

Second-Party Opinion

Macquarie Green Finance

Evaluation Summary

Sustainalytics is of the opinion that the Macquarie Green Finance Framework is credible and impactful, and aligns with the four core components of the Green Bond Principles 2017 and the Green Loan Principles. This opinion is based on:



USE OF PROCEEDS The eligible categories for the use of proceeds (renewable energy, energy efficiency, waste management, green buildings, and clean transportation) are aligned with those recognized by the Green Bond Principles and Green Loan Principles as project categories with positive environmental benefits.



PROJECT EVALUATION / SELECTION Eligible Projects are reviewed and approved by a dedicated Green Finance Working Group (“GFWG”). Macquarie ensures that social and environmental risks are mitigated by applying its internal Environmental and Social Risk (ESR) Policy and ESR Risk Assessment Toolkit. This approach to risk management is based on the IFC Performance Standards. Macquarie’s project evaluation and selection process is in line with market best practices.



MANAGEMENT OF PROCEEDS Macquarie will track Eligible Projects through a register which includes relevant information on each transaction. All transactions will be earmarked for allocation against the Eligible Projects and any unallocated proceeds will be held in accordance with Macquarie’s prudent liquidity management policy. Macquarie’s disclosure and processes with respect to management of proceeds is in line with market best practices.



REPORTING Macquarie commits to report on allocation of proceeds within its annual Green Finance Report. The allocation reporting will include relevant transaction data such as the aggregate amount allocated to Eligible Projects, while the impact reporting will comprise relevant metrics for each of the Eligible Projects. An auditor will provide annual assurance on Macquarie’s reporting commitments. Macquarie’s reporting commitments are in line with market best practices.

Evaluation date	June 7, 2018
Issuer Location	Sydney, Australia

Report Sections

Introduction	2
Sustainalytics’ Opinion	3
Appendices	7

For inquires, contact the Project Team:

Ankita Shukla (New York)
 Senior Associate, Sustainable Finance Solutions
 ankita.shukla@sustainalytics.com
 (+1) 617 603 3329

Catalina Secreteanu (Sydney)
 Director, Institutional Relations
 catalina.secreteanu@sustainalytics.com
 (+61) 2 8015 5651

Introduction

Macquarie Group Limited (“Macquarie”, “the Group”, or “the issuer”) is the largest Australian investment bank with presence across 28 countries. The Group’s key activities include asset management and finance, banking, advisory and risk and capital solution across debt, equity and commodities.

Macquarie has developed the Macquarie Green Finance Framework (the “framework”) under which it may issue Green Financing Transactions (“GFT”) which will include bonds, loans and other debt or financing structures to finance and refinance “Eligible Projects” that provide clear environmental sustainability and climate change benefits. The framework defines eligibility criteria in the following five areas:

1. Renewable energy
2. Energy efficiency
3. Waste management
4. Green buildings
5. Clean transportation

Macquarie engaged Sustainalytics to review the Macquarie Green Finance Framework and provide a second-party opinion on the framework’s environmental credentials, as well as the alignment of GFTs with the Green Bond Principles 2017¹ (the “GBP”) and the Green Loan Principles² (the “GLP”). This framework has been published in a separate document.³

As part of this engagement, Sustainalytics held conversations with various members of Macquarie’s management team to understand the sustainability impact of their business processes and planned use of proceeds, as well as management of proceeds and reporting aspects of Macquarie’s GFTs. Sustainalytics also reviewed relevant public documents and non-public information.

This document contains Sustainalytics’ opinion of the Macquarie Green Finance Framework and should be read in conjunction with that framework.

¹ Green Bond Principles 2017 <https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/GreenBondsBrochure-JUNE2017.pdf>

² Green Loan Principles, March 2018 http://www.lma.eu.com/application/files/8415/2162/5092/LMA_Green_Loan_Principles_Bookletpdf.pdf

³ <https://www.macquarie.com/au/about/company/environmental-social-governance-esg>

Sustainalytics' Opinion

Section 1: Sustainalytics' Opinion on the Macquarie Green Finance Framework

Summary

Sustainalytics is of the opinion that the Macquarie Green Finance Framework is credible and impactful, and aligns with the four core components of the Green Bond Principles 2017 and Green Loan Principles. In addition, Sustainalytics highlights the following elements of Macquarie's Green Financing Transactions ("GFT"):

