Liquid Markets Group Sustainability Report 2020-21

COMMITTED TO
SUSTAINABLE INVESTMENTS

CONTENTS

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Welcome

WELCOME FROM SUSAN BUCKLEY

MANAGING DIRECTOR, LIQUID MARKETS GROUP

Throughout the past 12 months, COVID-19 continued to challenge economies worldwide. During this volatile time, QIC's Liquid Markets Group (LMG) has taken a flexible approach to help the decision-making processes of our clients as they maintain the asset allocation of their portfolios to meet their members' and clients' demands.

Environmental, social, governance (ESG) and sustainability practices remain at the forefront of our thinking, which we integrate with our research, portfolio management, and trading processes. We start by incorporating real-time ESG data into our portfolio risk system and relative value tools to facilitate integration. We also position our portfolios to avoid stranded-asset risk. Finally, we look for ESG themes that could present opportunities, such as investing in labelled bonds that finance positive green and social impacts.

A global pandemic, growing commitment to net zero emissions, regulatory support for sustainability, and evolving consumer attitudes to non-financial corporate transgressions have certainly sharpened the focus of investors globally.

Despite these challenges, we are proud of our progress over the past year, in particular being named the KangaNews *Sustainability Fund Manager of the Year* for the second year running.

Marayka Ward, Senior Credit and ESG Manager leads QIC's ESG initiatives for the Liquid Markets Group. Her efforts were recognised by KangaNews which named QIC the Australian Sustainability Fund Manager of the Year for the second year in a row.

In this financial year's sustainability report, we take the opportunity to showcase implementation of our ESG processes across each part of the LMG business — Overlay Solutions, Global Trading, Absolute Return, and Fixed Income.

Overlay Solutions

Our Overlay Solutions business manages the hedging, rebalancing and currency needs of our clients, with trades often using derivatives and indices across equities, fixed interest, commodities, and currency markets to create long or short positions. Over the past year we completed regular sustainability questionnaires for Overlay Solutions clients, contributed to thought leadership and market governance (especially for foreign exchange clients), and executed trades that allow our clients to benefit from the growing popularity of carbon markets.

Global Trading

Our Global Trading business operates a Brisbane-based trading desk accessing global markets, 24 hours a day, five days a week. We treat our counterparties as we would a bond investment for ESG approval and monitoring purposes.

Absolute Return and Fixed Income

In the Absolute Return and Fixed Interest part of our business, we continued our ESG integration process, and have been identifying net zero pathways for fixed-interest portfolios and portfolio-warming measurements, along with the investment opportunities and industry risks we expect to emerge over the short to medium term as sustainability perspectives evolve.

Case studies in this report showcase how we implement ESG considerations through portfolios, and how investors can establish ESG-related commitments such as net zero pathways across investment portfolios. We have also included our regular information on our engagement program, impact of sustainability-labelled bonds, bondholder consent requests, and active ownership insights.

Our investment philosophy is unchanged — we believe ESG factors can have a material impact on the long-term outcomes of investment portfolios and the assets in which we invest. We consider sustainability factors in all our investment decision-making processes. We also use our position across a range of market committees and forums to advocate for enhanced market governance and sustainability.

Our sustainability activities are for the benefit of our clients — to enhance and protect their portfolios, the markets in which they invest, and the people those investments impact.

Broader LMG commitments

2.1 Active Ownership insights

Traditionally, equity investors — through their ownership share — were seen as the only investors able to influence the strategy and operations of companies. At LMG, we have long believed debt investors are an important part of the capital structure and certainly from the interactions we have, companies and sovereigns are interested in the sustainability views and activities of fixed-interest investors.

This is why we have an active engagement program, conduct votes on bondholder consent requests, and contribute to a range of thought leadership and market governance committees. We also focus on diversity and integrity of our own markets.

CASE STUDY
Bloomberg Women's Buyside Network — encouraging gender diversity in our industry

QIC's Managing Director of Liquid Markets Group, Susan Buckley is a founding member of the Australia/New Zealand Chapter of the Bloomberg Women's Buyside Network (BWBN) that focuses on the goal of achieving greater diversity in the next generation of investment industry leaders.

BWBN's charter is to inspire women to join the investment industry, to highlight the talented women already in key buy-side roles, and to grow the pipeline of female talent to be able to step into future investment industry leadership roles.

With Bloomberg's platform and support, BWBN will have meaningful impact on the buy-side investment industry where there continues to be a lack of gender balance in portfolio management, trading teams and at the CIO and CEO level.

Focused specifically on gender balance in the buy-side industry, BWBN will be helping to shape the future of investing at a time when ESG is front and centre of all investment decision-making.

2.2 Engagement

LMG's engagement program:

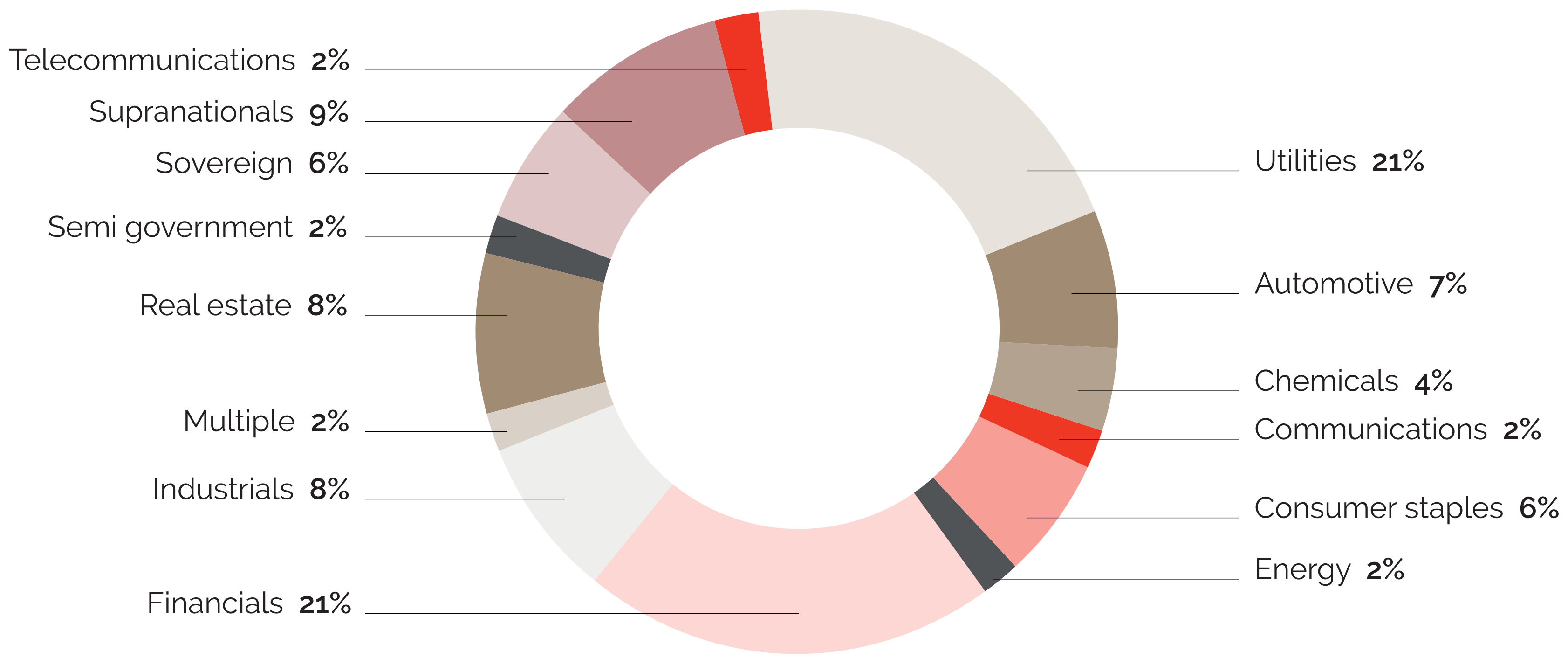
- is driven by QIC ESG focus areas
- identifies leaders, laggards, and thematics
- is specific to fixed interest and conducted by our Credit Analysts and Portfolio Managers
- is accompanied by transparent record-keeping
- engages with domestic and offshore entities
- includes follow-up engagements
- feeds into our credit analysis and monitoring process — engagement outcomes can drive investment decisions
- is supported by impact analysis
- includes discussion with non-issuers such as credit and ESG rating agencies.

