Construction Advisor The Quarterly

by Wolf & Bear Services

DECEMBER 2018

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#1 FOR CONSTRUCTION NEWS, INFORMATION AND RESOURCES

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by Wolf & Bear Services

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The Quarterly December 2018

Highlights

- Engineering Construction whilst down 0.8% in real terms for the Quarter are still trending upwards up 5.8% on the corresponding quarter in 2017. However much of this softness can be attributed to volatile weather which impacted many major infrastructure projects. The pipeline remains very strong with major infrastructure works on the East Coast only starting to get underway.
- News during the quarter highlighted a number of the issues facing the Engineering Construction sector with personnel (particularly specialists in rail and tunnelling) and concrete supply both presenting as major issues rising in 2019.
- Similarly, Non-Residential Construction is slightly off QoQ (-0.9%) but up 2.6% YoY. This is a reflection of the economic uncertainty in 2018 with energy prices, environmental legislative frameworks and political instability all contributing to a reluctance in investment.
- Despite all of the headlines regarding a 'housing property crisis', this has not yet flowed through to construction activity with Residential continuing its upward trend. Work done was up 0.7% QoQ and 5.5% YoY. This report highlights the contrasting activity between markets around the country with vastly differing conditions in the sector.
- Activity aside, it hasn't been a good end to the year for constructors commercially. RCR Tomlinson entered administration, Watpac was purchased by Besix, Lendlease announced a \$350m write-down and Acciona announced significant losses on the Sydney Light Rail project. To add to the pain, shares in the broader sector have had a very soft year amid concerns about the residential sector in 2019.
- If there is a proverbial 'gold-rush' going on, it is a dead-heat between the Infrastructure boom on the East-coast and development in renewable energy. We have discussed at length the major Engineering Construction activity driven primarily by Melbourne and Sydney, but equally, many states have unprecedented pipelines of renewable energy projects. Whether it is 'sun-blessed' or 'wind-swept', the lucky country is cashing in on its natural resources.
- If nothing else, 2019 is going to be interesting. Engineering Construction will boost on based on the projects currently breaking ground. Non-Residential Construction should return to positive trend despite the fall in office construction as the cycle turns and S&I investment returns. Finally, Residential Construction will be the 'one' to watch how deep and how widespread will the contraction be? We see very conflicting data across different markets and measures and the country responds to the macro-factors influencing the market.



As 2018 draws to a close it is time to pause and reflect on an interesting year in construction activity in Australia. After our initial launch of The Quarterly in September, we've received great feedback leading us to expand our coverage of key sectors such as residential construction and renewables. We've also brought together key major project lists for each state.

Q2 FY19 and 2018 in its entirety will be recognised as a turbulent time in construction in Australia. The narrative of the transition economy, from the mining boom to the infrastructure economy is mostly complete. The east-coast infrastructure boom is generating issues of its own with early signs of skill shortages, materials shortages and an overcrowded development pipeline. Making these problems more acute is a rejuvenated mining industry with new projects and increased exploration.

It has also been a year of contrast and contradictions. Amidst an infrastructure boom, cheap capital, record low interest rates and a growing economy, some big industry names have come unstuck. Probably the biggest name to fall was RCR Tomlinson, entering administration in November blaming commercial contracts on a handful of solar farms in Queensland. Next we have Lend Lease with a \$350m write-down related to infrastructure projects (notably NorthConnex in Sydney) blaming general wet weather - ironic amid the states ongoing drought crisis. Constructor Watpac has been scooped up by Belgian giant Besix. Finally, we have Acciona, predicting a \$1Bn loss on its Sydney Light Rail project due to unplanned complications relating to Ausgrid's utilities on the project. Just to round out the market wrap, materials leaders James Hardie,

Boral and CSL all look to book 15%-30% losses on the ASX for the year. It is hard to not scratch one's head and wonder how a year of supposed industry regrowth has claimed so many scalps.

With any reflection, we also look to the future and what the industry is facing in the year to come, and it is a year of uncertainty and challenges on the horizon. It is widely accepted that the Australian housing market is entering a downward pricing cycle however this doesn't necessarily translate to a relative downturn in construction particularly as existing/ongoing projects that were long ago committed are still in the works. Infrastructure and Engineering Construction remain in boom times with a strong pipeline leading out until 2021 and beyond. Mining is showing signs of life with some significant projects already announced and committed to come out of the ground in 2019. Despite some hiccups (see RCR Tomlinson), renewables still have a very strong development pipeline across all sub-sectors wind, solar, hydro.

So, it seems that 2019 will be a year of contrast, some sectors in construction will be rosy, some may struggle. It will be a year of positioning, negotiation and possibly consolidation. In the wake of some of the corporate twists and turns in 2018, the new year will bring a lot of soul searching when it comes to commercial risk, pricing and sector exposure. We are likely to see increasing pressures on resources - both personnel and materials, this will present significant challenges for projects and we can expect blow-outs in both cost and delivery times. Organisational Wellness too is set to be a hot topic in 2019, with an ever-increasing focus on employees health.

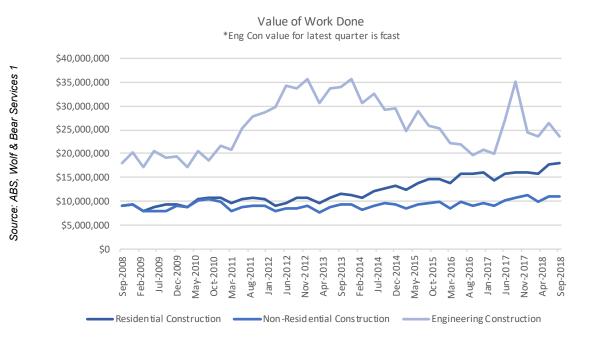
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National

The national construction landscape continues to look positive despite some economic headwinds and challenges. Engineering Construction continues to ride the East-Coast infrastructure boom and is supported by some renewed activity in the mining sector. Widespread reporting of a residential market 'crash' or at best 'downturn' haven't yet tangibly been reflected in the data. There is no doubt that the Sydney and Melbourne markets are being impacted by economic forces but this is not necessarily reflected in other markets. Non-Residential construction continues to slowly build although at modest levels.

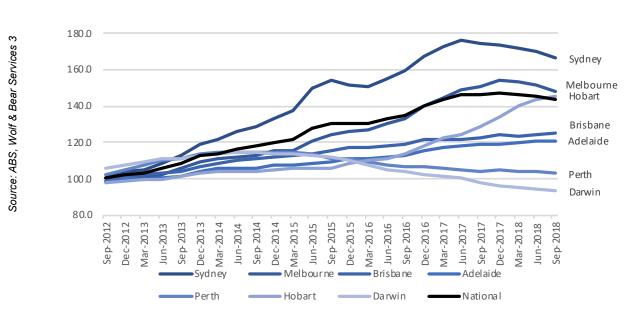






In state and territory terms, NSW and VIC continue to grow strongly overall as QLD steadily builds its recovery. WA is showing signs of a turn-around with a second round of investment in mining projects. On a smaller scale, SA is steadily growing to levels exceeding those of the GFC whilst NT is facing a number of challenges as 'mega-projects' enter production and its development pipeline is starting to look a little sparse.

Behind the headlines of a 'property crash' it is important to focus on the real data. The fundamentals that drive property; interest rates, employment, the broad economy and population growth all remain strong. It is the variables in the equation that are currently driving the market; foreign investment, speculation, available capital and importantly, sentiment. Many respected economists and forecasters such as; UBS, Corelogic and Deloitte all predict price falls of 15%-20% in housing however as with any broad forecast we must read between the lines. A generalised price fall has to be looked at in perspective – a 20% fall when prices have risen by 200% over 10 years is relatively not such a big fall at all. Equally, the market has already corrected by 10% in many areas meaning that the modelling suggests only a further slight easing to come. Finally, in any market, there are pockets of opportunity – sure, some assets have been over-priced but equally, there are always others that have been undervalued or are seeing transformation.

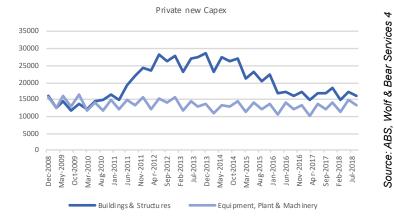


Residential Price Index: Select Cities

The differing trends in residential price indexes clearly show the divergent fortunes in markets across the country. Sydney was the first to peak in mid-2017 with Melbourne turning at the end of that year. Brisbane and Adelaide have quietly been trending upward at modest levels whereas Perth and Darwin have been in decline for a number of years as the mining boom's intervention is still being shaken out. The standout, of course, is Hobart that has faced down the government and financial institution interventions to power upwards.



Private new Capital Expenditure in the latest reported period remains subdued across all classifications however this is more likely to be a return to the longterm average after the super-sized investment between 2011-2016 on the back of the mining/LNG investment.

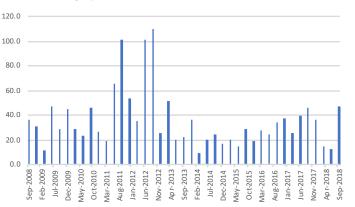


PPI output for the construction industry continues to trend upwards however the latest reported quarter for the first time in 4 years indicated a downward tick in the housing sector. Given the expected contraction in the housing market in 2019 it will be interesting to see if this develops into a more substantial decrease. Building construction is likely to continue to rise as the afore mentioned shortages in labour and materials starts to bite.

As flagged in the September Quarterly, working days lost to Industrial Action has jumped on the back of the action taken at Alcoa in WA. An agreement between the company and the AWU say workers end the action in October and unless there is another significant action the overall numbers should return to record lows in the next reporting period. Construction PPI: Output



Working Days Lost Due to Industrial Action: All Industries ('000s)



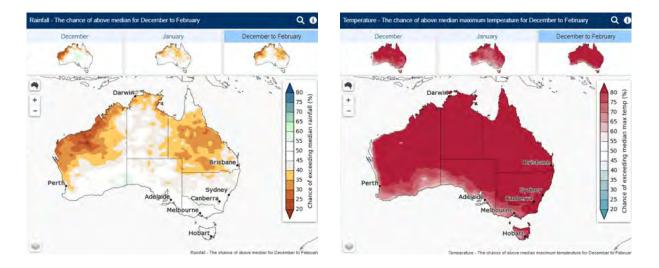
Source: ABS, Wolf & Bear Services 6

Source: ABS, Wolf & Bear Services 5



It may seem that predicting the weather recently is more like throwing darts in the dark – volatile weather patterns are in equal parts delivering drought, floods, storms, scorching heat and wintery blasts. It is not without some irony as NSW suffered through its drought that Lendlease identified 'wet-weather' as an issue on the NorthConnex project during the past quarter. Regardless, it is worth noting the long term forecasts from the Bureau.

In short, it's going to be hot. The vast majority of the country has a high likelihood of exceeding median maximum temperatures with only the mid-south coast and South-West Tasmania to avoid the heat. There is however some variation in projected rainfall as parts of the Pilbara and central Queensland are predicted to have much drier than average quarter.



Source: Bureau of Meteorology 1



The Quarterly December 2018

New South Wales

Work done in NSW continues to be driven by Engineering Construction and Residential Construction however storm clouds are brewing for both sectors. Growing concerns about a pricing correction in housing is threatening the Residential pipeline whereas the Engineering Construction pipeline, whilst strong, keeps hitting cost blow-outs and delays.

Residential Construction continues to outpace Engineering Construction in the latest reported quarter however it is

Value of Work Done *Eng Con value for latest quarter is fcast

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\$9,000,000 Source: ABS, Wolf & Bear Services \$8,000,000 \$7.000.000 \$6,000,000 \$5,000,000 \$4,000,000 \$3,000,000 \$2,000,000 \$1,000,000 \$0 Au g-2016 Jun-2017 Mar-2016 Jan-2017 Sep-2018 Jan-2012 Jun-2012 May-2015 Oct-2015 Nov-2017 /ay-201 Oct-2010 Mar-201: Au g-2011 Jul-2014 Dec-2014 Feb-201 Non-Residential Construction Residential Construction Engineering Construction

expected that as the pricing correction hits the development pipeline will turn, and Engineering Construction will again take over as the primary driver of work done in the State. Quarter-on-quarter: Residential Construction grew 4.3%, Engineering Construction grew 4.9% and Non-Residential Construction fell 2.0%

Engineering Construction in the state is dominated by NorthConnex (Sister project to WestConnex) and the Sydney Light Rail, unfortunately, neither has been without controversy. In November, contractor Acciona faced a State Parliamentary Enguiry into the project and announced that it faced a \$1Bn loss due to confusion over the requirements of power company Ausgrid's requirements for services related to the project. Company MD Bede Noonan indicated that the company was unaware of the requirements during the tender process and "had those Ausgrid guidelines been provided to our consortium in early February then we would not have signed the contracts and this project would not have proceeded in the manner it has". Blame aside, the project is now predicted to be delivered in May 2020 instead of March 2019 and at a far greater cost than anticipated.

NorthConnex also has had its fair share of controversy. The project contractor LendLease announced in November a \$350m writedown largely due to the project and associated wet-weather. The announcement resulted in a >30% sell-down in the companies share price from which it is yet to recover. The project was also tarred by a workplace incident in October when a worker was struck by a 1 tonne cutting blade requiring hospitalisation for a crushed leg.



Barangaroo without the view? Developers Crown and LendLease have been in court with the Barangaroo Development Authority as they challenge the next phase of the development. The plaintiffs accused the authority of planning to build additional towers which will block their views of the harbour and the iconic bridge in breach of their original contracts. At the eleventh hour prior to publication, this spat has been resolved with the court ruling in favour of Crown & Lendlease.

Next, we must face up to the reality of the Residential Construction sector. This, of course, is not restricted to the Sydney market, regardless, it is apparent that the price bubble has reached its zenith – at least for the moment. A combination of interventions by governments (both state and federal), plus tightened lending standards in the financial industry have 'pulled the hand-brake' on investment in the industry. So, what does this actually mean for



the residential construction sector, are we about to crash or are we going to see a stabilisation? We have a multitude of projects that were financed and committed prior to any price correction – these projects will still be delivered (mostly). Whilst it is still early days, even authorities such as APRA have conceded that some of these restrictions have gone too far and may relent on some of the lending ceilings/standards applied.

Residential prices are undeniably in decline but it is important to keep things in perspective. The trend applied equally to housing and attached dwellings from their June 2017 peak. Overall, the price index fell 1.9% in the September Quarter versus -4.4% YoY. Houses fell 2.1% QoQ versus a 4.9% fall YoY and Attached dwellings -1.3% QoQ and -3.3% YoY.

If we look at the building approvals numbers for NSW we can see that these actually peaked around the middle of 2016 and have been falling since. This is driven primarily by the non-house dwelling construction market. Housing approvals have remained at stable levels for the same period. What does this mean for the market? We are likely to see this downward trend in apartments/ units continuing in the current market as prices decline and concerns about surplus stock continue to drive market



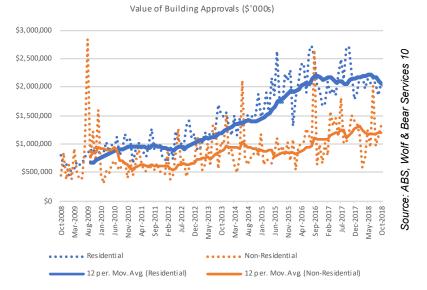
sentiment. Up to the latest reporting period, housing has remained stable and will react more slowly to the shift in confidence. The reason for this is that the attached dwelling market is far more exposed to investors and therefore speculation whereas in a falling market house owners are more likely to hold their asset and choose to either renovate or attempt to ride-out the shifting market cycle.



Turning our attention to residential versus non-residential, we can similarly see the shift in value approved as residential turns after its super-cycle peaked. In contrast to this, non-residential construction continues to trend upwards driven by justice, defence, offices and other social & institutional projects.

Drilling further into non-residential construction, we can see that the growth is primarily driven by the 'other' category with Commercial Building remaining steady and Industrial actually showing some early signs of a downward trend.

scale



Non-Residential Construction by Sector \$4,193,280 Value Building Approvals (\$'000s) log \$1 048 320 \$262.08 \$65.520 \$16.380 Oct-2010 Jun-2016 Jun-2018 ⁻eb-2010 ⁻eb-2013 Jun-2014 Feb-2017 Jun-2017 Feb-2018 Oct-2009 Jun-2010 Jun-2011 Oct-2017 eb-2009 un-2009 eb-2011 eb-2012 Jun-2012 **Dct-2012** Jun-2013 Oct-2013 ⁻eb-201⁴ **Dct-2014** ⁻eb-2015 Jun-2015 **Dct-2015** eb-2016 **Dct-2016 Dct-2018 Dct-201** •••••• Commercial Buildings • • • • • • Industrial Buildings •••••• Other Non-residential 12 per. Mov. Avg. (Commercial Buildings) 12 p er. Mov. Avg. (Industrial Buildings) 12 p er. Mov. Avg. (Other Non-resid ential)

What does this actually mean for the industry? In short, it's about to get crowded. As residential contracts, those players will seek to back-fill that revenue by moving into the non-residential construction space. For some this will be an easy transition (cabinet fitters, chippies, sparkies etc...) but for others the change will be difficult as a lack of proven experience will be a barrier to entry.



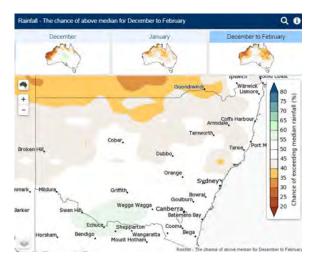
Source: ABS, Wolf & Bear Services 11

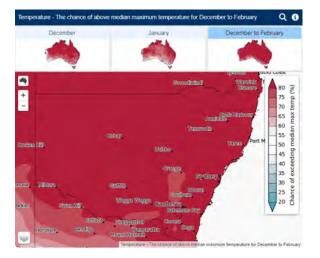
Renewables in NSW is experiencing something of a boom with the state government designating three key development zones – South-West (around Hay), Central-West (Dubbo) and New England (Armidale). Projects across wind and solar are set to deliver upwards of 4750MW of power to the grid. The current development pipeline includes around 12000MW in either seeking approval or approved status.

So to the risks... the crystal ball is very clouded. The state will deliver on NorthConnex, Light Rail, Badgerys Creek and Woolgoolga to Ballina. With a state election due in March 2019, expect the Engineering Construction pipeline to only get stronger. Residential is the most obvious sector



at risk, depending on the depth and longevity of the price correction, works could remain subdued for some time. Contrasting doom and gloom is the longer-term development of NSW and Sydney, Badgerys Creek is guaranteed to deliver a shift in the demographic and nature of Western Sydney. The airport will inevitably require additional industry, warehousing and transport infrastructure and this will have a flow on effect on the residential market in the region.





Source: Bureau of Meteorology 2

There seems little likelihood of the drought breaking in NSW in the coming quarter with the long-term forecast if anything edging towards lower than median falls for the state. The North-West in particular is predicted to remain drier than normal however other areas may get some reprieve. On the other-hand, no-where in the state is forecast to escape the heat as very high chances of exceeding median temperatures are forecast.

Projects we're watching:

WestConnex Light Rail Badgerys Creek Woolgoolga to Ballina

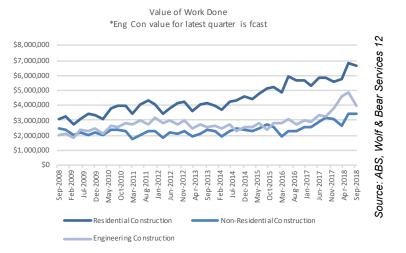


The Quarterly December 2018

Victoria

The latest quarter witnessed a state election with the usual election promises for spending in public services and infrastructure. Ultimately, the Labor party succeeded in seeking re-election and this has given us a relatively secure view of the development pipeline for the next 3-4 years.

Victoria as a state is something of an enigma – a strong infrastructure project pipeline supported by government spending contrasts with a volatile residential market which despite falling



asset prices is countered by government releasing satellite land for development. It can't be both, but yet it is. Residential Construction will continue, prices may be less than their lofty highs, but population growth and broader economic factors suggest that demand is still there in the market, it will just become more selective.

Projects such as the North-East-Link are now locked-in (it actually was regardless of the election outcome), spending in Health, Justice, Education and Services will continue, as they always have. Actually, the election, and its implications are largely unremarkable for the construction landscape... it's business as usual. The only real impacts from the election are; a, slightly, smaller justice centre being built in the South-West of Melbourne, more level crossing removals, additional road remediation works and some additional spending in regional Victoria in health.

Let's be honest, the Residential Construction boom is going to shift downwards – there are precious few indicators that would disagree with this assessment. So the primary driver of construction activity will now turn but what does this mean for the construction industry as a whole?

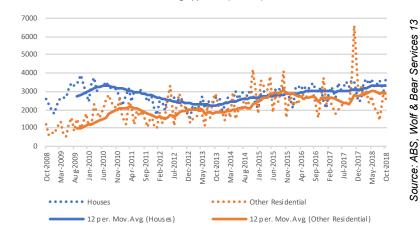
Well, Engineering Construction will persist, and grow, Non-Residential Construction will continue to grow (particularly on the back of S&I promises from the government) and Residential Construction will continue (not crash). Nationally, Victoria as a State is probably the most likely to emerge from any broader economic uncertainty with a positive outcome. Looking further into our crystal ball, the massive residential expansions of the last few years (particularly in the South-West and South East of Melbourne) are still lagging in terms of facilities and services which will most likely lead to increased investment in health, justice and commercial



projects. Despite any volatility in residential prices, construction will not come to a grinding halt given the strength of the broader economic drivers. We can already see some shift in demand from high-density development to medium-density projects.

In contrast with the NSW residential construction cycle, VIC has been more measured in its approvals. Non-housing approvals have been surprisingly subdued and almost half

Building Approvals (number)



that of the peak in NSW. Housing approvals too have been remarkably stable despite the surging prices registered over the last few years.

Although the quarter has witnessed significant softening in both prices and clearance rates, we are yet to see this tangibly reflected in the approvals numbers.

The property price index for Melbourne is markedly different from that in Sydney. The Melbourne market didn't see the uniform surge across both housing and attached dwelling seen in the northern city with attached dwellings rising modestly in comparison. The peak too differs with the Melbourne market turning in the March 2018 quarter versus June 2017 in Sydney.

Overall the market index moved -2.6% QoQ and -1.5% YoY. Housing 3.0% QoQ and -2.1% YoY and attached dwellings -1.1% but surprisingly +0.7% YoY.

Residential Property Price Index: Melbourne

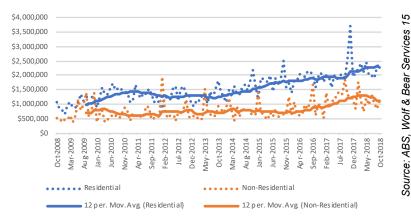


So, let's step back from the headlines and the buzz and actually look at the Residential Construction market drivers. There are macro factors such as foreign investment restrictions, changes to negative gearing and tighter lending standards. Then there are micro-economic factors which are very different between Sydney and Melbourne. Sydney responded to a decade of under-investment that Melbourne did not have, Sydney suffers from geographic limitations in its spread that Melbourne does not, Melbourne has overtaken Sydney as a migration destination. When it comes to the shift in residential pricing... it's almost like Melbourne caught Sydney's cold... The only real question is how long the cold will last?

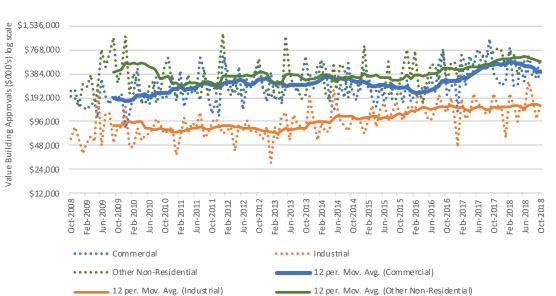


As with the afore mentioned approval numbers, Residential remains trending upwards in the latest data in spite of the recent market commentary. In contrast, Non-Residential has actually surprisingly taken a negative trend. This should, however, be a short term trend as the recent election has delivered a renewed pipeline of spending in health, justice, education and community spending.

Value of Building Approvals (\$000's)



In Non-Residential construction, the downturn in Commercial is largely driven by the office sector which saw unprecedented peaks between September 2016 and July 18. Retail, Trade and Wholesale construction approvals have been largely stable since early 2017. The Industrial sector has primarily been driven by activity in the Warehousing sector – not surprising given the entrance and expansion of players such as Aldi, Costco, Lidl and Amazon. In response to these market challengers traditional retailers and providers such as Coles, Woolworths et. al. have equally invested significantly in their logistics infrastructure and capabilities. This construction activity saw a prolonged rise from 2012 but now appears to have peaked with approvals falling significantly since February 2017, levels now are equal to approx. those in late 2014.



Non-Residential Construction by Sector

The downward trend in 'Other' Non-Residential Construction is broadly attributed to the likes of the Education, Justice and Health sectors however this is likely to strengthen as the promises of the election cycle flow through the approvals pipeline. Already we have promises of a new prison in the South West of the state and significant investment in regional health.

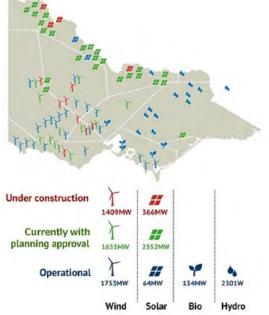


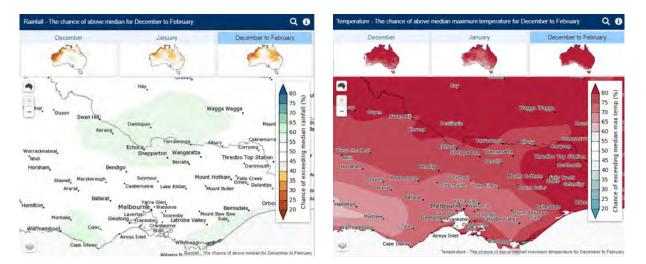
Source: ALP Victoria 1

Turning our attention to renewables, Victoria is fast forging its reputation as the renewable energy capital of Australia. Capitalising on its geographic advantages, the South-West of the state is heavily leaning on wind energy, the East on hydro and the northern border or solar.

Similar to NSW, Victoria is enjoying a boom in renewable project development. Wind power generation is set to almost triple with comparable capacity in both 'under construction' and 'planning approved' status versus existing. The biggest shift however will be in solar with 366MW under construction compared with 2552MW in planning approved status.

Major wind-farm projects currently either in development or about to get underway include; Cohuna, Carwarp, Winton, Mortlake South, Berrybank and Dundonnell.





Source: Bureau of Meteorology 3

Victoria relative to the rest of the country is looking relatively mild in the long-term forecasts. Rainfall should be close to normal/median although some riverina areas in the North may experience slightly drier conditions. Unlike the rest of the country, the temperature forecasts are only slightly likely to exceed the median with cooler systems coming in from the Bight to take the edge off.

Projects we're watching:

Level Crossing Removals North-East Link Metro Tunnel Westgate Alternative Tulla Widening Berrybank wind farm Dundonnell wind farm New justice centre north of Geelong

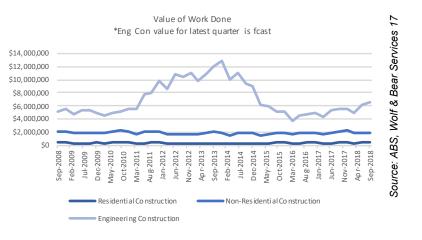




Queensland

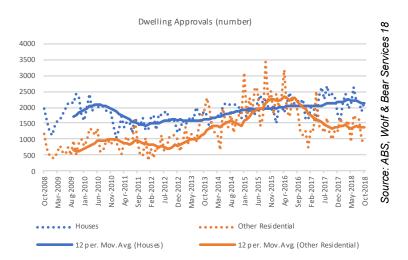
THE NEXT MEGA PROJECT... THE Slightly smaller super project, a major mining project... just another project. In a word. Adani.

The Carmichael Coal project will now go ahead, but with a far more modest scale of \$2Bn compared with the early \$16.5Bn project plan. Victims of the shrinking project include significant rail infrastructure and mine infrastructure components.



However, despite the headlines and the media coverage, Adani is not the only project in Queensland and it is far from a make-or-break player in the construction industry for the state. Engineering Construction projects such as the: Bruce Hwy Upgrade, Gateway Motorway, Warrego Hwy, Inland Rail and Cross River Rail are all promising a relatively strong pipeline of works in coming years. As the trend graph shows, Eng-Con is back on the rise, but unlikely to reach its previous levels in the medium term.

Dwelling approval numbers in Queensland have mimicked those trends seen in NSW although coming off a relatively lower base. The peak of the non-housing development occurred in late 2017. Prior to this, the industry saw a long growth period from around 2012 – 2017 driven both by development in Brisbane and also renewed interest in the Sunshine Coast/ Gold Coast regions particularly in light of the Commonwealth Games held in 2018.





In contrast with the shifting number of residential approvals, value of approvals has remained largely stable since late 2016. There are indications that this will start to fall on the back of falling house prices and lower numbers of starts however. Non-Residential construction is showing some signs of entering a downward cycle led by a fall in commercial building approvals that began back in mid-2017.

Residential approvals fell 1.8% MoM in real terms and 2.7% YoY. Non-Residential approvals were down 7.8% in the October quarter and -26.9% YoY however this volatility is common in this data series.

With a relatively strong development pipeline, non-residential construction is not expected to suffer a significant downturn in the state in the medium term. Supported by a lower Australian dollar, developments in tourism, gaming, health and education should continue to contribute to the construction landscape in the state.

With all of the media coverage of a 'house price crash', the northerners must be wondering what all the fuss is about. Far from the steep declines witnessed in Melbourne and Sydney, the Brisbane residential price index continues to rise – albeit somewhat more modestly.

In comparative terms, overall prices grew 0.6%, housing was +0.8% and attached dwellings -0.2% quarter on quarter. Year-on-year overall was +1.7%, housing +2.2% and attached dwellings -0.7%.

Value of Building Approvals (\$000's) \$2.000.000 Wolf & Bear Services 19 \$1,800,000 \$1,600,000 \$1,400,000 \$1,200,000 \$1,000,000 \$800,000 \$600,000 \$400.000 Source: ABS, \$200,000 \$0 Jan-2015 Jan-2010 Jun-2010 Jul-2017 Mar-2009 Au g-2009 Nov-2010 Ap r-201: Feb-2012 Jul-2012 Oct-2013 Vov-201 Sep-2010 Dec-201 **Dct-2018** 201 201 May-201 Au g-2014 Ap r-201 ⁼eb-201 Jay-201 Sep-Mar--unl ••••• Residenti a • • • • • Non-Residential 12 p er. Mov. Avg. (Residential) 12 p er. Mov. A vg. (Non-Residential)

Residential Property Price Index: Brisbane



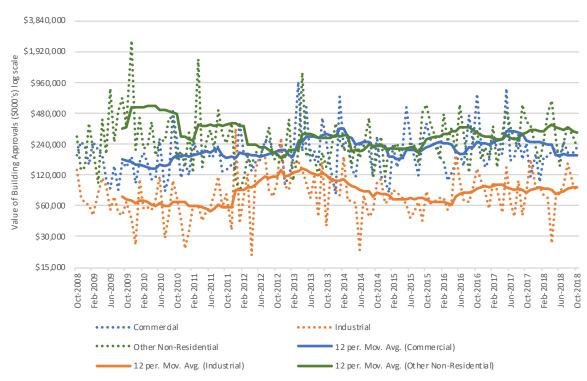
So where does this leave Queensland? Unlike other states, residential prices remain relatively stable (if not strong), attached dwelling approvals are down but are stable and housing compared with attached dwelling seems to be trundling along. This puts Queensland in an uncomfortable position; macro intervention strategies such as foreign investment laws and financial lending contraction would, in isolation, not be necessary in this market and are indeed disruptive to what otherwise should be a healthy market. Thus far, these interventions have not translated into a significant impact on the Brisbane market but time will tell.

Non-Residential Construction whilst a relatively lower driver of construction activity in the state is an important factor in the economic health. The recent dip in activity is almost entirely due to the commercial sector offsetting both Industrial and 'Other' developments in the market.



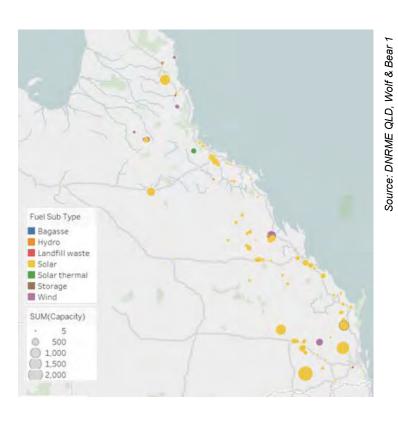
The commercial sector is primarily made up of retail, wholesale trade, transport and offices. In this case it is the offices sub-sector that has dragged on overall performance in the sector with approvals in decline since mid 2017.

Non-Residential Construction by Sector



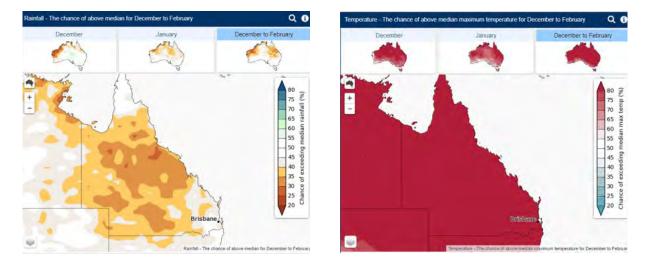
Unsurprisingly in the sunshine state, solar projects dominate the renewables landscape. Over 16,000MW of solar generation is currently in some form of proposal/development status.

As at July, there was approx. \$4.3Bn in the renewable generation pipeline with projections of an additional 2164MW connected to the grid by mid-2019 representing 21% of the states power needs. How the collapse of RCR Tomlinson and the projects it had on the books impacts on this will yet to be seen.





Queensland is looking like it is in for a hot, dry quarter. Hardly a newsflash about the northern states heading into Summer but this year is looking particularly so. Large swaths of the interior and North-East of the state are predicted to have much drier than normal conditions whilst the entire state is highly likely to exceed its median temperatures.



Source: Bureau of Meteorology 4

Projects we're watching: Adani Inland Rail Bruce Hwy Cross River Rail Warrego Hwy



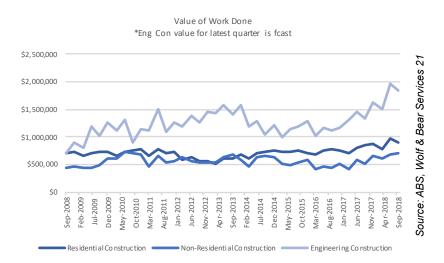
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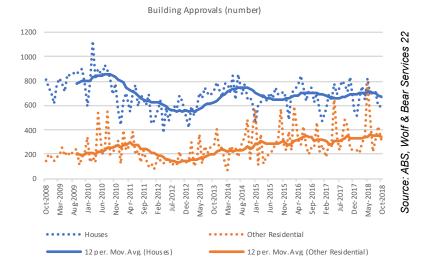
South Australia

South Australia is the surprise package of this quarter with all major construction sectors trending upwards. Primarily it is the northsouth corridor network of projects that is driving this activity. The year ends with more good news as British billionaire industrialist Sanjeev Gupta and his GFG Alliance announced a \$600m investment in the Whyalla steelworks set to deliver 2500 local jobs and a level of stability and certainty for a town that has ridden the rollercoaster of steel manufacturing for decades.

Both Residential and Non-Residential Construction have trended upwards since early 2017 as residential investment bled from the eastern capitals looking for value. Residential building approvals in the state have remained largely stable (by number) across both the housing and attached dwelling sectors.

It seems, at least to the latest data point (Oct 2018) that South Australia has avoided the sharp correction recorded in the eastern states albeit without having attracted the same surges in investment in attached dwellings in those markets.







With this combined positive growth in construction sectors, Adelaidians (much like the Queenslanders) must be scratching their heads about the headlines in the national media about doom and gloom. Indeed, with projects like the Adelaide Riverbank (former RAH site), the new national Australian Space Agency home, projected spend in defence, the Southern state has more to be positive about.

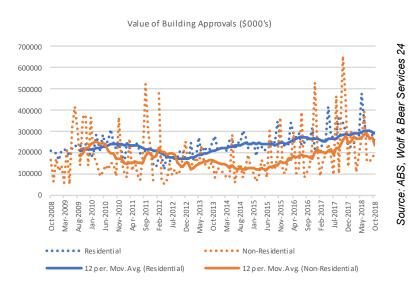
Similarly in the Adelaide residential price index, Adelaide seems to be riding the national downturn with much indifference. House prices have certainly been on the rise for 5+ years but do not mimic the negative short-term trend seen in Melbourne and Sydney.

If anything, the Adelaide market has defiantly charged on in its growth in the latest reported quarter including in attached dwellings, bucking the national trend.

Unfortunately, it seems somewhat inevitable that the Adelaide market will catch at least some of the negative pricing pressures being imposed by the macro economic changes in legislation and financial services at some point but to this point it seems that the market is somewhat insulated from the full impact of the changes.

What was surprising in the latest quarter was a sharp decline in nonresidential approval values, whether this is a once-off or signs of a more worrying trend will need to be watched over the coming months.

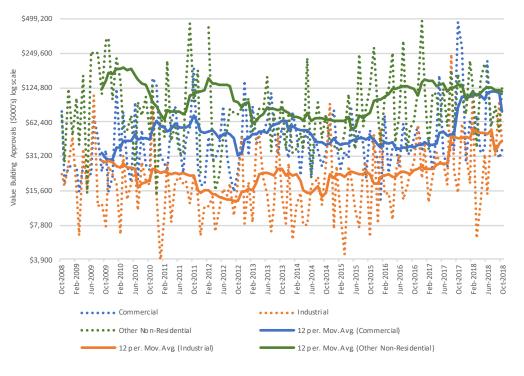


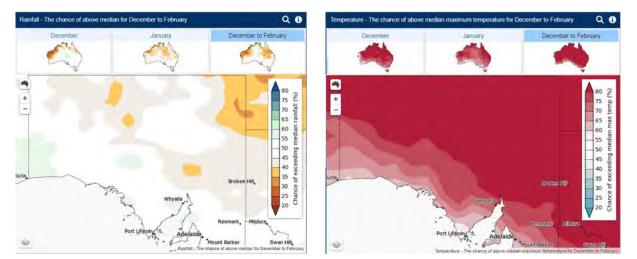


This downward tick was almost entirely driven by approvals in the Commercial sector which was in turn a reflection of falls in; retail, wholesale trade and transport building projects. Offsetting this fall was ongoing increased activity in the Industrial sector where; Factories, Secondary Production and Warehouses have all been trending upwards in recent periods. Education approvals remains subdued whereas healthcare continues on an upward cycle that commenced in mid-2017.



Non-Residential Construction by Sector





Source: Bureau of Meteorology 5

South Australia is looking at one of the milder long-term forecasts nationally with average rainfall predicted for most of the state and whilst the interior is likely to exceed the median temperature, the coast will remain much milder.

Projects we're watching: Whyalla Steel Works Adelaide Riverbank Defence spending





Western Australia

Far from a 'dead-cat bounce', WA is actually showing signs of life with mining, of course, centre stage. Whilst it is far from Boom 2.0, the renewed investment announcements certainly reaffirm the states significance in the global supply of commodities.

Last quarter we looked at BHP's \$2Bn South Flank project announcement and similarly this quarter has seen Rio commit to its \$3.5Bn Koodaideri IO mine project due to commence in 2019. Whilst these are hardly the 'mega-projects' of the boom times, the renewed investment activity is welcome for the state and provides a much stronger pipeline of work in the medium term. Outside of mining, The Forrestfield airport link continues to provide opportunity in Perth and will do so up until its projected completion in 2020. Additionally, the broader NorthLink project will continue to contribute to Engineering Construction in the state throughout 2019 up until the completion of the central and norther sections.

*Eng Con value for latest quarter is fcast \$20.000.000 \$ 18,000,000 \$ 16 ,00 0, 00 0 \$14,000,000 \$ 12 ,00 0, 00 0 \$ 10.000.000 \$8.000.000 \$ 6,0 00 ,0 00 \$4,000,000 \$2.000.000

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Non-Residential Construction

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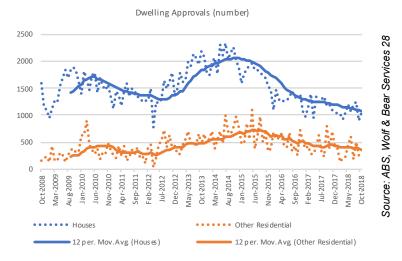
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Value of Work Done



If there was one thing that the recovering WA residential market didn't need as it started to rebuild on the back of the mining bust, it was increased intervention in housing finance. The good news is that the decline has slowed and the market is showing signs of life as the turnaround in mining investment brings back some certainty and stability to the economy.

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Construction



Source: ABS, Wolf & Bear Services 27

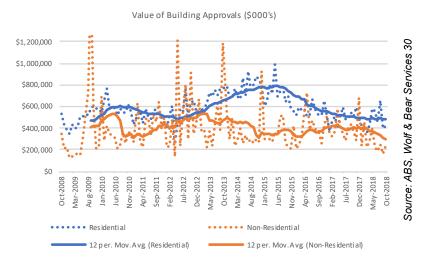
The Perth residential price index reflects the same trend as the approvals however the concern here is that the value of attached dwellings continues to fall. Whether this is a reflection of economic sentiment, underlying oversupply or a direct impact of tighter lending restrictions is yet to be seen.

In terms of Residential Construction versus Non-Residential Construction, the concern is the ongoing softness in non-residential approvals. This trend is spread across all sub-sectors; Commercial, Industrial and Other Non-Residential.

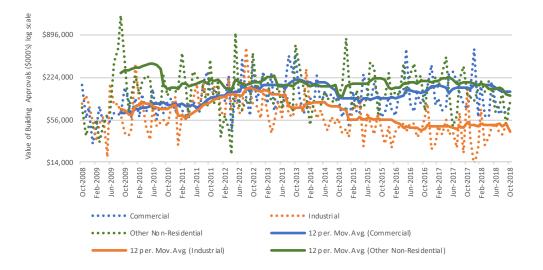
There are positive signs for the industry however with major developments such as the new \$360m Chevron headquarters at Elizabeth Quay progressing through the approvals pipeline.

Residential Property Price Index: Perth







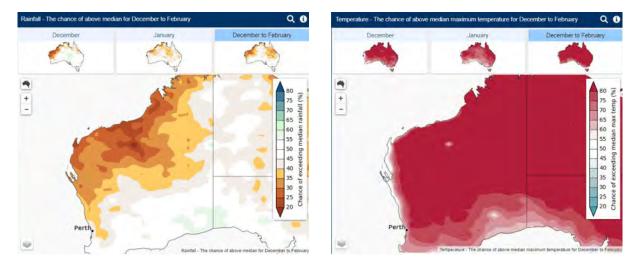




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Source: ABS, Wolf & Bear Services 29

Somewhat late to the party but WA is poised to invest significantly in renewable energy infrastructure with \$1Bn in works in the pipeline. These include the 210MW Yandin wind farm, and solar projects in Cunderdin and Merredin.



Source: Bureau of Meteorology 6

Similar to Queensland, WA is looking at a dry, hot quarter with large areas in the Pilbara forecast to record much lower than average rainfall in the quarter. Similar to much of the country, the bureau also predicts higher than average temperatures for most areas.

Projects we're watching:

South Flank (BHP) Koodaideri (Rio) Chevron HQ Perth



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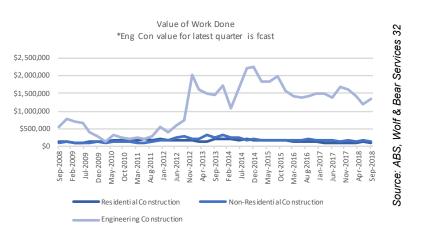
Northern Territory

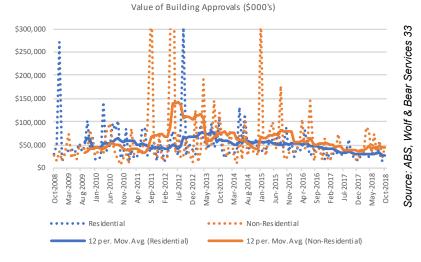
As the territory transitions from Engineering Construction activity on Inpex Ichthys and the Northern Gas Pipeline, the question is, what's next? Whilst there are a number of LNG projects attributed to the Territory, much of this is going to be offshore and include significant components manufactured elsewhere and shipped in.

Much of the development pipeline is going to rely on government funded projects such as; the Northern Roads Program, Defence Infrastructure and Health Infrastructure. Other activity includes the long-awaited Project Sea Dragon aquaculture project, Berrimah Farm and ongoing LNG exploration.

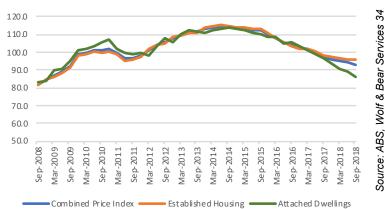
It can be hard to get excited about Residential and/or Non-Residential Construction activity in the Territory with comparatively low values and volumes. The current trend is largely unremarkable, settling to pre-Ichthys levels.

In terms of the residential price index for Darwin, prices overall now appear to have retreated beyond pre-lchthys levels however there are signs that houses at least are levelling off.

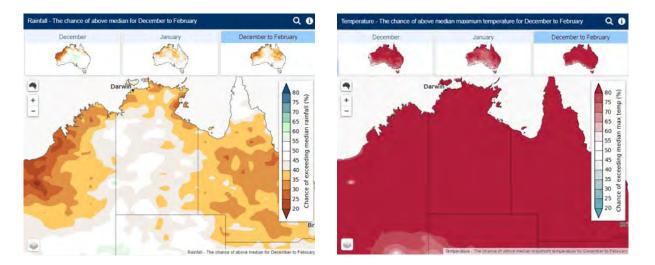




Residential Property Price Index: Darwin







Source: Bureau of Meteorology 7





Tasmania

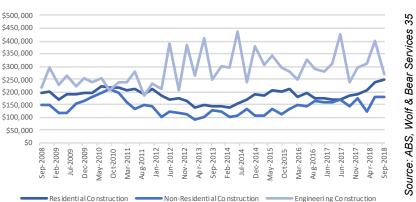
The apple isle continues to just roll along largely unfazed by the turbulence on the mainland. **Engineering Construction** activity is largely unchanged in trend terms and Non-**Residential construction remains** flat. Remarkably, Residential Construction in the state is actually one of the strongest markets in the country.

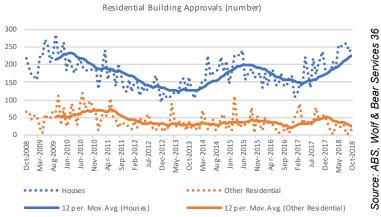
The Non-Residential Construction pipeline is modest but strong enough to support current activity levels particularly with the muted \$400m redevelopment of MONA in the planning stage.

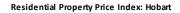
Residential building approvals continue to trend upwards - even if 'Other' Residential has recently turned into negative territory however this is on very small numbers.

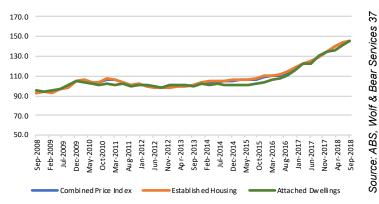
It is hardly surprising then to see that the residential pricing index is the strongest in the country with all sectors continuing to trend upwards. Established housing is displaying some signs of slowing its growth rate however time will tell if this is truly a peak or just a pause in the longerterm trend.

Value of Work Done *Eng Con value for latest quarter is fcast

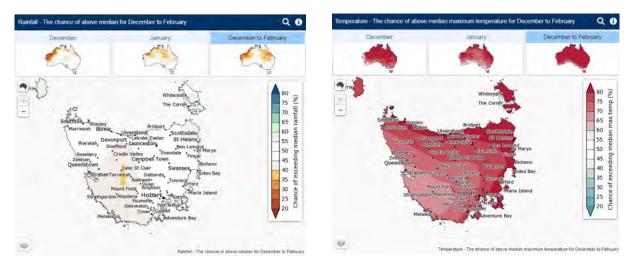












Source: Bureau of Meteorology 8

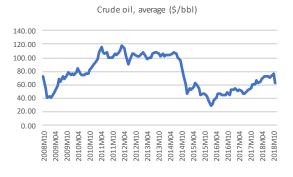
Tasmania is looking to be mildest of the states in terms of weather for the quarter with most areas expected to receive average rainfall and temperatures will be mostly average if a little higher than the median.



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Commodities Update



Natural gas index (2010=100)

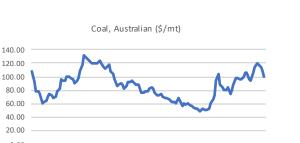


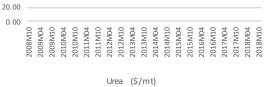
Potassium chloride (\$/mt)





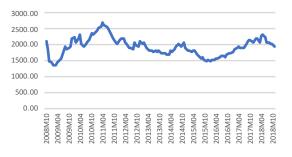








Aluminum (\$/mt)



Copper (\$/mt)



*Source: World Bank Commodity Price Data (Pink Sheet) \$USD





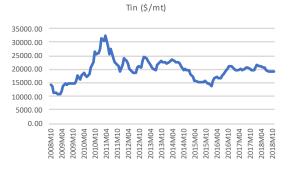
















Platinum (\$/troy oz)





WOLF & BEAR

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