Royal London Sustainable World Trust
Climate metrics

Following TCFD recommendations*

Portfolio data as of 31 December 2021

* TCFD Recommendations 2017

ROYAL LONDON
ASSET MANAGEMENT

Royal London Sustainable World Trust

Content and context

This document compares the performance of the Royal London Sustainable World Trust against its Index Benchmark, the FTSE All-Share Index with portfolio data as of 31 December 2021 in four climate metrics. The climate data is the latest available at issuer-level sourced from both RLAM internal research and MSCI as of 1 March 2022. To allow for valuable comparison and appraisal alongside last year's figures, this report uses 2017 Taskforce for Climate-related Financial Disclosures (TCFD) recommendations and covers:

- Weighted Average Carbon Intensity (slides 2 and 3).
- Warming Potential (slides 4 and 5).
- Climate Value at Risk (slide 6).
- Green and Brown revenues exposure (slide 7).
- Data coverage for metrics (slide 8).
- Definitions of terms (slide 9).
- Methodologies used (slide 10).
- Disclaimers (slide 11).

Our disclosed metrics are subject to potential limitations due to the emerging nature of climate data applications and methodologies in finance. We endeavour to improve climate data in finance through our engagement with companies and data providers. We believe that technology innovations will make data more easily accessible and auditable in the future. We are also working with regulators, for example, as members of the Climate Financial Risk Forum (CFRF), to support disclosure standardisation.

For more information on our Sustainable Fund range, including details of our Sustainable Fund themes, please see: An investor's guide to sustainable investing.

Investment risk: The value of investments and any income from them may go down as well as up and is not guaranteed. Investors may not get back the amount invested.

Responsible Investment style risk: The Fund can only invest in holdings that demonstrate compliance with certain sustainable indicators or ESG characteristics. This reduces the number securities in which the Fund can invest and there may as a result be occasions where it forgoes more strongly performing investment opportunities, potentially underperforming non-sustainable funds.

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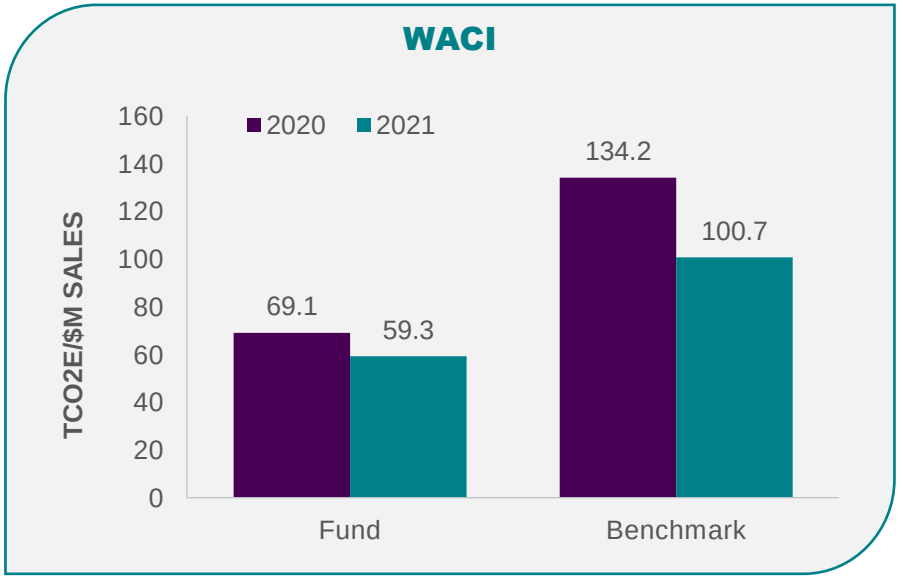
Weighted Average Carbon Intensity

Weighted Average Carbon Intensity (WACI) measures a portfolio's exposure to carbon-intensive companies. All direct company emissions (Scope 1 & 2) are divided by companies' revenues, then multiplied based on their weighting within the portfolio to create a tCO2e/$m* revenue figure. In-line with updated TCFD recommendations, future reports shall include financed emissions.