From our engagement activity in 2020–21, we observed:

- most issuers are now providing sustainability information as part of the general debt investor updates.
- issuers are forthcoming with environmental data such as carbon emissions. Measurement methodologies still differ but there is a distinct trend towards use of Task Force on Climate-Related Financial Disclosures (TCFD) and the Science Based Targets initiative (SBTi).
- issuers are approaching LMG for our thoughts on deal structures, likely market appetite, reporting expectations, and their own material sustainability issues.
- collaborative engagements are increasing, particularly on technical sustainability issues.
- there is increased transparency from issuers (or at least willingness to engage) around transgressions.
- climate risk including net zero pathways, modern slavery, and staff and customer wellbeing were among the most frequent engagement topics in 2020–21.
- other positive impacts include resolution of timing issues around reporting and repaired links to data.

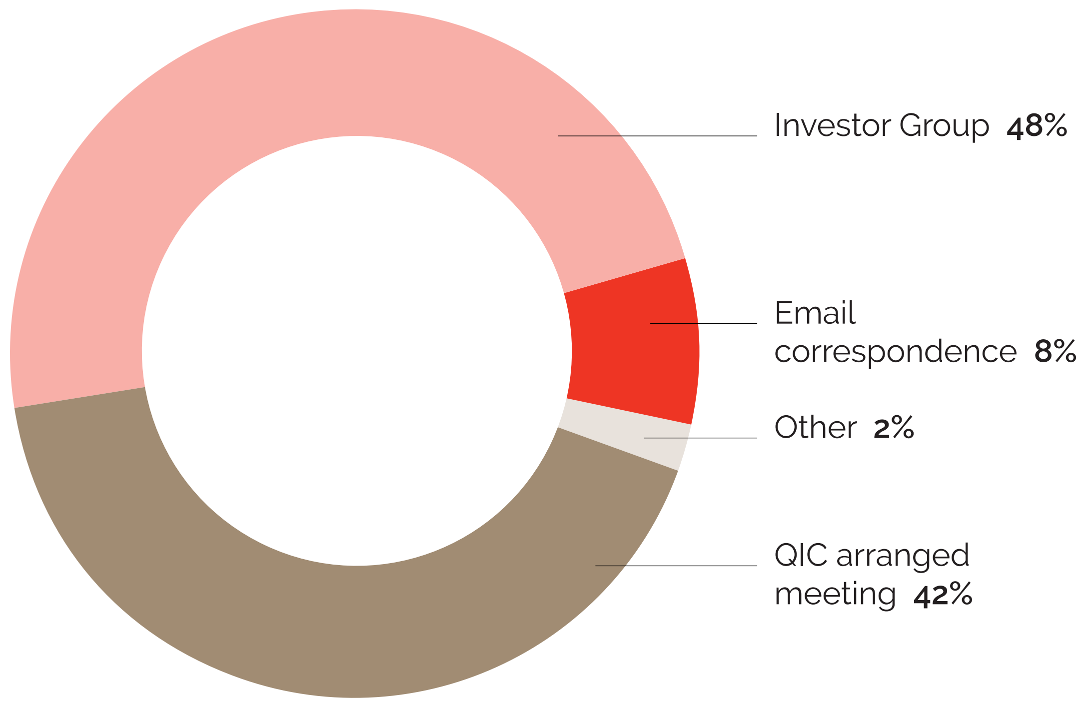
A full list of our engagements can be found in the Appendix.

Figure 1: Types of organisations we engaged with



Source: LMG record keeping

Figure 2: Type of contact



Source: LMG record keeping.

2.3 Proxy voting

Shareholders advise corporate boards of their preferences through voting on resolutions at company meetings. Bondholders do not vote on shareholder resolutions but are given voting rights through consent solicitations when issuers are seeking to amend terms governing bond deals.

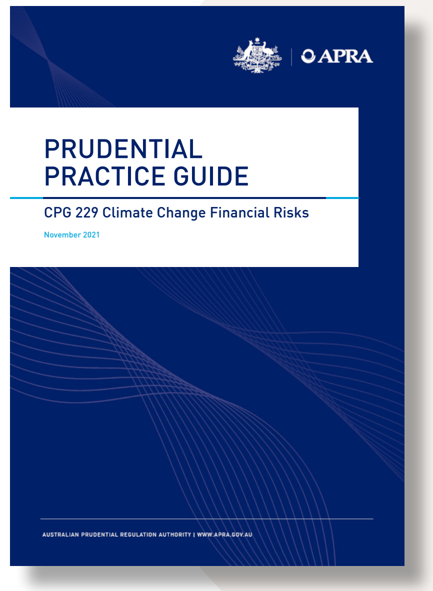
During the financial year we received and voted in favour of five consent solicitations. Two requests were seeking to amend covenants, two related to corporate restructures, and one was changing fallback language given the retirement of London Inter-Bank Offered Rate (LIBOR) — the benchmark interest rate major global banks used to lend to one another. The requests came from:

- WSO Finance
- Australian Prime Property Fund Retail
- ConnectEast
- Australian Gas Infrastructure Group (EPG and DBNGP)
- Barclays.

2.4 Developments relating to Portfolio 'E' risks and opportunities

As more investors make net zero emissions commitments, we expect portfolio-level climate-risk modelling to be a growth area. Our existing modelling incorporates:

- carbon emissions
- Weighted Average Carbon Intensity (WACI)
- shadow carbon pricing and potential revenue and credit-rating impacts — this has been useful as we see regions such as the European Union contemplate applying a carbon tax on imports
- selected portfolio warming scenarios incorporating physical and transition climate risk — this is an area we expect to enhance as we switch to a process incorporating International Energy Agency (IEA) data
- views on stranded-asset risk — as net zero emission commitments grow, we expect debt pricing and the ability to obtain finance will change in some industries.



The Australian Prudential Regulation Authority (APRA) PPG 229 Climate Change Financial Risks provides a guide to what APRA considers best practice when it comes to considering potential climate risk on the activities of regulated entities. In the meantime, we have been providing feedback and helping clients to understand what can be measured in their portfolios and the types of scenario analysis that could prove insightful.

Net zero pathways for sovereign and corporate bond portfolios

At QIC LMG, we are using the Institutional Investors Group on Climate Change (IIGCC) Net Zero Framework 1.0 across our asset classes. The Framework establishes a pathway for investors to show they are:

- Decarbonising portfolios
- Investing in climate solutions

The Framework acknowledges there are not many companies currently aligned to net zero. It is therefore unlikely that institutional investors would currently be able to achieve a portfolio that meets their investment goals while also being fully aligned to net zero.

For corporate bond portfolios, the Framework suggests showing the portfolio is decarbonising by analysing bond issuers against certain criteria and classifying companies as shown below.

Investors should then focus on defined 'material' sectors through engagement, voting and escalating expectations if necessary. Depending on investor mandates, investors could then tilt their portfolio and, as a last resort, selectively divest from those companies that are inconsistent with a credible net zero pathway.

The Framework also suggests investing in climate solutions to demonstrate focus on financing net zero. Examples include green bonds and issuers that are developing climate solutions.

There are also guidelines for sovereign bond investors, together with other asset classes, showing how investors can contribute to a world of net zero emissions.

ALREADY ALIGNED	ALIGNED TO NET ZERO PATHWAY*	ALIGNING	COMMITTED TO ALIGNING	NOT ALIGNED
• Current emissions intensity at or close to net zero • Business model consistent over time • Example: renewable energy	• Meet criteria 1–6 • If a lower impact company, can meet criteria 2,3 and 4 • Adequate performance over time in relation to criteria 3	• Meet: – criteria 2 – criteria 4 – partial criteria 5	• Complies with criteria 1; clear goal to achieve net zero by 2050	• All other companies

*credible pathways at a minimum
Source: QIC & IIGCC

Taskforce on Nature-related Financial Disclosures

The Taskforce on Climate-related Financial Disclosures (TCFD) was created by the Financial Stability Board to improve and increase the reporting of climate-related financial information. QIC issues sustainability data using the TCFD methodology and in LMG's engagements we encourage issuers to adopt the methodology.

We believe the core elements of the TCFD framework — governance, strategy, risk management, and metrics — can also be used when thinking about non-climate-related ESG risks and opportunities.

The Taskforce on Nature-related Financial Disclosures (TNFD) is a global initiative, complementary to the TCFD, that encourages financiers to consider other environmental risks and opportunities in their decision-making processes.

According to the TNFD, the World Economic Forum estimates more than 50 per cent of the world's economic output has a moderate or high dependence on nature. Therefore, nature losses pose a material risk for the financial community.[1]

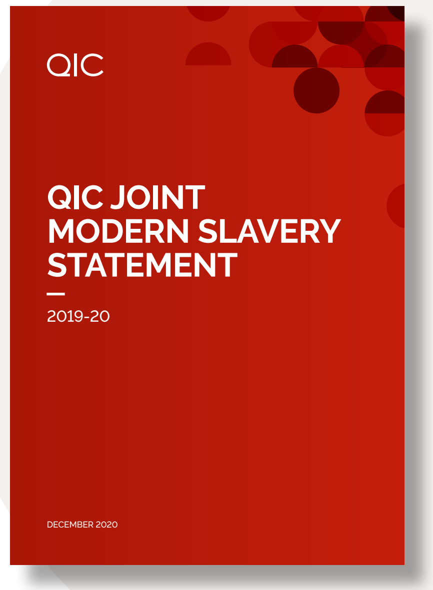
TNFD is developing a reporting framework intended to be compatible with frameworks from Value Reporting (SASB), Global Reporting Initiative (GRI), the International Financial Reporting Standards (IFRS) forthcoming Sustainability Board, and the Climate Disclosure Standards Board.

As part of LMG's credit process we look at natural capital risks such as biodiversity, water stress and raw-materials sourcing from the perspective of impacts we are potentially financing. Common to many areas of investment sustainability analysis, data availability and consistency can be a challenge so we look forward to guidance the TNFD framework can provide.

1 Why a Taskforce is needed — TNFD

2.5 Modern slavery

The reporting requirements of the *Modern Slavery Act 2018 (Cth)* increased client enquiries about our risk assessment process for minimising the risk of financing modern slavery. In section four of our 2020 LMG Sustainability Report we detailed our mapping, screening methodology, ongoing monitoring, and staff training process. This year we have continued LMG staff training, together with screening and monitoring portfolio positions for risks of modern slavery through credit analysis, monitoring using third-party data sources, and engagement.



QIC also published its Modern Slavery Statement, which was submitted to the Commonwealth Government.

QIC also published its Modern Slavery Statement, which was submitted to the Commonwealth Government. We have compared our process against other external Modern Slavery Statements submitted to Government. Our process involves risk assessment beyond tier one, narrowing down higher-risk areas using regional and sector mapping. Our corporate and investment process covers all asset classes and we have conducted specific staff training for LMG team members, complemented by QIC mandatory training. QIC has a documented policy and LMG has a process for monitoring labour risks involving weekly data feeds of positive and negative adjustments to labour flags (including forced labour), and fortnightly AI-based news scraping for instances of modern slavery.

During the financial year, none of the companies for which we hold bonds have been red flagged for instances of modern slavery. However, some companies have medium risks in their supply chains, which is something we monitor closely as part of our credit process. Modern slavery is an issue we have raised via our engagement program where we have identified elevated risks. We have also participated in Principles for Responsible Investment (PRI) roundtables to deepen our understanding of modern slavery risk and how investors can work to minimise instances.

2.6 Diversity

A lack of workplace and board diversity can represent potential social and governance issues, and is a potential risk often identified during our engagements.

In addition to encouraging gender diversity in our own field, we also consider diversity risks of the entities we are financing.

We review the board composition of issuers, looking at gender diversity, independence, and potential over-boarding. We expect a trend towards new directors who bring skills and experience in technology, security, and sustainability.

We also look at workplace diversity data, where available, and gender pay gaps.

The Australian Institute of Company Directors (AICD) campaigns for a minimum of 30 per cent female directors to ensure a robust governance model.

The boards of some companies in which we invest have at least one, but less than 30 per cent, female directors. A small minority do not have female directors or do not disclose board composition. There are also companies that appoint an employee as the chair and often lack an independent board. Our analysis indicates these companies are mainly offshore issuers and banks, where it is common for CEOs to sit on boards rather than report to the board.

Overlay Solutions

3.1 Understanding sustainability credentials of investments

Many of the mandates managed by our Overlay Solutions team relate to whole-of-portfolio hedging and rebalancing using a range of index and derivative securities across fixed interest, currencies, equities, and commodities.

The market's framework for incorporating ESG considerations into these types of mandates is less developed compared to mandates comprising single-name physical securities. While the past financial year has seen advancements around market ESG frameworks at a whole-of-portfolio level, incorporating ESG for overlay investments remains under development by the market, particularly in relation to hedging positions, derivatives, and benchmark selections. LMG has a range of tools to incorporate sustainability considerations, especially in relation to sovereign and industry exposures. Overlay Solutions mandates often benefit indirectly from these and from our thought-leadership activities.

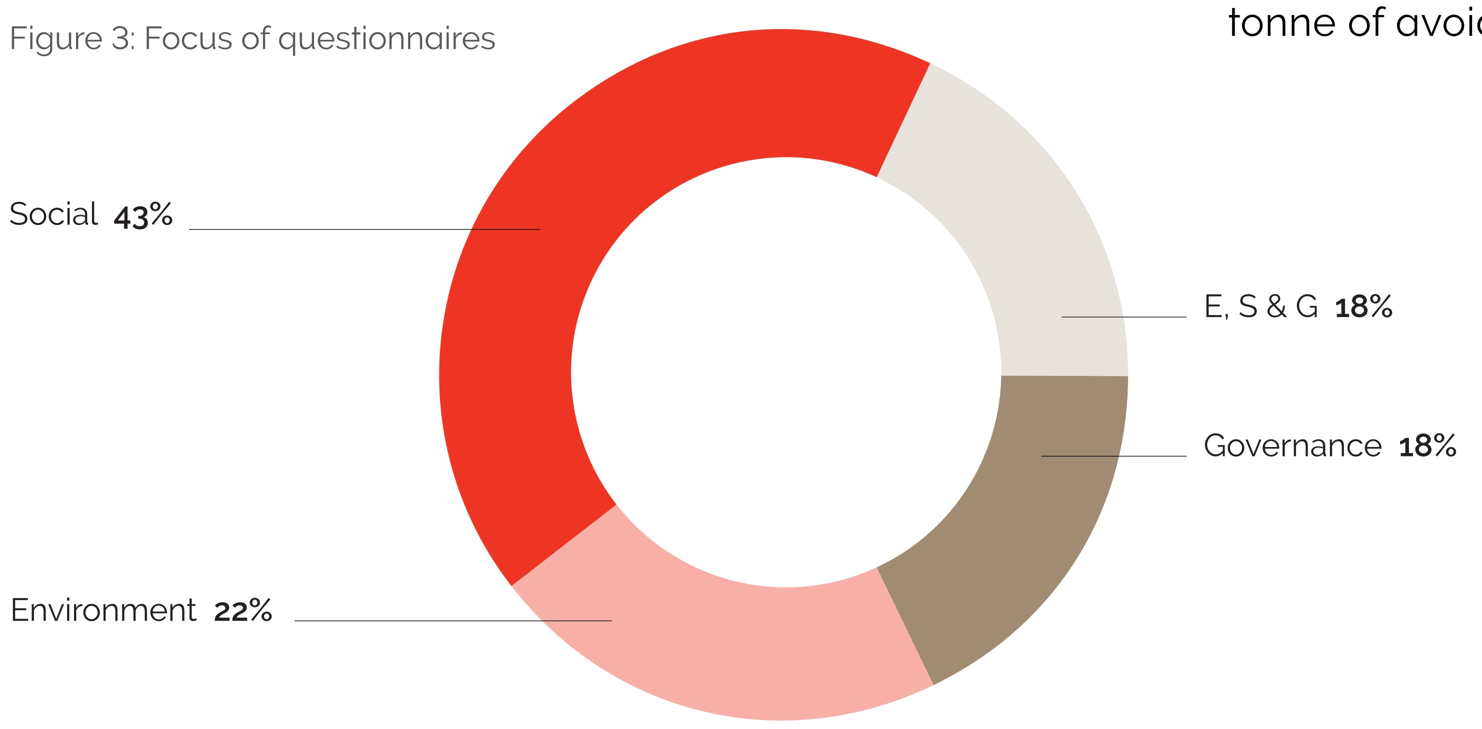
During the financial year we saw a significant increase in ESG engagement and questionnaires, particularly from clients where we manage whole-of-portfolio hedging and rebalancing requirements. While enquiries were driven by the reporting requirements of the *Modern Slavery Act 2018 (Cth)*, many clients and consultants took the opportunity to understand LMG's broader ESG investment process and the potential sustainability implications and benefits of the investments we make on their behalf.

Table 1 summarises the types and number of written ESG enquiries LMG responded to during the financial year and Figure 3 analyses the focus of questionnaires required to be completed as part of LMG's response.

Table 1: ESG enquiries and LMG responses

Source	Count
Questionnaires received	23
Sections answered	362
Questionnaires from asset consultants	8
Questionnaires from Overlay Solutions clients	9
Questionnaires from other LMG clients	6

Figure 3: Focus of questionnaires



Source: QIC

3.2 Opportunities for investors as carbon markets gather steam

Over the past financial year, we have seen continued momentum around net zero emissions commitments as the world strives to meet or exceed Paris Agreement goals. Net zero commitments have been a trend in real estate, insurance, and energy, and this has moved to incorporate commitments across the operations and investment portfolios of banks, insurers, and superannuation funds.

Investors are looking to measure and reduce the carbon intensity of investment portfolios through engagement with heavy carbon emitters, divestment of potentially stranded assets, investment in more sustainable sectors such as renewable energy, and carbon offsets.

There are carbon markets operating in different geographies with a range of compulsory or voluntary participation. In Australia, the carbon market trades Australian Carbon Credit Units (ACCUs) issued by the Clean Energy Regulator. Each ACCU represents one tonne of avoided or stored carbon dioxide equivalent.

One of the more established markets is for European Union Allowances (EUAs), which began trading in 2005 and now has liquid physical and futures markets. The physical European Union scheme is a 'Cap and Trade Scheme' with both free and auctioned carbon allowances issued annually at a decreasing rate. They are also accompanied by a Market Stability Reserve, effectively a Central Bank of Carbon, to manage oversupply risks. The European Union scheme is in its fourth phase with mandatory participation for some more emissions-intensive industries.

One way we have accessed the EUA market for our clients is via Commodity Linked Notes. These notes allow investors without EU registry accounts to participate in the physical carbon market and benefit from growing interest in carbon trading.

For investors with appropriate mandates there are also opportunities to take physical delivery of EUAs via futures contracts, to invest in other carbon markets such as the ACCUs market (where interest in carbon offsets is growing as the price of ACCUs increases), and we are also seeing other products designed for wholesale investors to access carbon offsets emerge.

CASE STUDY
Promoting integrity and transparency in complex global foreign exchange markets

The Global Foreign Exchange Committee has completed its 3-year Review of the FX Global Code. The Statement of Commitment to the FX Global Code has been signed by 1,100 entities globally.

LMG's Director, Head of Currency Stuart Simmons is Australia's sole private-sector representative on the Global Foreign Exchange Committee, a forum bringing together central banks and private-sector participants with the aim to promote a robust, fair, liquid, open and appropriately transparent FX market.

In the review:

- 11 of the Code's 55 principles have been updated
- guidance has been strengthened around anonymous trading, algorithmic trading and transaction cost analysis, disclosures, and settlement risk
- templates have been released for algorithmic and transaction cost analysis disclosures
- standardised bank and platform disclosure sheets have been released.

Trading and Counterparty ESG Risk

CASE STUDY: Evaluating counterparties for ESG risk

In our previous annual ESG reports we have introduced our ESG process as it relates to investments. While many investors consider the sustainability credentials of the companies and countries in which they invest, at LMG we are also cognisant of the ESG practices of the counterparties with whom we deal.

All trading relationships are subject to formal review and onboarding processes. Our counterparties operate in the financial sector, so they fall under our ESG process for that industry and our financial industry credit analysts consider the environmental, social, and governance credentials of counterparties as if they were buying bonds.

Trading relationships are divided into two groups:

- counterparties where we have a level of exposure, often collateralised
- brokers where we have an agency trading relationship.

The approval process includes a credit review, incorporating a review of the MSCI ESG rating and associated research with notable ESG issues cited. The counterparty is also subject to ongoing credit monitoring by the credit team. LMG's Director, Credit and ESG Manager are part of the team involved in approving counterparties. Counterparties are then configured into our trading, compliance, and risk management system by QIC's independent Investment Compliance team.

All trading relationships are also loaded into a bespoke RepRisk watchlist for continuous ESG monitoring. RepRisk is an ESG monitoring tool using artificial intelligence to scan regulatory, news and NGO reports for heightened ESG risk. We receive a fortnightly report from QIC's Responsible Investment team on counterparty ESG monitoring (this incorporates all trading relationships).

The financial sector is a highly regulated area operating across the wholesale, commercial and retail spectrum where issues and ethical transgressions can arise. When prioritising potential ESG issues, we look for frequency of headline risk, fines, and regulatory investigations to monitor for systemic issues and outsized reputational risk. Should high risk issues be identified, we have the option to:

- engage with the counterparty's management — we do this regularly as part of our engagement program and when specific issues arise (see Appendix for our engagement program)
- add the counterparty to our Dynamic Exclusion List while the matter is being addressed and:
  - remove or reduce trading lines
  - reduce investment exposures in the counterparty's debt
- determine agreed follow-up processes, which might include further engagement, continued restrictions, reintroduction of trading limits upon satisfactory reduction of systemic risk, and resolution of the matter or removal of trading lines.

Trading counterparties and relationships are a key tenet of our operations and our trading volumes provide invaluable market liquidity. This makes it important to monitor for ESG risks, act on ESG transgressions and support the market with governance enhancements through forums such as the FX Global Code (of which LMG is a key sponsor), AFMA (LMG contributes via various committees and forums), and ASFI (which is seeking to underpin the financial system's resilience and stability while shaping the domestic economy to prioritise human wellbeing, social equity and environmental protection).

It is also equally important to direct trading volumes to responsible, sustainable counterparties.

Absolute Return and Fixed Interest

Our previous sustainability reports detailed how we incorporate sustainability considerations in our credit analysis process and how that feeds through to portfolio positioning. Over the past 12 months we have seen rapid change in the impact of non-financial trends. We have also seen growth in frameworks, ESG tools, and a proliferation of experts advising on technical ESG issues.

We are supportive of the focus traditional rating agencies are placing on explaining the potential impact of ESG issues on credit evaluations and, ultimately, ratings. Each agency is developing ESG tools and matrices, and although ESG issues are not yet a significant driver of rating changes, we are seeing agencies acknowledge industry impacts and transitions — for example, the move from coal-fired to renewable power generation. Rating agency S&P Global Ratings is working on a matrix that will show its views on industry and issuer impact of ESG issues. The organisation already cites a range of ESG-influenced rating actions. We believe the market is building in an ESG spread premium to certain sectors already, and this additional funding cost could ultimately impact the credit metrics and ratings of some companies.

CASE STUDY

Net zero emissions for corporate and sovereign bond portfolios — the IIGCC Framework

In LMG we have modelled the carbon emissions of bond portfolios and applied shadow carbon prices to investments for a number of years.

When modelling carbon emissions, we use a proprietary model that incorporates 'as reported' data, other publicly available data, and modelled data (where our credit analysts apply a beta to average emissions based on their knowledge of the ESG credentials of the issuer).

For sovereign and quasi-government issuers, our model incorporates Gross Domestic Product (GDP) and Gross State Product (GSP) rather than revenue. Carbon emissions of governments have not been a traditional input to portfolio Weighted Average Carbon Intensity measures, but we wanted to ensure our calculations covered portfolios as thoroughly as possible. For a portfolio comprising corporate and government bonds, we do not reduce the output by subtracting emissions of the government of domicile of each corporate issuer, so some would argue we have an element of double-counting.

Our process works well for physical investments and for some derivative 'long positions' such as long Credit Default Swaps. In theory it could work for active long foreign exchange positions too but raises questions for other derivatives, rebalancing and hedging trades and short positions as they are not directly financing the emitting entities.

Investors in real assets such as buildings and infrastructure can have the biggest impact on reducing emissions. Likewise, equity investors can influence corporate policy via shareholder voting rights, and bond investors can provide feedback to borrowers around preferences for sustainability. However, as investors make net zero commitments across investment portfolios, we expect derivatives, currency and hedging will receive more attention, potentially via selection of sustainability-focused benchmarks.

When we apply shadow carbon prices, we look at the impact a carbon price would have on the revenue of the company. We also look at credit rating headroom, asking could the introduction of a carbon price, especially one that cannot be passed on to customers, materially impact revenue such that credit rating headroom would reduce or trigger a rating downgrade. We are conservative but believe this methodology helps us think about ESG risks and opportunities. We believe these are sensible and useful methodologies for our clients. The growth of investors making net zero commitments across investment portfolios tells us clients are increasingly cognisant of the footprint their financial investments can leave.

Regulatory guidance such as APRA's *PPG 229 Climate Change Financial Risks* suggests regulated entities exhibiting best practice would be considering physical, transition and liability risk of climate change, measuring, monitoring, and managing risks, conducting scenario analysis, and reporting transparently.

The release of the IIGCC Net Zero Framework 1.0, which closely mirrors our process, shows bond investors a pathway to analyse portfolio impacts with a view to reducing investment footprints and increasing climate-resilient investment strategies across corporate and sovereign bond portfolios. We use this Framework and believe it will have strong market endorsement, despite challenges in derivatives and rebalancing trades, for whole-of-portfolio net zero commitments.

CASE STUDY

Integrating ESG themes into portfolio positioning — oil, financing and stranded asset risk

As active corporate bond investors, two critical risks are a default, and investing in the bonds of a company that underperforms its industry peers, negatively impacting its bond spreads. It is important for us to consider ESG as part of the investment process to help manage these risks.

To do this, we are looking for companies able to repay their debt — those that can sustain their business model and adjust to a changing operating landscape. Secondly, we are looking for indicators that an industry or business process is at risk of becoming stranded, for example, because it is:

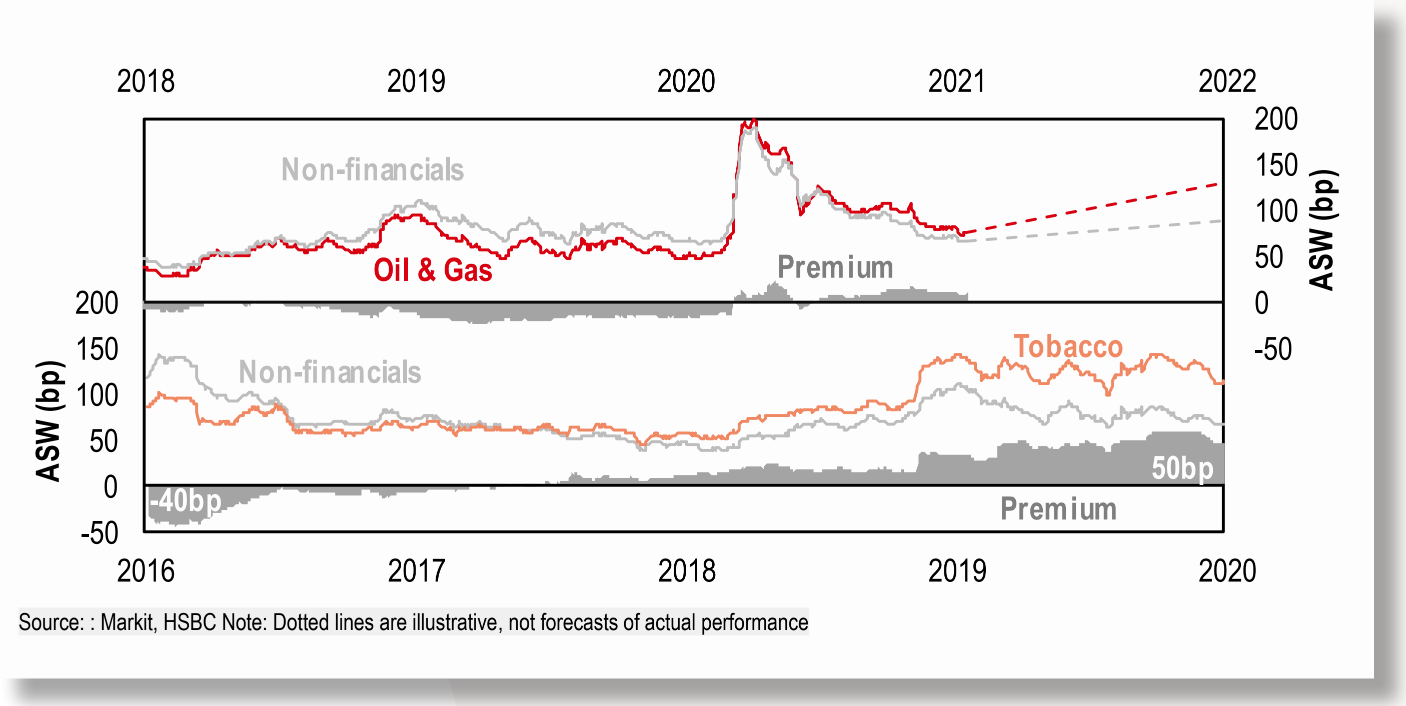
- at odds with changing consumer or investor sentiment
- incompatible with changing regulation
- substitutable by new processes or offerings.

If we consider the oil industry there are several headwinds on demand and financing, including:

- regulatory headwinds (e.g. UK banning the sale of new diesel or petrol cars by 2030 and the European Union requiring zero-emission new vehicles by 2035).
- substitutability:
  - auto manufacturers are directing capital expenditure towards the development of electric vehicles
  - beyond biofuels, aircraft flying on electric engines and battery power have made short-range flights in the US[2] and France[3], with commercial airlines keen observers[4]
  - commercial short-haul air travel is being banned on some domestic French routes where lower-carbon train travel can be used[5]
  - examples of eco-friendly and bioplastic[6] substitutes for fossil fuel-based plastic packaging.
- companies and investors making net zero emissions commitments. For investors this means they may look to reduce the emissions in their portfolio, starting with the highest-emitting companies. They will be interested in a company's plans to reduce emissions and if not satisfied with plans they may divest from the equity or bonds. Many investors have 2050 targets with interim measurements in 2030.

For LMG, this means heightened risk to spreads on the bonds of oil companies, especially bonds that mature beyond 2030. While we acknowledge some oil companies are working hard on their sustainability and emissions pathway and demand for oil will continue beyond 2030, we believe the bonds of other oil companies may underperform in much the same way tobacco bonds underperformed when investors pledged not to finance tobacco manufacturers. Figure 4 echoes our views of potential spread widening risk, demonstrating the importance of considering ESG credentials of oil companies.

Figure 4: HSBC comparison of tobacco and oil bond spreads



Source: HSBC

2 The largest electric plane yet completed its first flight — but it's the batteries that matter — NBC News
3 Fly Electric: The Aircraft of the Future Takes Flight — The Atlantic
4 EasyJet says it could be flying electric planes within a decade — The Guardian
5 France Short-Haul Flight Ban Points Way to Cleaner Flying — Bloomberg
6 Bioplastics — Food Packaging Forum

Sustainability bonds

6.1 Investing in labelled bonds

Sustainability or labelled bonds continue to form an important and growing part of our vanilla bond portfolios. This year has seen continued global growth in issuance of Green, Social, Sustainable and Sustainability-Linked Bonds (SLB), along with improvement in impact reporting and tightening of frameworks, standards and guidelines. We also saw the first Sustainability-Linked Bond print in Australian dollars.

Sustainability-Linked Bond — the first $AUD SLB

The first Australian dollar Sustainability-Linked Bond was priced in June 2021. Wesfarmers borrowed $1 billion, issuing two bonds maturing in 2028 and 2031. The proceeds will be used to transform energy sources in the Wesfarmers retail businesses (Bunnings and Officeworks) with a target to operate on 100 per cent renewable energy by 2025. The funding will also be used to reduce emissions in its most carbon intensive business (the production of ammonium nitrate). Wesfarmers is already market-leading on reducing carbon intensity of the ammonium nitrate business, so it has established additional measurement restrictions to ensure the target is ambitious. If it misses either or both targets, the coupon increases.

When we are assessing a labelled green, social, sustainable, or sustainability-linked bond investment, the issuer must first meet LMG's credit criteria, with ESG risks and opportunities forming an important part of our credit process.

We then assess the bond structure, and relative value merits, not the sustainability label alone. This means we will not buy the green bond of an issuer with what we consider weak ESG credentials. This does not mean we will not consider issuers seeking to transition but we must judge their plans to be credible and consistent with the entity's strategic ambitions. We look at indicators such as forward capital expenditure plans to understand the issuer's intentions.

We are also alert to 'greenwashing' risks and have turned down bonds with a structure or objective that do not align with our criteria or the issuer's operations. We favour issuers with strong ESG credentials and will buy their vanilla bonds if they offer better relative value than another issuer's labelled bond.

Sustainable Bonds versus Sustainability-Linked Bonds

Sustainable Bond proceeds are ringfenced for green and/or social projects or assets, whereas Sustainability-Linked Bond (SLB) proceeds can be used for general corporate purposes and are subject to Key Performance Indicators (KPIs), sustainability targets, and coupon adjustments (usually a coupon step-up in the event of a missed target).

For both security types, LMG looks for:

- a robust Framework aligned with guidelines or principles from entities like International Capital Market Association (ICMA) or Climate Bonds Initiative (CBI)
- independent review against the Framework and preferably ongoing independent certification
- regular (at least annual) reporting of use of proceeds and impact — we encourage issuers to use market-accepted measurements and to align reporting timeframes with their general financial reporting to embed sustainability within operations.

SLBs can be used by sustainable or transitioning companies and those with sustainability targets funded via operating expenses, whereas Sustainable Bonds are limited to issuers that already have or can readily build a portfolio of green or social assets (or projects). We believe SLBs should have broad appeal to issuers, their staff and investors, and should drive activities that support a net zero world.

6.2 Trading activity

Table 2: LMG holdings as at 30 June 2021

Bond type	Market value ($)
Green Bond	307,204,600.76
Social Bond	22,319,931.75
Sustainable Bond	131,567,136.73
SDG Bond	10,393,261.60
Sustainability-Linked Bond	74,124,259.33
Grand total	**545,609,190.17**

Table 3: LMG turnover during 2020–21

BUY/SELL	Bond type	Market value ($)
BUY	Green Bond	251,199,720.98
	Sustainability-Linked Bond	61,271,498.53
	Social Bond	38,428,734.66
	Sustainable Bond	65,822,397.60
BUY total		**416,722,351.77**
SELL	Green Bond	134,435,375.47
	Sustainability-Linked Bond	3,976,788.05
	Social Bond	67,962,551.84
	Sustainable Bond	27,207,050.40
SELL total		**233,581,765.76**

6.3 Impact of labelled bond investments

Nineteen bonds are less than 12 months old, so their first impact report is not yet due. Thirty-two bonds have provided impact reports.

We review impact reports, and estimate cumulatively that the bonds in which we have invested have funded renewable energy installations, green buildings and building refurbishments that supported the avoidance of 97,693,191 tonnes of carbon emissions equivalents. Bonds also supported social housing, wastewater recycling, education, health, and gender equality.

Although reporting quality is improving and most of the bonds in which we invest have independently audited impact reports (and are issued under principles or guidelines of groups like ICMA and CBI), there is not a single framework for measuring impact. See Table 4 for examples of reported impact. This is not a complete aggregation of impact and it does not cover every labelled bond in LMG's portfolios — it is our summary based on various issuers' reports.

Table 4: Examples of reported impact

Bond type	Industry	Project/asset universe	Examples of reported impact
Green	Banks	Renewable energy – solar and wind farms Clean energy Low emissions transport Pollution control Water and wastewater Green buildings Green mortgages	Avoided emissions Installed capacity Low carbon buildings with GHG intensity nearly 20% below CBI city emissions benchmarks Increased water supply Low carbon residential buildings
Green	Health	Circular product solutions Energy efficiency Packaging Hazardous materials disposal	Waste collection and recycling Reduced emissions 100% of operations powered by renewable energy 90% of operational waste recycled 20% reduction water consumption
Green	Consumer	Renewable energy powering retail sites Retrofitting LED lighting Reduction of plastic packaging Organic farming projects Sustainable sourcing of food products	Over 140 sites generating energy from solar power LED lighting installed in over 800 sites HVAC and refrigeration optimisation
Green	Utilities	Development of renewable energy sources Energy efficiency Smart metering	Installed renewable energy capacity of nearly 4,000 MW
Sustainable	SSA*	Social housing Clean transport Water and wastewater management Access to essential services Affordable basic infrastructure Employment opportunities	Reduced emissions Public transport powered by clean energy Litter removal Employment of long-term unemployed, youth and people with disabilities or from culturally diverse backgrounds
Sustainable	Bank	Affordable housing Environmental sustainability Financial wellbeing	Hospital and aged care sector loans Student housing Renewable energy project loans Green buildings Financial education programs
Sustainability-Linked	Utilities	Renewable energy capacity Reduced carbon emissions	Though measurement of targets is not yet due, the issuer appears to be on track to exceed the targets

Bond type	Industry	Project/asset universe	Examples of reported impact
Social	Bank	Employers that promote gender equality	Directors exceeding AICD gender target Majority female employees Gender equality in management
Social	SSA*	Extending telecommunication services Power distribution Health services Education Microfinance Gender-based lending Loans to social housing providers	Technology extended to 43 million people in developing markets Power supplied to 7 million people for a year 18 million microfinance loans Over 6 million loans to female-led businesses 7,000 affordable housing properties supported

* includes sovereigns, semi-government and supranational issuers

Thought-leadership contributions

QIC is a member of various industry initiatives collaborating on ESG implementation and sustainability. These are valuable sources of knowledge in relation to market developments as well as ESG themes and trends.

They also contribute to our commitment to the UN supported Principles for Responsible Investment (PRI). Particularly Principle 2 which states, "we will be active owners and incorporate ESG issues into our ownership policies and practices".

During the year, members of the LMG team contributed to market thought-leadership and governance via committees, panels, and investor groups. In addition to the events listed in Table 5, we had sessions with rating agencies, service providers and banks to evaluate and give feedback on their sustainability offerings. We also met with bank syndicates to discuss potential green, social, sustainable, and sustainability-linked deal structures (on a 'public information only' basis). We also joined the Clean Energy Finance Corporation (CEFC) to provide feedback on a joint Commonwealth and State Government project to enhance home energy-efficiency ratings. See Table 5 for a full list of our industry involvement and support.

Table 5: Snapshot of LMG event, conference and committee involvement

Event/onference/committee	Participation by LMG Personnel
AFMA ESG Risk Forum	Marayka Ward, Senior Credit & ESG Manager, is a member of AFMA's ESG Risk Forum, an AFMA policy committee that considers ESG-related regulatory, policy and legislative reform together with ESG-related legal and compliance risk relevant to AFMA members. This group also looks at global ESG developments applicable to members operating in global markets.
AFMA Inflation Committee	Andrew Whittaker, Senior Portfolio Manager, Fixed Income, is a member of AFMA's Inflation Committee, the governance committee responsible for contributing to regulatory, policy and legislative reform around domestic inflation markets.
AFMA Sustainable Finance Forum	Marayka Ward, Senior Credit & ESG Manager, is a member of AFMA's Sustainable Finance Forum, an AFMA policy committee that considers sustainable finance regulatory, policy and legislative reform relevant to AFMA members.
Australian Foreign Exchange Committee	Stuart Simmons, Director, Head of Currency, is a member of the Australian Foreign Exchange Committee (AFXC), a representative forum of the Australian foreign exchange market operating under the sponsorship of the Reserve Bank of Australia (RBA).
Australian Sustainable Finance Initiative	Marayka Ward, Senior Credit & ESG Manager, was a member of Technical Working Group 2: Creating a more sustainable, resilient, and stable finance system by embedding sustainability into systems, markets, products, and services to better account for risk and impact.
BBSW Advisory Committee	Laurent Danoy, Senior Portfolio Manager, is a member of the ASX BBSW Advisory Committee, which is the industry consultative committee reforming the BBSW benchmark, comprised of the RBA, ASIC, APRA and around 10 market participants.
Bloomberg & Westpac IQ	Marayka Ward, Senior Credit & ESG Manager, was one of three global experts interviewed for a joint Bloomberg and Westpac paper on 'Sustainable Finance for a world in transition'.
Bloomberg Women's Buyside Network, Australia/NZ Chapter	Susan Buckley, Managing Director Liquid Markets Group, is a founding member of the BWBN, Australia/NZ Chapter. Focused on the goal of achieving greater diversity in the next generation of investment industry leaders, the Chapter's charter is — to inspire women into the investment industry (from school and universities), to highlight the talented women already in key buy-side roles and grow the pipeline of female talent to be able to step into future investment industry leadership roles. Focused specifically on gender balance in the buy-side industry, BWBN will be helping to shape the future of investing at a time when ESG is front and centre of all investment decision-making.
Global Foreign Exchange Committee	Stuart Simmons Director, Head of Currency, LMG, is Australia's sole private- sector representative on the Global Foreign Exchange Committee (GFXC), a forum bringing together central banks and private-sector participants with the aim to promote a robust, fair, liquid, open and appropriately transparent FX market. During this time Stuart has co-chaired the Buyside Outreach Working Group and actively participated in the Pre-Hedging Working Group.

Event/onference/committee	Participation by LMG Personnel
Griffith University Student Investment Fund Investment Committee	Marayka Ward, Senior Credit & ESG Manager, is a member of the Investment Committee. The SIF invests real money in ASX200-listed companies and excludes investments in companies deriving revenue from fossil fuels. The Investment Committee determines holdings based on student recommendations and provides an excellent mentoring opportunity.
PRI Sovereign Debt Advisory Committee	Marayka Ward, Senior Credit & ESG Manager, is a member of the UNPRI's Sovereign Debt Advisory Committee. She was also a member of the UNPRI's Bondholder Engagement Working Group when it existed.
S&P ESG Leadership Council	Marayka Ward, Senior Credit & ESG Manager, contributes to S&P's ESG Leadership Council. This group, arranged by credit rating agency Standard & Poor's, discusses latest global sustainable finance developments, resources, and evaluations.
Sustainability Panels	Marayka Ward, Senior Credit & ESG Manager, has joined several roundtable and conference panels on sustainability including: • CBA roundtable on green, social, sustainability bonds July 2020 • ANZ Sustainability Linked Bond roundtable November 2020 • KangaNews Sustainable Debt summit November 2020 • KangaNews Investing with Impact roundtable February 2020 • OMFIF Sustainable Policy Institute and Maleki Green Finance roundtable "Moving beyond climate risk: investing into the S" March 2020 • ANZ Debt Conference Sustainable Finance Market Overview and Key Trends May 2021 • FinanceAsia & ANZ 2021 Sustainable Finance roundtable June 2021 • KangaNews Sustainable Debt Summit (Kate Bromley spoke on behalf of Marayka) June 2021

Appendix

8.1 Engagement record for FY21

Industry	Engagement format	Date	Areas covered
JUL TO SEPT QUARTER			
Consumer Staples	Email correspondence	Jul-20	Reporting
Supranationals	QIC arranged meeting	Jul-20	Sustainability Impact Reporting Governance
Semi government	QIC arranged meeting	Aug-20	Impact reporting Reporting
Supranationals	QIC arranged meeting	Aug-20	Green bond program Impact reporting
Automotive	QIC arranged meeting	Aug-20	Climate Sustainability Governance Green bonds
Utilities	Investor Group	Aug-20	Carbon emissions
Supranationals	Email correspondence	Sep-20	Climate Impact reporting
Supranationals	Email correspondence	Sep-20	Social Impact reporting
Financials	Other	Sep-20	Governance Social
Utilities	QIC arranged meeting	Sep-20	Board diversity Social Renewable energy Carbon emissions
Utilities	QIC arranged meeting	Sep-20	Reporting Executive remuneration Gender diversity Governance Renewable energy Transition plans Carbon emissions Power purchase agreements

Industry	Engagement format	Date	Areas covered
Automotive	QIC arranged meeting	Sep-20	Carbon emissions Electric vehicles Battery technology COVID-19 customer response
Utilities	Investor Group	Sep-20	Governance Climate change Carbon emissions
OCT TO DEC QUARTER			
Utilities	Email correspondence	Oct-20	Climate change Emissions
Real estate	Investor Group	Oct-20	Emissions reduction
Financials	Investor Group	Nov-20	LIBOR transition
Financials	QIC arranged meeting	Nov-20	LIBOR transition
Utilities	Investor Group	Nov-20	Nuclear reform in Europe Sustainability strategy Issuance of sustainability-linked notes Green opportunities
Automotive	Investor Group	Dec-20	Ethics and strategy Risk management Decarbonisation Sustainable supply chain management Human rights
Real estate	Investor Group	Nov-20	Emissions reduction
Communications	Investor Group	Nov-20	Climate change Carbon emissions Renewable energy Sustainability
Chemicals	Investor Group	Nov-20	Exposure to thermal coal customers
Industrials	Investor Group	Dec-20	Climate change Health and safety

Industry	Engagement format	Date	Areas covered
JAN TO MAR QUARTER			
Financials	QIC arranged meeting	Jan-21	Sustainable issuance Product design
Consumer Staples	QIC arranged meeting	Feb-21	Sustainable issuance Water and wastewater management Ecological impacts Climate risk Product quality & safety Supply chain management Product design and lifecycle management
Utilities	QIC arranged meeting	Feb-21	Climate risk Carbon emissions Social - staff diversity Social - supply chain
Sovereign	QIC arranged meeting	Feb-21	Climate risk Carbon emissions Green bonds Quality of data
Supranationals	QIC arranged meeting	Feb-21	SDGs Impact investing
Automotive	Investor Group	Feb-21	Climate change Emissions reduction/carbon neutrality Governance Green bonds
Energy	Investor Group	Mar-21	COVID-19 support Climate change and executive remuneration links Green initiatives Net zero pathway
Utilities	Investor Group	Mar-21	Climate change Green energy COVID-19

Industry	Engagement format	Date	Areas covered
Industrials	Investor Group	Mar-21	Climate change Net zero target Environmental initiatives Sustainability-linked loan
Industrials	Investor Group	Mar-21	Green energy Environmental initiatives
Real estate	Investor Group	Mar-21	Sustainable issuance Emissions reduction
Utilities	Investor Group	Mar-21	Climate change Emissions targets
Utilities	Investor Group	Feb-21	Renewables Stranded assets Cost of carbon Emissions reductions Climate change Climate leadership
Financials	QIC arranged meeting	Mar-21	COVID-19 support Sustainable financing Governance issues Social measures
Multiple	Investor Group	Mar-21	Climate change
APR TO JUN QUARTER			
Financials	QIC arranged meeting	Apr-21	Governance Regulation
Real estate	Investor Group	Apr-21	Climate resilience Community engagement
Financials	QIC arranged meeting	May-21	Governance Regulation Staff training
Financials	QIC arranged meeting	May-21	Climate risk Lending policy and exposure to coal industry Sustainability

Industry	Engagement format	Date	Areas covered
Industrials	Investor Group	May-21	Reporting Climate change Modern slavery Workplace health and safety
Financials	QIC arranged meeting	May-21	Climate change Diversity and Inclusion Sustainable financing Materiality assessment
Sovereign	Investor Group	May-21	Diversity and inclusion
Chemicals	Investor Group	May-21	Emissions
Telecommunications	QIC arranged meeting	May-21	Workplace health and safety Social — essential services
Utilities	QIC arranged meeting	May-21	Renewable energy Power purchase agreements Mine rehabilitation
Financials	QIC arranged meeting	Jun-21	Governance Sustainability Material ESG matters
Financials	Investor Group	Jun-21	Paris agreement Net zero commitments Climate change
Consumer Staples	QIC arranged meeting	Jun-21	Climate change Renewable energy Net zero emissions Modern slavery and human rights UN SDGs Health and product safety Data security Governance Green products
Sovereign	Investor Group	Jun-21	Energy efficiency Green products

Source: QIC

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