- The eligible use of proceeds categories (renewable energy, energy efficiency, waste management, green buildings, and clean transportation) are recognized by the GBP 2017 and GLP as project categories carrying positive environmental benefits. Further, Macquarie specifically excludes lending to industries which involve fossil-fuel, nuclear, and production of biomass suitable for food production;
- Macquarie's green buildings eligibility criterion is based on third-party certification standards such as GBCA 6 star, BREEAM Excellent, LEED Gold or above, or equivalent regional standards. Sustainalytics has conducted an evaluation of the certifications, and considers such certification standards as having a positive impact (see Appendix 1 for additional details on the certification schemes).
- With regard to its selection process, Macquarie will have a dedicated Green Finance Working Group ("GFWG") comprised of cross-departmental team members responsible for ensuring that GFTs meet the use of proceeds criteria. In addition, Sustainalytics is of the opinion that Macquarie has comprehensive internal screening procedures to ensure that it does not lend to sensitive sectors through its Environmental and Social Risk (ESR) Policy with relevant priorities and approach methods, internal ESR Risk Assessment Toolkit, and oversight of ESR by the Chief Risk Officer. Macquarie's approach is based on the IFC Performance Standards and, as such, Sustainalytics views the Group's project evaluation and selection process as in line with market best practices.
- Macquarie will establish a register to record the ongoing allocation of net proceeds for each GFT. All GFT funds will be earmarked within the register for allocation against the Eligible Projects. Macquarie's processes with respect to management of proceeds is robust and in line with market practices.
- Macquarie commits to provide an annual Green Finance Report comprised of allocation and impact reporting. The allocation reporting will include relevant transaction data such as the aggregate amount allocated to Eligible Projects, while the impact reporting will comprise relevant metrics for each of the Eligible Projects. An auditor will provide annual assurance on Macquarie's reporting commitments. Macquarie's reporting commitments are in line with market best practices.

Alignment with Green Bond Principles 2017 and Green Loan Principles

Sustainalytics has determined that Macquarie's Green Finance Framework aligns with the four core components of the Green Bond Principles 2017. For detailed information please refer to Appendix 2: Green Bond/Green Bond Programme External Review Form.

Sustainalytics also considers Macquarie's Green Finance Framework to be aligned with the expectations of the Green Loan Principles, which closely reflect the Green Bond Principles 2017.

Section 2: Sustainability Performance of the Issuer

Contribution of Green Financing Transactions to Macquarie's sustainability strategy

Sustainalytics has a positive view of Macquarie's framework and its alignment with the Group's efforts to transition to a low-carbon economy. Although Macquarie has not set quantifiable targets for green lending/financing, the Group has demonstrated its commitment to mitigating climate change through the following efforts:

- Macquarie has a substantial and longstanding commitment to the renewable energy sector having invested or arranged approximately AUD 20 billion into renewable energy projects since 2010.⁴ The Group has an existing track record of supporting numerous large-scale renewable energy projects globally in onshore and offshore wind, solar, tidal, hydro and biomass. Macquarie and Macquarie-managed businesses have more than 12,546MW of diversified renewable energy assets in operation.⁵
- In 2017, Macquarie evolved its climate risk approach, enhancing its portfolio analysis and the assessment of climate-related risks for transactions in carbon intensive sectors.⁶
- Macquarie Asset Management has been a signatory to the United Nations-supported Principles for Responsible Investment since August 2015, submitting its first RI Transparency Report in 2017, and has dedicated teams to coordinate ESG activities across the group.⁷
- The Group transparently reports on its lending and equity exposures to the oil and gas, and coal sectors, which accounted for 2% of the total funded loan assets and 7% of the total funded equity investments⁸ in 2017.
- In 2017, Macquarie acquired the Green Investment Bank, which will remain one of the leading investors in green infrastructure in the UK and Europe, with an added scope to further expand internationally. Macquarie has committed to the Green Investment Bank's target of leading £3 billion of investment in green energy projects over the next three years, and operating in accordance with its established green purpose.⁹

Sustainalytics is of the opinion that Macquarie's sustainability efforts are indicative of the priority the Group assigns to achieving positive environmental impact. As such, Sustainalytics is of the opinion that Macquarie's Green Financing Transactions are aligned with the Group's overall sustainability efforts and serve as a tool to mobilise capital and enable a transition to a low carbon economy.

Well positioned to address common environmental and social risks associated with the projects

While Sustainalytics recognizes that the proceeds from Macquarie's GFT will be directed towards Eligible Projects that are recognized by market norms (GBP and GLP) to have positive impact, Sustainalytics is aware that such projects can lead to negative social and environmental impacts. Some key environmental and social risks associated with the Eligible Projects are biodiversity loss, pollution control in the construction and development of projects, and increased exposure of local communities to adverse impacts. However, Sustainalytics is of the opinion that Macquarie has strong environmental and social risk assessment processes to mitigate such risks, through its: (i) compliance with International Finance Corporation (IFC) Performance Standards, (ii) Environmental and Social Risk (ESR) Policy¹⁰ with relevant priorities and approach,¹¹ (iii) internal ESR Risk Assessment Toolkit, (iv) oversight of ESR by the Chief Risk Officer, and (v) Climate Change Approach.

Macquarie's Environmental and Social Risk Policy provides a process for embedding environmental and social risk management into investment decision making. As per Macquarie's climate change approach, climate-related risks are considered through the assessment of changes to laws and regulations, technology developments and disruptions, physical and reputational risks and the evaluation of adaptation and mitigation measures for transactions and counterparties in exposed industry sectors.¹²

Sustainalytics is of the opinion that Macquarie's internal processes and mechanisms to mitigate environmental and social risks associated with its project financing and lending activities are in line with market best practices.

⁴ [Macquarie and Renewable Energy](#)

⁵ [Macquarie and Renewable Energy](#)

⁶ [Macquarie Group Annual Report, 2017](#) and [Macquarie and Climate Change](#)

⁷ <https://www.unpri.org/signatories/macquarie-asset-management/1448.article>

⁸ [Macquarie Group Annual Report, 2017](#)

⁹ <https://www.macquarie.com/uk/about/newsroom/2017/green-investment-bank>

¹⁰ [Macquarie Environmental and Social Risk Policy](#); In 2017, Macquarie assessed 163 transactions under the ESR Policy

¹¹ [Defining our ESG Focus](#)

¹² <https://static.macquarie.com/dafiles/Internet/mgl/global/shared/sf/pdf/climate-change-approach.pdf?v=6>

Section 3: Impact of Use of Proceeds

The proceeds of the bond will be used for project financing and lending in the following five categories:

1. Renewable energy
2. Energy efficiency
3. Waste management
4. Green buildings
5. Clean transportation

All of the above-mentioned green categories defined in the Macquarie Green Finance Framework are recognized as having beneficial environmental impacts by the Green Bond Principles, 2017, and the Green Loan Principles.

Moreover, financial institutions play an important role in the environmental finance landscape by raising and channeling funds in order to help make low-carbon investment projects viable. Scaling up low-carbon investment and finance is a two-fold process which involves: scaling up finance for long-term investment in infrastructure; and shifting investments towards low-carbon alternatives. According to estimates, between 2015-2030, the global economy will require \$89 trillion in infrastructure investments across cities, energy, and land-use systems, and \$4.1 trillion in incremental investment for the low-carbon transition to keep within the internationally agreed limit of a 2-degree Celsius temperature rise.¹³ Macquarie's green commitments, which are enabling financing of renewable energy and low-carbon infrastructure projects, are supporting global goals to mitigate climate change. As such, Sustainalytics is of the opinion that Macquarie's Green Financing Transactions will be allocated towards projects or loans that facilitate climate change mitigation and promote development of sustainable infrastructure.

Alignment with/contribution to SDGs

The Sustainable Development Goals (SDGs) were set in September 2015 and form an agenda for achieving sustainable development by the year 2030. Responsible business and investment is essential to advancing the SDGs and achieving transformational change through the SDGs.¹⁴ Macquarie's Green Financing Transactions will specifically advance the following SDG goals and targets:

Use of Proceeds Category	SDG	SDG target
Renewable energy	7. Affordable and Clean Energy	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix
Energy efficiency	7. Affordable and Clean Energy	7.3 By 2030, double the global rate of improvement in energy efficiency
Waste management	12. Responsible Consumption and Production	12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.
Green buildings	11. Sustainable Cities and Communities	11.B By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters
Clean transportation	9. Industry, Innovation and Infrastructure	9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes

¹³ <http://www.worldbank.org/en/news/feature/2015/04/18/raising-trillions-for-climate-finance>

¹⁴ <https://www.unglobalcompact.org/sdgs/17-global-goals#sdg7>

Conclusion

Macquarie has developed the Macquarie Green Finance Framework for bonds, loans and other debt or financing structures to finance projects that contribute to climate change mitigation as well as sustainable infrastructure. Taking into consideration Macquarie's efforts on financing sustainable growth, Sustainalytics believes that the Macquarie Green Finance Framework is aligned with the overall sustainability objectives of Macquarie. By adhering to strong eligibility criteria, demonstrating a structured and transparent project selection and management of proceeds process, and reporting on relevant Key Performance Indicators to measure the impact of the allocated proceeds, Sustainalytics considers the framework to be fully aligned with the Green Bond Principles 2017 and Green Loan Principles. Sustainalytics is of the opinion that the Macquarie Green Finance Framework is robust, credible and transparent.




Appendices

Appendix 1: Green Building Certifications Comparison Table

	GBCA	BREEAM	LEED
Background	Established in 2003, the Green Building Council of Australia's Green Star system is the nation's authority on sustainable buildings, communities and cities. The rating system assesses buildings in one of four categories: Communities, Design & As Built, Interiors, and Performance.	BREEAM (Building Research Establishment Environmental Assessment Method) was first published by the Building Research Establishment (BRE) in 1990. Based in the UK. Used for new, refurbished and extension of existing buildings.	Leadership in Energy and Environmental Design (LEED) is a US Certification System for residential and commercial buildings used worldwide. LEED was developed by the non-profit U.S. Green Building Council (USGBC) and covers the design, construction, maintenance and operation of buildings.
Certification levels	1 Star (Minimum Practice) 2 Star (Average Practice) 3 Star (Good Practice) ¹⁵ 4 Star (Best Practice) 5 Star (Australian Excellence) 6 Star (World Leadership)	Pass Good Very Good Excellent Outstanding	Certified Silver Gold Platinum
Areas of Assessment: Environmental Project Management	<i>Areas assessed for Communities:</i> Governance Liveability Economic Prosperity Environment Innovation	Management (Man) addresses various aspects: project management, deployment, minimal environmental disturbance worksite and stakeholder engagement.	Integrative process, which requires, from the beginning of the design process, the identification and creation of synergies between the various project stakeholders regarding the construction choices and the technical systems.
Areas of Assessment: Environmental Performance of the Building	<i>Areas assessed for Design & As Built, Interiors, and Performance:</i> Management Indoor Environment Quality Energy Transport Water Materials Land Use and Ecology Emissions Innovation	Energy Land Use and Ecology Pollution Transport Materials Water Waste Health and Wellbeing Innovation	Energy and atmosphere Sustainable Sites Location and Transportation Materials and resources Water efficiency Indoor environmental quality Innovation in Design Regional Priority
Requirements	Point system, "category score" awarded based on performance (% of points achieved) within a given category. For some categories there is a minimum threshold (i.e. GHG/sqm/yr) and points are awarded for exceeding the minimum. Categories are weighted based on building location (to reflect that in some	Prerequisites depending on the levels of certification + Credits with associated points This number of points is then weighted by item ¹⁶ and gives a BREEAM level of certification, which is based on the overall score obtained (expressed as a percentage). Majority of BREEAM issues are flexible,	Prerequisites (independent of level of certification) + Credits with associated points These points are then added together to obtain the LEED level of certification There are several different rating systems within LEED.

¹⁵ Buildings assessed on the Design & As-Built, Interiors, and Communities criteria can achieve certifications 4-star and higher. Buildings assessed on the Performance Rating scale can achieve any score.

¹⁶ BREEAM weighting: Management 12%, Health and wellbeing 15%, Energy 19%, Transport 8%, Water 6%, Materials 12.5%, Waste 7.5%, Land Use and ecology 10%, Pollution 10% and Innovation 10%. One point scored in the Energy item is therefore worth twice as much in the overall score as one point scored in the Pollution item

	<p>areas of Australia, certain metrics may be more relevant). Total score is then given out of 100.</p> <p>For the areas of Communities, Design & As Built, and Interiors, no certification is awarded for buildings scoring below 45 points/3 stars.</p>	<p>meaning that the client can choose which to comply with to build their BREEAM performance score.</p> <p>BREEAM has two stages/audit reports: a 'BREEAM Design Stage' and a 'Post Construction Stage', with different assessment criteria.</p>	<p>Each rating system is designed to apply to a specific sector (e.g. New Construction, Major Renovation, Core and Shell Development, Schools-/Retail-/Healthcare New Construction and Major Renovations, Existing Buildings: Operation and Maintenance).</p>
Performance display			
Accreditation	<p>Certification by an independent panel commissioned by the GBCA to review ratings.</p>	<p>BREEAM International Assessor BREEAM AP BREEAM In Use Assessor</p>	<p>LEED AP BD+C LEED AP O+M</p>
Qualitative considerations	<p>Commonly used in Australia, New Zealand, and South Africa. Set up similar to BREEAM and LEED.</p> <p>Some suggest that Green Star is less stringent than BREEAM, and that a 6-star rating is roughly equivalent to "very good", however the Green Star system has been updated since most assessments have been published, so may now be more stringent.</p> <p>Tailored to countries with varied climates.</p>	<p>Used in more than 70 countries: Good adaptation to the local normative context. Predominant environmental focus.</p> <p>BREEAM certification is less strict (less minimum thresholds) than HQE and LEED certifications.</p>	<p>Widely recognised internationally, and strong assurance of overall quality.</p>

Appendix 2: Green Bond / Green Bond Programme - External Review Form

Section 1. Basic Information

Issuer name:	Macquarie
Green Bond ISIN or Issuer Green Bond Framework Name, if applicable: <i>[specify as appropriate]</i>	Macquarie Green Finance Framework
Review provider's name:	Sustainalytics
Completion date of this form:	June 6, 2018
Publication date of review publication: <i>[where appropriate, specify if it is an update and add reference to earlier relevant review]</i>	

Section 2. Review overview

SCOPE OF REVIEW

The following may be used or adapted, where appropriate, to summarise the scope of the review.

The review assessed the following elements and confirmed their alignment with the GBPs:

- | | |
|------------------------------------------------------------|----------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Use of Proceeds | <input checked="" type="checkbox"/> Process for Project Evaluation and Selection |
| <input checked="" type="checkbox"/> Management of Proceeds | <input checked="" type="checkbox"/> Reporting |

ROLE(S) OF REVIEW PROVIDER

- | | |
|---------------------------------------------------------------------------------|----------------------------------------|
| <input checked="" type="checkbox"/> Consultancy (incl. 2 nd opinion) | <input type="checkbox"/> Certification |
| <input type="checkbox"/> Verification | <input type="checkbox"/> Rating |
| <input type="checkbox"/> Other <i>(please specify)</i> : | |

Note: In case of multiple reviews / different providers, please provide separate forms for each review.

EXECUTIVE SUMMARY OF REVIEW and/or LINK TO FULL REVIEW *(if applicable)*

Please refer to Executive Summary above.

Section 3. Detailed review

Reviewers are encouraged to provide the information below to the extent possible and use the comment section to explain the scope of their review.

1. USE OF PROCEEDS

Overall comment on section (*if applicable*):

The eligible categories for the use of proceeds (renewable energy, energy efficiency, waste management, green buildings, and clean transportation) are aligned with those recognized by the Green Bond Principles and Green Loan Principles as project categories with positive environmental benefits.

Use of proceeds categories as per GBP:

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Renewable energy | <input checked="" type="checkbox"/> Energy efficiency |
| <input checked="" type="checkbox"/> Pollution prevention and control | <input type="checkbox"/> Environmentally sustainable management of living natural resources and land use |
| <input type="checkbox"/> Terrestrial and aquatic biodiversity conservation | <input checked="" type="checkbox"/> Clean transportation |
| <input type="checkbox"/> Sustainable water and wastewater management | <input type="checkbox"/> Climate change adaptation |
| <input type="checkbox"/> Eco-efficient and/or circular economy adapted products, production technologies and processes | <input checked="" type="checkbox"/> Green buildings |
| <input type="checkbox"/> Unknown at issuance but currently expected to conform with GBP categories, or other eligible areas not yet stated in GBPs | <input type="checkbox"/> Other (<i>please specify</i>): |

If applicable please specify the environmental taxonomy, if other than GBPs:

2. PROCESS FOR PROJECT EVALUATION AND SELECTION

Overall comment on section (*if applicable*):

Eligible Projects are reviewed and approved by a dedicated Green Finance Working Group (“GFWG”). Macquarie ensures that social and environmental risks are mitigated by applying its internal Environmental and Social Risk (ESR) Policy and ESR Risk Assessment Toolkit. This approach to risk management is based on the IFC Performance Standards. Macquarie’s project evaluation and selection process is in line with market best practices.

Evaluation and selection

- | | |
|---------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Credentials on the issuer’s environmental sustainability objectives | <input checked="" type="checkbox"/> Documented process to determine that projects fit within defined categories |
|---------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|

- | | |
|--------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Defined and transparent criteria for projects eligible for Green Bond proceeds | <input checked="" type="checkbox"/> Documented process to identify and manage potential ESG risks associated with the project |
| <input checked="" type="checkbox"/> Summary criteria for project evaluation and selection publicly available | <input type="checkbox"/> Other (<i>please specify</i>): |

Information on Responsibilities and Accountability

- | | |
|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| <input type="checkbox"/> Evaluation / Selection criteria subject to external advice or verification | <input checked="" type="checkbox"/> In-house assessment |
| <input type="checkbox"/> Other (<i>please specify</i>): | |

3. MANAGEMENT OF PROCEEDS

Overall comment on section (*if applicable*):

Macquarie will track Eligible Projects through a register which includes relevant information on each transaction. All transactions will be earmarked for allocation against the Eligible Projects and any unallocated proceeds will be held in accordance with Macquarie's prudent liquidity management policy. Macquarie's disclosure and processes with respect to management of proceeds is in line with market best practices.

Tracking of proceeds:

- | |
|-------------------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Green Bond proceeds segregated or tracked by the issuer in an appropriate manner |
| <input checked="" type="checkbox"/> Disclosure of intended types of temporary investment instruments for unallocated proceeds |
| <input type="checkbox"/> Other (<i>please specify</i>): |

Additional disclosure:

- | | |
|---------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| <input type="checkbox"/> Allocations to future investments only | <input checked="" type="checkbox"/> Allocations to both existing and future investments |
| <input checked="" type="checkbox"/> Allocation to individual disbursements | <input checked="" type="checkbox"/> Allocation to a portfolio of disbursements |
| <input checked="" type="checkbox"/> Disclosure of portfolio balance of unallocated proceeds | <input type="checkbox"/> Other (<i>please specify</i>): |

4. REPORTING

Overall comment on section (if applicable):

Macquarie commits to report on allocation of proceeds within its annual Green Finance Report. The allocation reporting will include relevant transaction data such as the aggregate amount allocated to Eligible Projects, while the impact reporting will comprise relevant metrics for each of the Eligible Projects. An auditor will provide annual assurance on Macquarie's reporting commitments. Macquarie's reporting commitments are in line with market best practices.

Use of proceeds reporting:

- | | |
|--------------------------------------------------------|------------------------------------------------------------------|
| <input type="checkbox"/> Project-by-project | <input checked="" type="checkbox"/> On a project portfolio basis |
| <input type="checkbox"/> Linkage to individual bond(s) | <input type="checkbox"/> Other (<i>please specify</i>): |

Information reported:

- | | |
|-----------------------------------------------------------|------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Allocated amounts | <input type="checkbox"/> Green Bond financed share of total investment |
| <input type="checkbox"/> Other (<i>please specify</i>): | |

Frequency:

- | | |
|-----------------------------------------------------------|--------------------------------------|
| <input checked="" type="checkbox"/> Annual | <input type="checkbox"/> Semi-annual |
| <input type="checkbox"/> Other (<i>please specify</i>): | |

Impact reporting:

- | | |
|--------------------------------------------------------|------------------------------------------------------------------|
| <input type="checkbox"/> Project-by-project | <input checked="" type="checkbox"/> On a project portfolio basis |
| <input type="checkbox"/> Linkage to individual bond(s) | <input type="checkbox"/> Other (<i>please specify</i>): |

Frequency:

- | | |
|-----------------------------------------------------------|--------------------------------------|
| <input checked="" type="checkbox"/> Annual | <input type="checkbox"/> Semi-annual |
| <input type="checkbox"/> Other (<i>please specify</i>): | |

Information reported (expected or ex-post):

- | | |
|-------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> GHG Emissions / Savings | <input checked="" type="checkbox"/> Energy Savings |
| <input type="checkbox"/> Decrease in water use | <input checked="" type="checkbox"/> Other ESG indicators (<i>please specify</i>): Green building certification received / maintained, waste recycled |

Means of Disclosure

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Information published in financial report | <input checked="" type="checkbox"/> Information published in sustainability report |
| <input checked="" type="checkbox"/> Information published in ad hoc documents | <input checked="" type="checkbox"/> Other (please specify): Green Finance Report, Annual Reports, CSR Reports, and Macquarie's website |
| <input checked="" type="checkbox"/> Reporting reviewed (if yes, please specify which parts of the reporting are subject to external review): | |

Where appropriate, please specify name and date of publication in the useful links section.

USEFUL LINKS (e.g. to review provider methodology or credentials, to issuer's documentation, etc.)

<https://www.macquarie.com>
<https://www.macquarie.com/au/about/company/environmental-social-governance-esg>

SPECIFY OTHER EXTERNAL REVIEWS AVAILABLE, IF APPROPRIATE**Type(s) of Review provided:**

- | | |
|----------------------------------------------------------------------|----------------------------------------|
| <input type="checkbox"/> Consultancy (incl. 2 nd opinion) | <input type="checkbox"/> Certification |
| <input type="checkbox"/> Verification / Audit | <input type="checkbox"/> Rating |
| <input type="checkbox"/> Other (please specify): | |

Review provider(s):**Date of publication:****ABOUT ROLE(S) OF REVIEW PROVIDERS AS DEFINED BY THE GBP**

- i. **Consultant Review:** An issuer can seek advice from consultants and/or institutions with recognized expertise in environmental sustainability or other aspects of the issuance of a Green Bond, such as the establishment/review of an issuer's Green Bond framework. "Second Party Opinions" may fall into this category.
- ii. **Verification:** An issuer can have its Green Bond, associated Green Bond framework, or underlying assets independently verified by qualified parties, such as auditors. In contrast to certification, verification may focus on alignment with internal standards or claims made by the issuer. Evaluation of the environmentally sustainable features of underlying assets may be termed verification and may reference external criteria.
- iii. **Certification:** An issuer can have its Green Bond or associated Green Bond framework or Use of Proceeds certified against an external green assessment standard. An assessment standard defines criteria, and alignment with such criteria is tested by qualified third parties / certifiers.
- iv. **Rating:** An issuer can have its Green Bond or associated Green Bond framework rated by qualified third parties, such as specialised research providers or rating agencies. Green Bond ratings are separate from an issuer's ESG rating as they typically apply to individual securities or Green Bond frameworks / programmes.

Disclaimer

© Sustainalytics 2018. All rights reserved. No part of this second-party opinion (the “Opinion”) may be reproduced, transmitted or published in any form or by any means without the prior written permission of Sustainalytics.

The Opinion was drawn up with the aim to explain why the analyzed bond is considered sustainable and responsible. Consequently, this Opinion is for information purposes only and Sustainalytics will not accept any form of liability for the substance of the opinion and/or any liability for damage arising from the use of this Opinion and/or the information provided in it.

As the Opinion is based on information made available by the client, Sustainalytics does not warrant that the information presented in this Opinion is complete, accurate or up to date.

Nothing contained in this Opinion shall be construed as to make a representation or warranty, express or implied, regarding the advisability to invest in or include companies in investable universes and/or portfolios. Furthermore, this Opinion shall in no event be interpreted and construed as an assessment of the economic performance and credit worthiness of the bond, nor to have focused on the effective allocation of the funds' use of proceeds.

The client is fully responsible for certifying and ensuring its commitments' compliance, implementation and monitoring.

Sustainalytics

Sustainalytics is a leading independent ESG and corporate governance research, ratings and analytics firm that support investors around the world with the development and implementation of responsible investment strategies. With 13 offices globally, the firm partners with institutional investors who integrate ESG information and assessments into their investment processes. Spanning 30 countries, the world's leading issuers, from multinational corporations to financial institutions to governments, turn to Sustainalytics for second-party opinions on green and sustainable bond frameworks. Sustainalytics has been certified by the Climate Bonds Standard Board as a verifier organization, and supports various stakeholders in the development and verification of their frameworks. Global Capital named Sustainalytics the "Most Impressive Second Party Opinion Provider in 2017". In 2018, the firm was recognized as the "Largest External Reviewer" by the Climate Bonds Initiative as well as Environmental Finance. In addition, Sustainalytics received a Special Mention Sustainable Finance Award in 2018 from The Research Institute for Environmental Finance Japan for its contribution to the growth of the Japanese Green Bond Market.

For more information, visit www.sustainalytics.com

Or contact us info@sustainalytics.com