WACI**

	2021	2020	YoY Change
Fund (tCO2e/$m)	59.3	69.1	↓14%
Benchmark (tCO2e/$m)	100.7	134.2	↓ 25%
Difference (%)	-41%	-49%	

Although utilities continues to be the largest contributing sector to Fund WACI, its contribution has reduced by 32% compared to last year. This has been the driving force behind the Fund's year-on-year decrease. This decrease is despite increased weightings in CSX and TSMC, which although being best-in-sector performers, still operate in carbon intensive industries (rail freight and semiconductors respectively).



* Metric tonnes of carbon dioxide equivalent emissions (as defined by the GHG Protocol). See slide 9 for further details.
** See slide 8 for data coverage figures.
Benchmark: 85% MSCI World 15% iBoxx Non Sterling Gilts.
For information purposes only. Sources: Portfolio data, RLAM as of 31 December 2021. Carbon intensity, RLAM and MSCI latest information available at issuer-level as of 1 March 2022. Certain information ©2022 MSCI ESG Research LLC. Reproduced by permission.

The Fund's WACI is 41% lower than that of its benchmark, and 14% lower than last year

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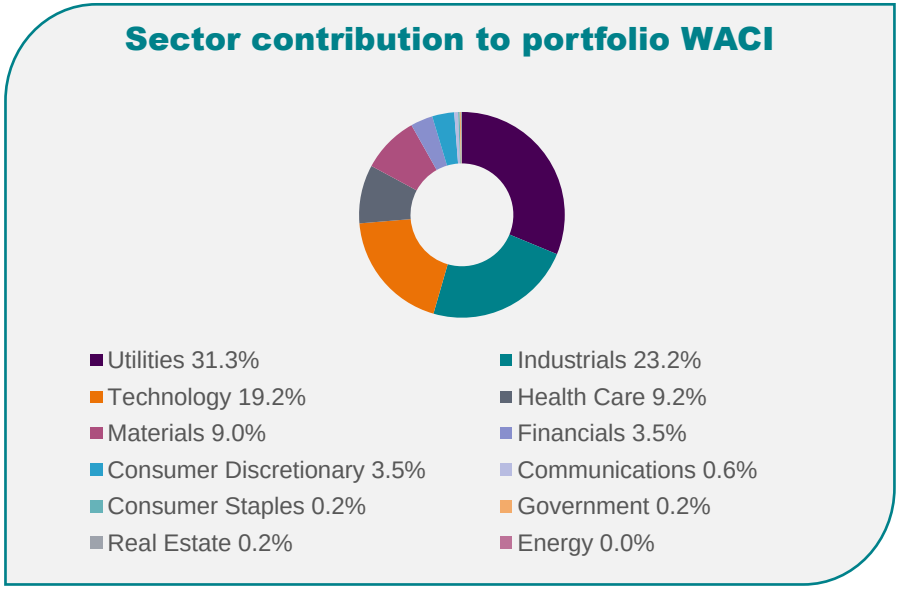
Weighted Average Carbon Intensity – sector & top contributors

The table below shows the top 5 contributors to the portfolio WACI, and the sustainable theme they are linked to.

Top contributors to portfolio WACI	Sector	% of WACI contribution	% change from 2020	Sustainable theme*
SSE	Utilities	23.1%	-17%	Net benefit: energy transition
CSX	Industrials	14.8%	+31%	Net benefit: cleaner & safer transport
TSMC	Technology	9.9%	+18%	Net benefit: digital world
Texas Instruments	Technology	6.1%	+22%	Net benefit: industry 4.0
Lonza Group	Health Care	5.6%	27%	Net benefit: next generation medicine

The graph below shows the sector contribution to portfolio WACI.



* Please see An investor's guide to sustainable investing for more information on our Sustainable Fund themes.
Portfolio characteristics and holdings are subject to change without notice. This does not constitute an investment recommendation.
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The utilities and industrials sectors are responsible for over half (54%) of the Fund's WACI

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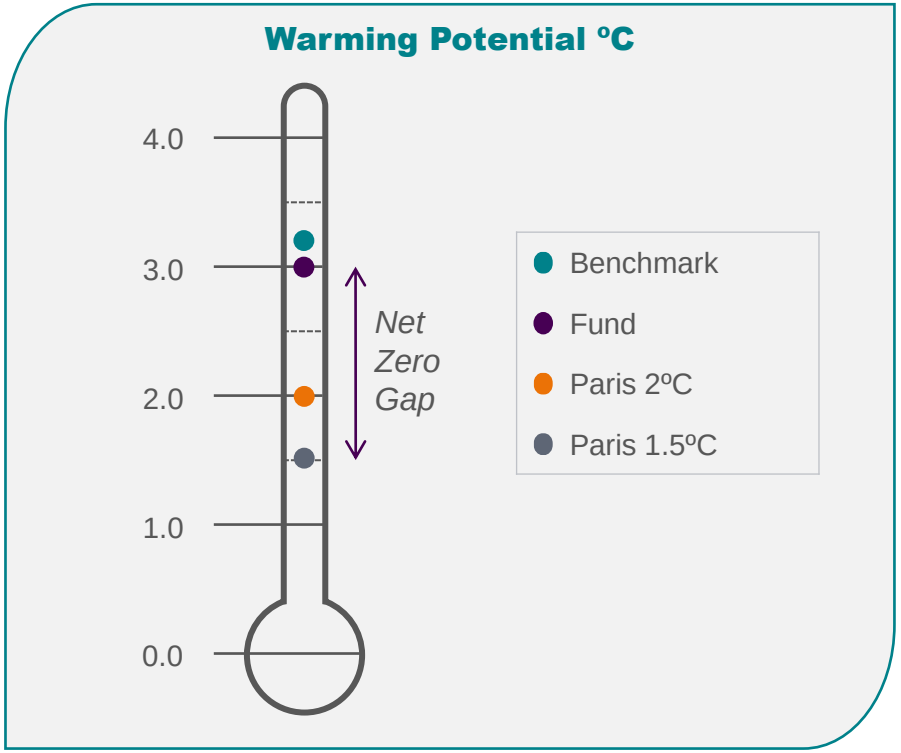
Warming Potential

Warming Potential (WP) aims to quantify the alignment of a company's activities against pathways commensurate with future temperature goals. WP incorporates a company's entire emissions (Scope 1, 2 & 3), as well as some of a company's reduction targets.

Warming Potential

	2021	2020	YoY Change
Fund (%)	3.0	3.0	↓ 0%
Benchmark (ºC)	3.2	3.4	↓ 6%
Difference (%)	-6%	-12%	

Fund WP has largely remained static though the issuers contributing most significantly has changed. Since last year the health care sector has reduced WP contribution by 24%, however this is largely offset by an increase in contribution from the consumer discretionary (+24%), technology (+37%), and materials (+145%) sectors' contribution.



Benchmark: 85% MSCI World 15% iBoxx Non Sterling Gilts.
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The Fund's Warming Potential is 6% lower than its benchmark

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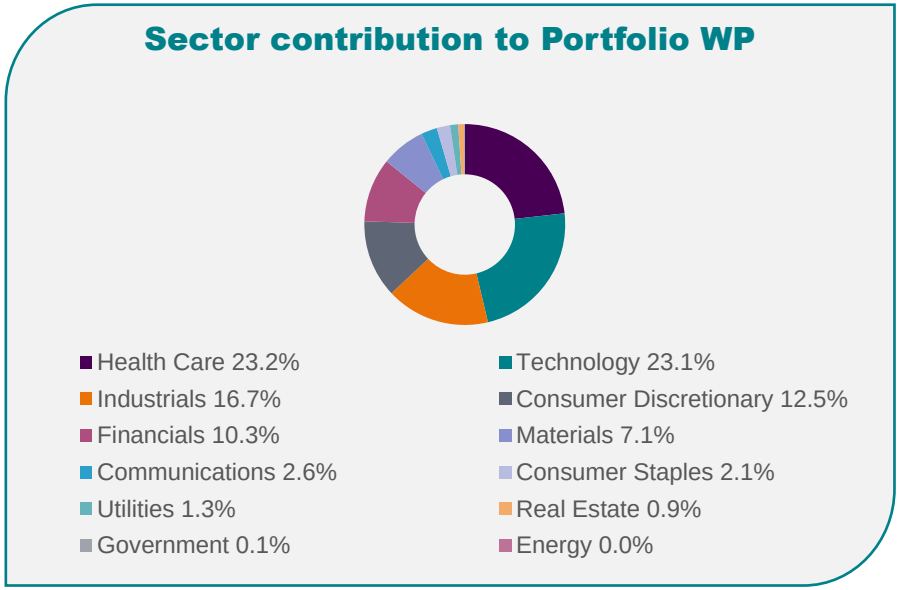
Warming Potential – sector & top contributors

The table below shows the top 5 contributors to the portfolio Warming Potential, and the sustainable theme they are linked to.

Top contributors to portfolio WP	Sector	% of WP contribution	% change from 2020	Sustainable theme*
Aptiv	Consumer Discretionary	4.5%	+2%	Net benefit: cleaner & safer transport
Texas Instruments	Technology	3.8%	0%	Net benefit: industry 4.0
TSMC	Technology	3.8%	+23%	Net benefit: digital world
Intuitive Surgical	Health Care	-3.7%	+85%	Net benefit: next generation medicine
Microsoft	Technology	3.5%	+75%	Net benefit: digital world

The Graph below shows the sector contribution to portfolio Warming Potential.



As climate data matures, new metrics are being developed and used as a form of undertaking scenario analysis. Implied Temperature Rise (ITR) is one such metric which enables us to determine the % of issuers that are 1.5ºC aligned. Looking ahead, we will aim to include this metric in our 2022 fund reporting.

* Please see An investor's guide to sustainable investing for more information on our Sustainable Fund themes.
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Health care and technology are responsible for just under half (46%) the Fund's WACI

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Climate change scenario stress-testing

Climate Value at Risk (C-VaR) aims to assess how climate change may reduce the investment return in portfolios over the next 15 years, in the absence of interventions, by evaluating two types of impact:

Transition impact: the low-carbon economy transition's risks and opportunities - through policy changes and technology opportunities.

Physical impact: the impact of extreme weather hazards – C-VaR provides insights into the potential stress on market valuation under different scenarios associated with global temperature trajectories.

A slow transition to low carbon (+3 ºC scenario) exposes investments to irreversible climate physical risk. A swift transition to low carbon, such as scenarios reaching 2 ºC and the quickest 1.5 ºC has investments more exposed to transition risk.

	1.5ºC			2ºC		
	2021	2020	YOY	2021	2020	YOY
Fund (equity portion of fund, % market value at risk)	-2.9%	-2.6%	↑ 12%	-2.4%	-2.1%	↑ 14%
Benchmark (equity portion of fund, % market value at risk)	-10.3%	-9.5%	↑ 8.4%	-7.6%	-6.5%	↑ 17%
Difference (%)	-72%	-73%		-68%	-68%	

The small year-on-year increase in C-VaR is predominantly due to the sale of holdings in Orsted, which last year reduced Fund C-VaR by 17%. Additionally, changes in industrial sector weighting have compounded this. Increased holding in CSX has led to its C-VaR contribution growing by 26%, and a 14% year-on-year reduction in exposure to Schneider electric has further increased Fund C-VaR.

Benchmark: 85% MSCI World 15% iBoxx Non Sterling Gilts.
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The Fund's C-VaR below 1.5ºC is 72% better than its benchmark

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Exposure to Green and Brown revenues

The exposure measures the percentage by value held in the portfolio with any revenue from an activity considered Green or Brown.

Green activities: renewable energy, energy efficiency, sustainable agriculture or water, green building and pollution prevention.

Brown activities: oil and gas (any part of the value-chain), coal mining and coal-based generation of electricity.

The Fund's exposure to Green revenues is predominantly through the technology and industrials sector, with Microsoft and Schneider Electric being the largest contributors in each sector. Exposure to Brown revenues comes in its entirety from the industrials and utilities sectors, with the year-on-year increase coming as a result of the increased data coverage on CSX, which alone accounts for 54% of exposure to Brown. In spite of this, CSX champions best practice in rail freight, maximising efficiency and benefit possible from the sector.

	Exposure to Green			Exposure to Brown		
	2021	2020	YOY	2021	2020	YOY
Fund (% value in portfolio)	38.3%	32.8%	↑ 17%	4.3%	3.1%	↑ 39%
Benchmark (% value in portfolio)	33.7%	9.4%	↑ 259%	8.2%	34.1%	↓ 76%
Difference (%)	+12%	+249%		-48%	-91%	

Benchmark: 85% MSCI World 15% iBoxx Non Sterling Gilts.
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The Fund has 12% more value held in issuers with exposure to green revenues than the benchmark and 48% less value exposed to brown revenues

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Data coverage for metrics

Our data coverage is comprised of third-party data and in-house propriety RLAM research, allowing us to gain a better understanding, and give a clearer picture of the climate impact of this Fund.

Metric	Fund (%)		Benchmark (%)	
	2021	2020	2021	2020
WACI	98%	98%	95%	99%
Warming Potential	95%	91%	91%	93%
C-VaR	77%	83%	85%	85%
Exposure to Green & Brown Revenues	N/A: See slide 10 for an explanation of metric methodology			

Benchmark: 85% MSCI World 15% iBoxx Non Sterling Gilts.

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Definitions of terms

Term	Brief explanation of the term
tCO_2 e Scope 1	All direct company greenhouse gas (GHG) emissions from owned or controlled sources. Other greenhouse gases, such as methane or nitrous oxide are converted to carbon dioxide hence reporting is under tCO_2e, where the 'e' stands for equivalent and t for metric tonnes. This follows the Greenhouse gases protocol, the most widely used accounting standard for emissions. FAQ.pdf (ghgprotocol.org)
tCO_2 e Scope 2	Indirect company emissions from the generation of purchased electricity, steam, heating and cooling consumed by the reporting company. Other greenhouse gases, such as methane or nitrous oxide are converted to carbon dioxide hence reporting is under tCO_2e, where the 'e' stands for equivalent and t for metric tonnes. This follows the Greenhouse gases protocol, the most widely used accounting standard for emissions. FAQ.pdf (ghgprotocol.org)
tCO_2 e Scope 3	Indirect company emissions that occur in a company's value chain both upstream (before their production) and downstream (after the sale of their products). Other greenhouse gases, such as methane or nitrous oxide are converted to carbon dioxide hence reporting is under tCO_2e, where the 'e' stands for equivalent and t for metric tonnes. This follows the Greenhouse gases protocol, the most widely used accounting standard for emissions. FAQ.pdf (ghgprotocol.org)
The Paris Agreement	The Paris Agreement is an international agreement that establishes a framework and commits all countries that ratify it to reduce their emissions so that that the global median warming remains well below 2 degrees Celsius. It also commits countries to work together to adapt to the impacts of climate change. The agreement was adopted in 2015 at the 21st Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC), 189 nations have now ratified the Paris Agreement. The Paris Agreement | United Nations
Task force on Climate-related Financial Disclosures	The Task force on Climate-related Financial Disclosures (TCFD) consists of 31 members from various organisations including banks, insurance companies, asset managers, large-non financial companies. In 2015 the G20 Finance Ministers and Central Bank Governors asked the Financial Stability Board to review climate risk. The FSB established the TCFD to develop recommendations for more effective climate-related disclosures that could promote more informed investment, credit, and insurance underwriting decisions, they published their recommendations in 2017. There are +2000 supporters of the TCFD across 78 geographies recommending disclosures on climate risk. Task Force on Climate-Related Financial Disclosures (fsb-tcfd.org)
Climate Financial Risk Forum	The Climate Financial Risk Forum is (CFRF) is an industry forum jointly convened by the Prudential Regulation Authority and Financial Conduct Authority to build capacity and share best practice in the financial sector on climate risk. It brings together senior representatives from across the financial sector, including banks, insurers, and asset managers. Climate Financial Risk Forum | Bank of England

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Methodology notes

Metric	Brief explanation of the metric
Weighted Average Carbon Intensity (WACI)	Portfolio's exposure to carbon-intensive companies, expressed in tCO_2e / $M revenue. Scope 1 and Scope 2 GHG emissions are divided by companies revenues, then multiplied based on portfolio weights (the current value of the investment relative to the current portfolio value). This follows the recommended methodology by the Taskforce for climate-related Financial Disclosures. E09 - Carbon footprinting - metrics.pdf (tcfdhub.org). The WACI is calculated as a weighted average sum of the holdings with carbon intensity coverage. For the portion of the fund where carbon data is not available, the holdings are removed and the remainder of the fund is re-weighted to 100%. The portion not covered by carbon intensity values are assumed to behave as the holdings with data available. The % of coverage by market value of the portfolio is based on all of the portfolio holdings including cash. Our equity data comes wholly from MSCI. For fixed income securities, RLAM has developed its own carbon intensity tool. The report uses RLAM data for the fixed income securities as a first port of call, supplementing with MSCI estimates where no reported or better estimate exists. RLAM's data for the emissions includes a combination of company disclosures through annual reporting, sustainability supplements and filings to the carbon disclosure project and primary research by our RI team. Where we lend to ring-fenced subsidiaries we have tried to source carbon data and revenues specific to those subsidiaries.
Warming Potential (WP)	Warming Potential metrics aim to quantify the alignment of a company's activities against pathways commensurate with future temperature goals. This metric incorporates current scope 1, 2 and 3 emission intensity and assumptions to estimate expected future emissions intensity for an entity. It also incorporates some of the companies' reduction targets and emissions it will contribute to avoid. The estimate is then translated into a projected increase in global average temperature above preindustrial levels. It is expressed in ºC. The portfolio level warming potential is calculated as a weighted average sum of the holdings with warming potential coverage. For the portion of the fund where warming potential data is not available, the holdings are removed and the remainder of the fund is re-weighted to 100%. The % of coverage by market value of the portfolio is based on all of the portfolio holdings including cash.73ccf115-0ed2-434b-553f-f10d0a1dfa1b (msci.com)
Climate Value at Risk (C-VAR)	Climate Value-at-Risk (Climate VaR) model aims to provide an assessment on how climate change may affect the investment return in portfolios based on conditions associated with global temperature trajectories (e.g. 1.5, 2, 3C). By evaluating policy impact, technology opportunities and climate physical risk, under different scenarios associated with those temperature trajectories, the metric provides insights into the potential stress on market valuation, translating climate-related costs into possible valuation impacts. We selected two scenarios from the Asia-Pacific Integrated Assessment Computable General Equilibrium (AIM.CGE) model. This model is comprised by four integrated models: an economic model, a spatial model, an emissions constraints model and a climate model. The model is peer reviewed and its building blocks and key outputs are accessible through the International Panel of Climate Change database of climate models. This metric is only relevant for equities or the equity portion of a portfolio. At portfolio level it is calculated as a weighted average sum of the holdings with C-VaR coverage. For the portion of the fund where C-VaR data is not available, the holdings are removed and the remainder of the fund is re-weighted to 100%. The % of coverage by market value of the portfolio is based on all of the portfolio holdings including cash. IAMC 1.5°C Scenario Explorer hosted by IIASA
Exposure to Brown revenues	The percentage of instruments (by value) held in the portfolio through equity stake or bonds that have any exposure to revenues from oil and gas activity, coal mining and/or coal-based generation of electricity. This does not measure the total brown revenue derived from the portfolio just the count of issuers with any exposure to the activities defined above. As our trust on the revenue calculations increase we will re-evaluate this metric.
Exposure to Green revenues	The percentage of instruments (by value) held in the portfolio through equity stake or bonds that have any exposure to revenues from renewable energy, energy efficiency, green building, sustainable water and agriculture, and pollution prevention. This does not measure the total green revenue derived from the portfolio just the count of issuers with any exposure to green activities. As our trust on the revenue calculations increase we will re-evaluate this metric.

For further analysis on assumptions and limitations of the metrics we disclose please refer to Appendix III of our 2020 TCFD report.

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