

Climate Report (TCFD) 2023.

Basis of Reporting

Pension Insurance Corporation plc 27 March 2024

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1. Introduction

This Basis of Reporting sets out the approach taken to calculate and disclose the metrics in the Pension Insurance Corporation plc (PIC) Climate Report (TCFD) ("the TCFD report", "the report") for the year ended 31 December 2023. A selection of these metrics also appear in the PIC Annual Report and Accounts for the year ended 31 December 2023 and the PIC Sustainability Report for the year ended 31 December 2023. This document includes the following information in respect of each of the metrics disclosed:

- Definition;
- Scope;
- Units;
- Data sources;
- Methodology;
- Assumptions and simplifications.

PIC has put in place controls and procedures to ensure, as far as possible, that the metrics in the TCFD report are calculated in line with this Basis of Reporting, in all material aspects.

Materiality

This report refers throughout to materiality. The concept of materiality is well established for financial reporting, where information is considered material if omitting or misstating such information could be expected to influence decisions taken by the users of the financial statements.

However, given the relative infancy of sustainability reporting, assessing the materiality of information is more judgemental. In some reporting frameworks, the concept of "Double Materiality" has been introduced, referring to how information can be both material in terms of the impact on the company, but also in terms of the impact of the company on the environment. In both cases, the disclosure of such information could be expected to influence decisions taken by the users of the information.

For the purposes of this report, materiality has been based on a qualitative assessment of double materiality, taking into account the timescales over which our decarbonisation targets are in place, the level of assumptions and judgements made in the calculation process, and the metrics under consideration. Where we consider, based on a qualitative assessment, that information is material in terms of potential impact on our business or potential impact of our business on the climate, we have disclosed this information.

Independent Third Party Assurance

KPMG LLP have provided independent limited assurance over selected information within the Metrics and Targets chapter of the TCFD report. The selected information has been marked in this document with a Solar The independent limited assurance opinion has been issued in accordance with International Standard on Assurance Engagements (UK) 3000 Assurance Engagements Other Than Audits or Reviews of Historical Financial Information (ISAE (UK) 3000) and the International Standard on Assurance Engagements 3410 Assurance of Greenhouse Gas Statements (ISAE 3410). The full opinion can be found in Appendix B of the TCFD report.

Reporting principles

Throughout our processes we have followed the following reporting principles:

- Timing of emissions data we use the latest data available at the time of reporting. For our YE23 TCFD report, data available as at 8 January 2024 has been used. No data has been used relating to a calculation date after 31/12/2023. The data sources we use are updated on a regular basis as more data becomes available from underlying issuers, meaning accessing the data on a different date could lead to changes in the data.
- