Cumulative green bond issuance to 30 June: AUD15.6bn, 10th in global country rankings, 3rd in Asia-Pacific
Annual 2018 issuance: AUD6.0bn (2017: AUD3.3bn), 9th in 2018 global country rankings
H1 Issuance to 30 June 2019: AUD3.9bn. Market growth expected from corporates and state governments

State governments boost recent issuance

Note: All green bond data calculated as of 30th June 2019 unless otherwise stated

Issuance has picked up significantly in 2019, with AUD3.9bn already issued in H1. Queensland Treasury Corporation (QTC) issued its second deal (AUD1.2bn) in June 2019. Issuance from state governments has played a major role in the last 12 months, building on initial 2016/17 deals. New South Wales T-Corp entered the market in Q4 2018 with a record AUD1.8bn deal.

In 2019, the property sector has been quite active with debt raised by Woolworths Group (green bond), Brookfield Properties and Investa (green loans) for low-carbon buildings. Monash University remains the largest non-financial corporate repeat issuer with three private placements, the first one tracing back to 2016.

Certification: most popular external review

At 83% of issuance, the Australian market has one of the highest ratios of Certification under the Climate Bonds Standard, a best practice indicator. EY is the leading Approved Verifier for Certified Climate Bonds, having assessed 18 deals (42% by issued volume), including NSW T Corp’s AUD1.8bn GB, the largest Australian deal to date. DNV GL has assessed 13 deals (40% by volume). Further, Moody’s has provided GB ratings on three Certified bonds.

All bonds with Buildings allocations, except for Pepper Group’s RMBS tranches, have been Certified. Transport and Energy are also popular sectors for Certified Climate Bonds.

More broadly, all GBs from Australian entities benefit from at least one external review. Sustainalytics has provided an SPO on 9 deals (10% by volume), while KPMG assured a bond in 2014.

Low-carbon buildings dominate GB allocations

Note: As much as possible, CBI tries to assign adaptation and resilience allocations to sectors. “Unalloc A&R” could not be allocated to a sector.

Low carbon buildings dominate green bond allocations with a 43% share. This is supported by strong green building ratings schemes, particularly NABERS and Green Star. Financial corporates earmarked 39% of proceeds for buildings, state governments – 22% and non-financial corporates – 96%. Buildings have been financed with green RMBS (76% of ABS volume) and green loans.

Over half of the proceeds allocated to low carbon transport were raised by state governments: almost all by Treasury Corp Victoria and QTC. Financial corporates have mostly financed renewables, with NAB being at the forefront with a cumulative AUD1.4bn allocated to the sector.

All Australian GB issuers report post-issuance

Abbreviations: UoP: use-of-proceeds post-issuance reporting only, IR: impact reporting only, UoP:IR: both use-of-proceeds and impact reporting

Levels of post-issuance disclosure are also reflective of market best practice, with 100% of issuers providing at least one form of post-issuance reporting on deals closed prior to November 2017.

Except for one 2014 deal, all bonds captured in this dataset are Certified Climate Bonds, which entails a commitment to report on allocations. Six of the nine issuers of Certified Climate Bonds, accounting for almost 80% of total volume and eight of 14 deals, provide both use-of-proceeds and impact reporting, demonstrating strong voluntary commitment towards disclosure.

High levels of disclosure are well perceived by investors with a clear green mandate and help build overall market confidence.
Some 43% of Australian deals fall in the AUD100-500m size range, which is particularly favoured by financial corporates. Smaller deals up to AUD100m, are also popular, especially among entities issuing green ABS tranches backed by green pools of assets and incorporated in larger transactions.

However, a third of issue volume is sized at AUD1bn or more: only state governments and NAB have come to market with such large deals. Deals of AUD500m-1bn account for 42% of total issuance, and financial corporates have contributed 62% of that volume.

Top 5 lead managers for Australian GB

<table>
<thead>
<tr>
<th>Bookrunner</th>
<th>Number of deals</th>
<th>Amount (AUD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAB</td>
<td>10</td>
<td>2.4bn</td>
</tr>
<tr>
<td>ANZ Banking Group</td>
<td>5</td>
<td>1.1bn</td>
</tr>
<tr>
<td>Bank of America</td>
<td>3</td>
<td>1.0bn</td>
</tr>
<tr>
<td>UBS</td>
<td>3</td>
<td>937m</td>
</tr>
<tr>
<td>Citi</td>
<td>3</td>
<td>650m</td>
</tr>
</tbody>
</table>

Source: Refinitiv. Cumulative data: 2014 – Q2 2019

Altogether 16 bookrunners have helped Australian issuers come to market. The largest is NAB with 27% market share by volume and 10 deals, followed by ANZ Banking Group with 13% market share and 5 deals. Australian banks NAB and ANZ are also green bond issuers. Another Australian bank issuer, Westpac, is 6th in the lead manager league table with 6 deals (AUD591m).

Green loans have been taken out by Brookfield Properties (AUD880m) and Investa Commercial Property Fund (AUD170m), while Macquarie Group created green tranches in a larger facility. Green tranches within wider deals also feature in Australian ABS: Pepper Group has done this in three RMBS deals and National RMBS Trust in one, for a total of AUD870m. Flexi Group has issued green tranches in four ABS to refinance solar consumer loans.

One of the more innovative approaches is the NAB Trust Services vehicle set up to issue AUD200m notes backed by a pool of loans originated by NAB to finance wind and large-scale solar projects.

Cumulatively, AUD9.6bn worth of green bonds have been listed on a variety of trading venues: half of that in Germany. International venues also include London, Dublin, Singapore and Luxembourg, and two deals have been listed on the Australian Stock Exchange. Just over 38% of issuance is not listed, including NSW T-Corp’s AUD1.8bn bond and AUD2.8bn in loans and private placements.
Green bonds are part of a wider range of sustainability-related financial instruments

To harness retail and institutional savings, NAB’s UBank and Westpac Banking have launched green deposit schemes. They are the first globally to commit to investing only in assets and projects that meet the Sector Criteria of the Climate Bonds Standard, ensuring that investments actively contribute to decarbonisation by 2050. As is the case with Certified Climate Bonds, the climate credentials of the assets and projects need to be assessed by an independent third party (an Approved Verifier) to confirm Certification eligibility, both initially and annually, while the instrument is outstanding.

Sustainability debt instruments have also appeared in Australia. Sustainability bonds, which raise finance for pre-defined eligible climate and social projects, have been issued by Bank Australia (2018) and NAB (2017), for example. Sydney Airport recently took out a sustainability-linked loan. ESG and sustainability-linked debt usually funds overall corporate ESG or sustainability measures. Typically, if pre-set targets are achieved, the lending terms improve.

The Australian climate-aligned bond universe is limited to green bonds

Climate Bonds Initiative conducts annual research to estimate the size of the climate-aligned universe and companies that operate primarily in low-carbon sectors such as renewables, clean transport, and sustainable waste management.

The climate-aligned universe highlights opportunities to invest in bonds associated with low-carbon assets. It includes:

- **Green bonds**, which can be issued by any entity financing suitable assets. CBI uses the CBI Green Bond Database Methodology to screen labelled bonds and identify bonds with at least 95% of proceeds going to assets and projects that are aligned to the Climate Bonds Taxonomy.
- **Bonds from climate-aligned issuers**, defined as companies that derive at least 75% of their revenue from ‘green’ business lines, aligned to the Climate Bonds Taxonomy.

The 2019 edition of the Bonds and Climate Change report has not been published yet, but the issuer research has been completed. Unusually for a developed market, we did not identify any Australian climate-aligned issuers this year.

The initial industry search picked up two rail companies, and rail is generally low carbon. However, both Aurizon Network and Australian Rail Track Corporation were screened out due to the high volume of business generated by coal transport, which is not aligned to the Climate Bonds Taxonomy.

There are undoubtedly entities the research is not picking up – e.g. solar project vehicles, train manufacturers, recycling firms – because their debt comes from a non-aligned parent, they do not disclose detail in their annual accounts, they do not report publicly, etc. Labelling their debt green would bring them visibility and improve discoverability for investors.

Non-financial corporate issuers and the brown-to-green transition

To achieve a transition to a low-carbon economy at national and global level, both government and the private sector need to act immediately on reducing greenhouse gas (GHG) emissions with corporates progressively orienting capital expenditures towards zero-carbon business models.

For example, electricity transmission companies such as existing vanilla bond issuers AusNet Services and Ausgrid, could follow their European counterparts and use green bonds to finance improved connectivity of renewables to the national grid and to improve overall grid efficiency.

ASX-listed Woolworths Group was the first supermarket chain to issue a Certified Climate Bond earlier in 2019, one of the few non-financial companies to enter the green bond market in 2019.

In both the listed and unlisted property sector, transition is becoming evident. Green bond issuer and commercial property fund manager Investa has a science-based net zero 2040 target. Real-estate investment trust GPT Group aims to reach carbon neutrality before 2030 for all its assets and is conducting analysis on the pathway to carbon-neutral buildings. Unlisted property trust ISPT, aims to understand and manage the impact of climate change by developing resilience plans for each building and using real-time performance monitoring systems.

Building industry superannuation fund Cbus has committed to net zero emissions by 2030 across its listed and unlisted property portfolio.

Resource giants have also begun some early brown to green measures. Rio Tinto, which exited coal in 2018 and has adopted the TCFD reporting framework, is taking a ‘supply chain approach’ and is focused on providing metals which are essential to support the transition to a low-carbon economy. BHP is examining the future of its remaining coal assets and has announced a new phase in emissions reductions, examination of Scope 3 emissions and a zero-carbon “ambition”.

Notwithstanding these and other examples, brown to green transition and a substantial shift towards green investment and net zero remains a lagging indicator amongst ASX-listed companies.
Australia climate & green finance actions

Australia has committed to cut CO₂ emissions by 26-28% by 2030 compared to 2005 levels under the Paris Agreement. Climate Action Tracker has rated the commitment as insufficient, noting the uneasiness of meeting the target due to lack of climate policies.

The current clean energy target for large-scale operations was set in 2015 and calls for 33,000 GWh generated from renewables by 2020, about 23.5% of supply. This has been a strong driver behind the increase in renewable energy capacity but ends in 2020. The Clean Energy Regulator estimates that the target will be met in advance but follow on-policy is unclear.

Notwithstanding limited progress in energy and state-based actions, federally, Australia has yet to develop a substantive framework of mitigation and adaptation policies to fully address the coming climate emergency and create climate resilience.

This is despite the Australia’s surfeit of clean energy options and exposure to twin 21st century climate based economic risks: A major global exporter of high carbon energy coupled with an emissions intensive domestic economy, slow to progress on transition measures.

More can be done. The table below summarises green finance action points and policy considerations for the 2020s.

<table>
<thead>
<tr>
<th>Action point</th>
<th>Action in 2018 and early 2019</th>
<th>Policy considerations for 2020 and beyond</th>
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<tbody>
<tr>
<td>Issuance of sovereign and sub-sovereign (SSA) green bonds</td>
<td>State governments been active in the past year with issuance from the treasury corporations of Qld and NSW. Victoria has been the first Australian SSA issuer to enter the green bond market in 2016. Follow up from Qld, NSW and the recent QIC bond in August 2019 have had a constructive effect on market awareness and perceptions.</td>
<td>Repeat sub sovereign issuance advances state government infrastructure, resilience, congestion and emissions goals. Repeat issuance also provides a positive signal to policy makers, regulators and institutional investors.</td>
</tr>
<tr>
<td>Building sustainability factors into the financial system</td>
<td>The Australian Sustainable Finance Initiative was formed to develop a Sustainable Finance Roadmap in 2020. AF5 brings together major banks, superannuation funds, asset managers, insurers and NGOs. The Roadmap highlights four key objectives: i) mobilise capital to meet SDGs ii) embed sustainability factors into financial markets iii) enhance disclosure and transparency iv) deliver a financial system that meets consumer expectations around sustainability.</td>
<td>Implementation of the Sustainable Finance Roadmap recommendations, particularly actions to encourage green finance and investment in adaptation and resilience. Support for ASX listed companies in implementing the recommendations of the Task Force on Climate-related Financial Disclosures.</td>
</tr>
<tr>
<td>Superannuation funds engagement</td>
<td>Australian superannuation funds are increasing their local and global activity around climate risk issues, particularly via Climate Action 100+, TCFD reporting and The Investor Agenda. Incorporation of ESG factors into general investment practices and expectations of corporate directions is growing. Green bond specific mandates are being awarded, and global scale funds are becoming more active in the alternative space, seeking increased opportunities for financing and operation of domestic &amp; international infrastructure assets.</td>
<td>Formalise shareholder engagement programs with ASX listed companies on brown-to-green transition. Creation dedicated green, or climate related bond pools within fixed income portfolios to encourage market growth. Improve integration of domestic actors’ green finance capabilities and infrastructure investment expertise into regional engagement and foreign policy.</td>
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