIS figures | Qld | \$568,000 | \$568,710 | 0.13% |
| Updated figures | Brisbane | \$725,397 | \$726,256 | 0.12% |
| | Regional Qld | \$572,866 | \$573,725 | 0.15% |

Livable housing

- Since the development of the livable housing RIS (which used figures from June 2020), residential construction costs in Queensland have increased by [42.9732.9%](#).
 - This is based on the ABS Producer Price Index.
- The RIS estimated that the cost of the provisions would be \$3874 per dwelling across Australia (a state and territory breakdown was not carried out).
- Applying the Queensland increase in construction costs to this figure, increases the cost per dwelling to [\\$5,539,514.9](#).
- The estimated benefits will also increase during this period as the avoided costs (e.g. avoided home modifications) were greater than the original RIS figures.
 - However, the increase in benefits was less than the increase in costs.

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- Applying the updated capital cost to these updated median house prices, the percentage increase is around 0.15% for Brisbane and around 0.12% for regional Qld (refer table below).
 - Note, the capital cost is likely to vary between Brisbane and regional Qld, but this data is not available.

Impact of the livable housing provisions on 2023 median house prices in Qld

| | Location | Original median house price | Updated median house price incl. NCC 2022 | % increase due to NCC 2022 |
|-----------------|--------------|-----------------------------|---|----------------------------|
| RIS figures | Qld | \$568,000 | \$571,874 | 0.68% |
| Updated figures | Brisbane | \$725,397 | \$730,546 \$730,936 | 0.76% |
| | Regional Qld | \$572,866 | \$578,015 \$578,405 | 0.96% |

Commented 22 : The accessible house RIS did not include the median house value. This approach was included in the energy efficiency RIS.

Combining the residential energy efficiency and livable housing provisions

- The tables below show the combined impact of the construction cost increases on the capital costs and median house prices.

Capital cost of the residential energy efficiency and livable housing provisions on houses built in Queensland in 2023

| | Residential energy efficiency | Livable housing | Total |
|-----------------|-------------------------------|---------------------------------|---------------------------------|
| RIS figures | \$710 | \$3874 | \$4584 |
| Updated figures | \$859 | \$5449 \$5449.539 | \$6399 \$6399.008 |

Impact of the residential energy efficiency and livable housing provisions on 2023 median house prices in Qld

| | Location | Original median house price | Updated median house price incl. NCC 2022 | % increase due to NCC 2022 |
|-----------------|--------------|-----------------------------|---|----------------------------|
| RIS figures | Qld | \$568,000 | \$572,584 | 0.81% |
| Updated figures | Brisbane | \$725,397 | \$731,405 \$731,405.795 | 0.87% |
| | Regional Qld | \$572,866 | \$579,264 \$579,264.874 | 1.19% |

s22

From: Rake, Gary
Sent: Tuesday, 20 August 2024 11:04 AM
To: s22
Subject: FW: s22 I - NCC 1-3 per cent calculation [SEC=OFFICIAL]

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Communications

OFFICIAL

OFFICIAL

From: Rake, Gary
Sent: Tuesday, September 19, 2023 3:51 PM
To: s22 External Professional s22
s22
Subject: FW: s22 - NCC 1-3 per cent calculation [SEC=OFFICIAL]

G'day both,

Using the same updated calc's as we provided in July...I have given the following reply to the s22 today.

s47C

Rgds, G

OFFICIAL

From: Rake, Gary
Sent: Tuesday, 19 September 2023 3:29 PM
To: s22
Subject: RE: s22 - NCC 1-3 per cent calculation [SEC=OFFICIAL]

G'day s22

Here is a response that can be attributed to me.

Attributable to Gary Rake, Chief Executive Officer, Australian Building Codes Board:

“The Australian Building Codes Board analysed the average costs and benefits of the improved Residential Energy Efficiency and Livable Housing provisions as part of preparing the 2022 update of the National Construction Code. We have also updated those original values to reflect costs in 2023.

Our original assessment put the average cost increase for houses in Queensland at \$4,584, against an average capital cost of \$316,400 at that time. That was a 1.45% increase.

Our updated 2023 assessment allows for price increases over the past two years and brings the current average cost of these reforms up to \$6,008. With an updated average construction cost of \$366,120, this is a 1.64% increase.”

[END]

Rgds, G

Gary Rake

Chief Executive Officer & Head of Division
Australian Building Codes Board

Gary.Rake@abcb.gov.au

s22



OFFICIAL

From: s22
Sent: Tuesday, 19 September 2023 12:51 PM
To: Rake, Gary <Gary.Rake@abcb.gov.au>
Subject: s22 - NCC 1-3 per cent calculation

CAUTION – External Email: This email originated from outside the department. Make sure you trust this sender before opening any links or attachments. If you think this is an attempt at Phishing, please report by clicking the **Report Phishing** button above.

Afternoon Gary,

The NCC changes are once again circulating the news on today's announcement QLD will be delaying energy efficiency code adoption to May 2024.

A couple of months ago I was speaking with s22 and she said the ABCB had access to how the 1-3 per cent price calculation was achieved.

We've been told this calculation is at the extreme low end of the scale but I'm hoping to show Queenslanders what they may be able to pay compared to/instead of the building industry's calculation of at least \$20,000 (some saying up to \$70,000).

