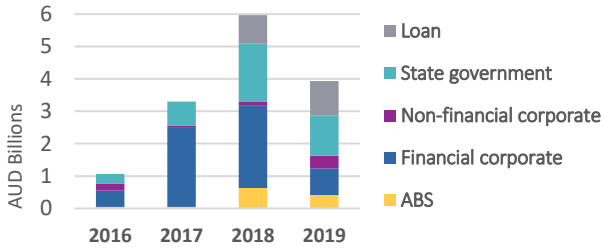




Australia

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

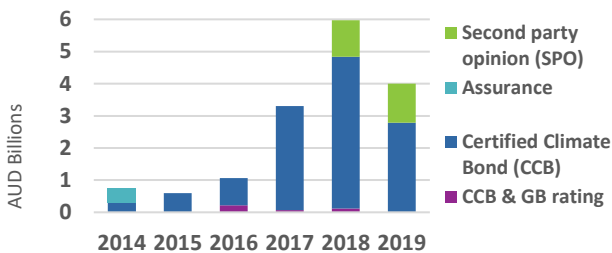


Note: All green bond data calculated as of 30th June 2019 unless otherwise stated

Issuance has picked up significantly in 2019, with AUD3.9bn already issued in H1.¹ **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

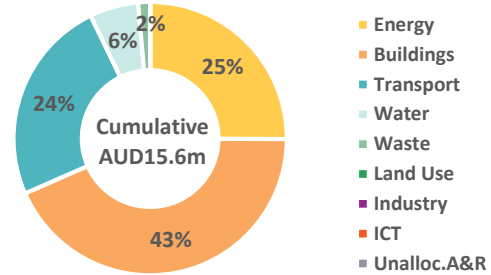


At 83% of issuance, the Australian market has one of the highest ratios of Certification under the Climate Bonds Standard, a best practice indicator. **EY** is the leading Approved Verifier for Certified Climate Bonds, having assessed 15 deals (42% by issued volume), including **NSW T Corp's** AUD1.8bn 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 5 deals (10% by volume), while **KPMG** assured a bond in 2014.

Low-carbon buildings dominate GB allocations

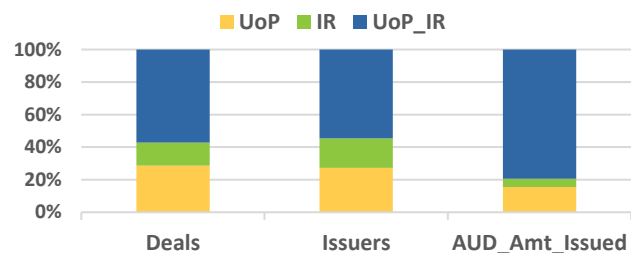


Note: As much as possible, CBI tries to assign adaptation and resilience allocations to sectors. "Unalloc A&R" could not be allocated to a sector.

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 also 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



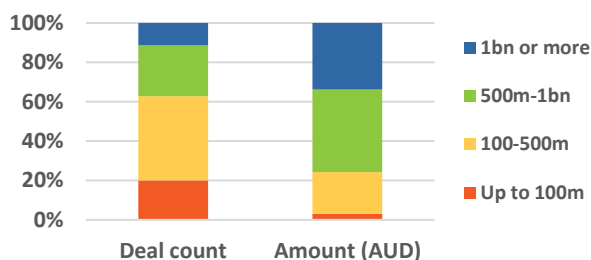
Abbreviations: UoP: use-of-proceeds post-issuance reporting only, IR: impact reporting only, UoP IR: both use-of-proceeds and impact reporting

Levels of post-issuance disclosure is 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.

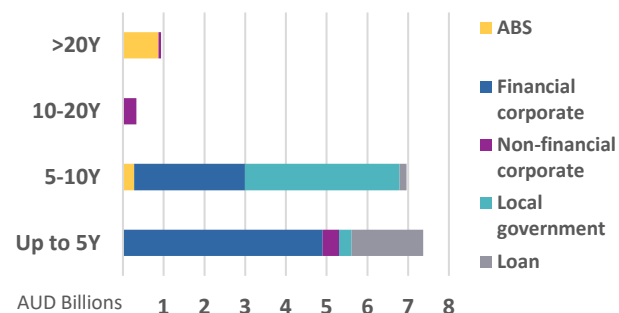
75% of issuance is benchmark-sized



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.

Short to medium term tenors are popular



Short (up to 5 years) and medium-term (5 to 10 years) deals dominate Australian green bond issuance. Two-thirds of short-term deals are from **financial corporates**, but the term is also popular for loans. Medium-term deals are popular amongst **state governments** (55% of 5-10Y issuance) and **financial corporates** (39%).

Only **Monash University** and **RMBS** deals have very long-dated bonds, with a final maturity of 33 years in the case of National RMBS Trust (NAB) and about 41 years for Pepper Group’s three RBMS. RMBS deals are often long dated as the underlying residential mortgages are long dated.

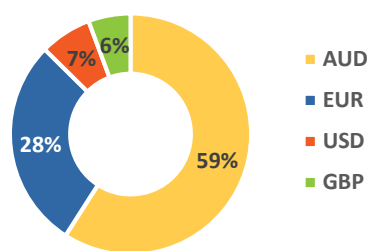
Top 5 lead managers for Australian GB

Bookrunner	Number of deals	Amount (AUD)
NAB	10	2.4bn
ANZ Banking Group	5	1.1bn
Bank of America	3	1.0bn
UBS	3	937m
Citi	3	650m

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).

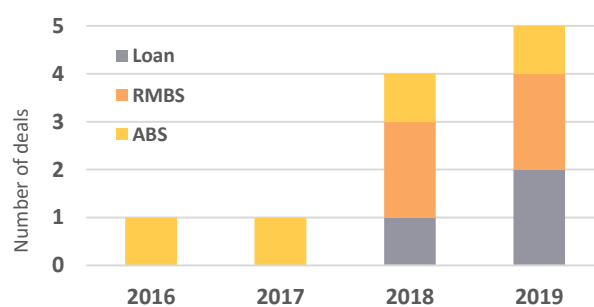
GB deal volume is mostly AUD-denominated



Australian green bonds are all denominated in hard currencies, with almost **60%** issued in AUD. This ties in with strong domestic demand for green bonds.

EUR and **USD** deals have been issued mostly by financial corporates, e.g. **NAB**, **Westpac**, **Stockland Trust Management**. Three of **Pepper Group**’s green RMBS tranches were in **EUR**. **GBP** has been used solely by asset manager **Macquarie Group** for its GBP500m (AUD883m) green loan tranches, which form part of a wider GBP2bn facility, taken out in mid-2018.

Green label used for debt beyond bonds



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.

Top 5 trading venues for Australian GB

Trading venue	Number of deals	Amount (AUD)
All German SE	4	2.2bn
Frankfurt	3	1.3bn
Munich	1	1.25bn
LSE	2	1.2bn
ASX	2	800m

Note: Data from Bloomberg, Refinitiv EIKON and Euronext Dublin.

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**.^{1,2} 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 2050.³ 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.^{4,5}

Sydney Airport recently took out a **sustainability-linked** loan.⁶ 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.⁷

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.^{8,9}
- **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 2019,¹⁰ 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.¹¹

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.¹² 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.¹³

Building industry superannuation fund **Cbus** has committed to net zero emissions by 2030 across its listed and unlisted property portfolio.¹⁴



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.¹⁵ **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".^{16,17}



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.^{18,19}

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.²⁰ Climate Action Tracker has rated the commitment as insufficient, noting the unfeasibility of meeting the target due to lack of climate policies.²¹

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.²² 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 advance²³ 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 emergency²⁴ 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.

Action point	Action in 2018 and early 2019	Policy considerations for 2020 and beyond
Issuance of sovereign and sub-sovereign (SSA) green bonds	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.	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.
Building sustainability factors into the financial system	The Australian Sustainable Finance Initiative was formed to develop a Sustainable Finance Roadmap in 2020. ²⁵ ASFI brings together major banks, superannuation funds, asset managers, insurers and NGOs. The Roadmap highlights four key objectives: i) mobilise capital to meet SDGs ²⁶ ii) embed sustainability factors into financial markets iii) enhance disclosure and transparency iv) deliver a financial system that meets consumer expectations around sustainability. ²⁷	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 . ²⁸
Superannuation funds engagement	Australian superannuation funds are increasing their local and global activity around climate risk issues, particularly via Climate Action 100+, ²⁹ TCFD reporting and The Investor Agenda. ³⁰ Incorporation of ESG factors into general investment practices and expectations of corporate directions is growing. Green bond specific mandates are being awarded, ³¹ and global scale funds are becoming more active in the alternative space, seeking increased opportunities for financing and operation of domestic & international infrastructure assets. ³²	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.

Endnotes (weblinks): 1. UBank, Green Term Deposits. 2. Westpac Banking Corp, 2018. 3. Climate Bonds Standard & Certification Scheme. 4. Sustainalytics, Bank of Australia Sustainability Bond, 2018. 5. NAB, 2017. 6. Sydney Airport, 2019. 7. Bonds and Climate Change: State of the Market 2018, CBI, 2018. 8. CBI Green Bond Database Methodology, 2018. 9. Climate Bonds Taxonomy, 2018. 10. Woolworths Group press release, 2019. 11. Investa press release, 2019. 12. GPT Group, Climate Change and Energy Policy, 2017. 13. ISPT Super Property. 14. Cbus press release, 2018. 15. Rio Tinto, Annual Report, 2018. 16. BHP, Strategy Briefing, 2019. 17. Confronting Complexity: Evolving our approach to climate change, BHP, 2019. 18. Climate risk disclosure by Australia’s listed companies, ASIC, 2019. 19. Australia’s biggest companies failing to plan for climate change risks, ABC, 2019. 20. Australia’s Intended Nationally Determined Contribution to a new Climate Change Agreement, 2015. 21. Climate Action Tracker, Australia, 2019. 22. Australian Government, Department of the Environment and Energy. 23. Clean Energy Council. 24. The Carbon Brief Profile: Australia, 2019. 25. Australian Sustainable Finance Initiative. 26. United Nations Sustainable Development Goals. 27. ASFI, Terms of Reference. 28. FSB, Taskforce on Climate-related Financial Risks. 29. Climate Action 100+. 30. The Investor Agenda. 31. Sunsuper Press Release. 32. The New Daily, AFR.

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