I think it's important given that s22 has really pushed this 1-3 per cent messaging and people are confused as it is at odds with builders' calculations, that we can show people that there is a cheaper option.

Is the ABCB able to provide us with this? I have already asked s22 office but he has pointed me in your direction.

Please call me anytime to discuss. I'm on s22

I will also send this email to s22

Kind regards,

s22

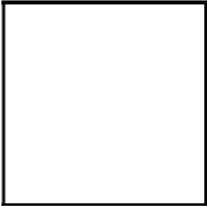
Reporter

s22

s22

We acknowledge the Traditional Custodians of the land in all states and territories on which we work and report. We pay our respects to Aboriginal and Torres Strait Islander Elders past and present, and honour their history, cultures, and traditions of storytelling.

s22



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ABCB Input to QB23-000073

Livable housing

- Since the development of the livable housing RIS (which used figures from June 2020), a percentage of residential construction costs in States & Territories is calculated based on the ABS Producer Price Index (June 2020 – March 2023).
- The RIS estimated that the cost of the provisions would be \$3874 per dwelling across Australia (a state and territory breakdown was not carried out). Please note it is not required for each new dwelling to apply all livable housing requirements. The per dwelling cost is a ballpark figure.
- Applying the percentage increase in construction costs to this figure, the adjusted cost per dwelling in States and Territories is shown in the table below:

Percentage increase June 2020 – March 2023 and per dwelling costs adjusted

| S&T | % increase ¹ (June 2020 to March 2023) | Applying % to per dwelling cost |
|-----|---|---------------------------------|
| NSW | 31.67% | \$5,101 |
| Vic | 27.62% | \$4,944 |
| Qld | 42.97% | \$5,539 |
| SA | 40.48% | \$5,442 |
| WA | 46.47% | \$5,674 |
| Tas | 40.53% | \$5,444 |
| NT | 12.21% | \$4,347 |
| ACT | 34.82% | \$5,223 |

• The estimated benefits will also increase during this period as the avoided costs (e.g. avoided home modifications) were greater than the original RIS figures.

- However, the increase in benefits was less than the increase in costs.
- Applying the adjusted cost per dwelling to median house value, the percentage increase due to NCC 2022 is shown for major capital cities and regional areas in **Table Impact of the livable housing provisions on 2023 median house values** (see next page).
 - Note, the capital cost is likely to vary between major capital cities and regional areas, but this data is not available.

¹ This is based on the ABS Producer Price Index: <https://www.abs.gov.au/statistics/economy/price-indexes-and-inflation/producer-price-indexes-australia/mar-2023#data-downloads>.

Impact of the livable housing provisions on 2023 median house value-dwelling

| | Location | Median house value² | Increased costs per dwelling | Updated median house values incl. NCC 2022 | % increase due to NCC 2022 |
|------------|-----------------|---------------------------------------|-------------------------------------|---|-----------------------------------|
| NSW | Sydney | \$1,073,924 | \$5,101 | \$1,079,025 | 0.47% |
| | Regional NSW | \$695,131 | \$5,101 | \$700,232 | 0.73% |
| Vic | Melbourne | \$762,537 | \$4,944 | \$767,481 | 0.64% |
| | Regional Vic | \$561,890 | \$4,944 | \$566,834 | 0.87% |
| Qld | Brisbane | \$725,397 | \$5,539 | \$730,936 | 0.76% |
| | Regional Qld | \$572,866 | \$5,539 | \$578,405 | 0.96% |
| SA | Adelaide | \$663,136 | \$5,442 | \$668,578 | 0.81% |
| | Regional SA | \$373,632 | \$5,442 | \$379,074 | 1.44% |
| WA | Perth | \$588,454 | \$5,674 | \$594,128 | 0.96% |
| | Regional WA | \$435,758 | \$5,674 | \$441,432 | 1.29% |
| Tas | Hobart | \$651,187 | \$5,444 | \$656,631 | 0.83% |
| | Regional Tas | \$505,528 | \$5,444 | \$510,972 | 1.07% |
| NT | Darwin | \$492,081 | \$4,347 | \$496,428 | 0.88% |
| ACT | Canberra | \$830,217 | \$5,223 | \$835,440 | 0.63% |

² Median house prices are based on CoreLogic Home Value Index: <https://www.corelogic.com.au/news-research/news/2023/home-value-index-shows-housing-values-increase-in-june,-but-the-pace-of-growth-has-slowed>.

- The cost of a project home is lower than the home value index and the percentage increase in the cost to build a project home is slightly higher as shown in the table for project homes in major cities.

Percentage increase due to NCC 2022 for project homes³

| Major cities | Project home cost | Cost incl. NCC 2022 | % increase due to NCC 2022 |
|--------------|-------------------|---------------------|----------------------------|
| Sydney | \$415,167 | \$420,268 | 1.2% |
| Melbourne | \$396,896 | \$401,840 | 1.2% |
| Brisbane | \$366,035 | \$371,574 | 1.5% |
| Adelaide | \$251,238 | \$256,681 | 2.1% |
| Perth | \$278,450 | \$284,125 | 2.0% |
| Hobart | \$330,071 | \$335,515 | 1.6% |

³ Percentage increases are calculated based on average size of all home (ABS) multiplied by Rawlinsons project home \$/m².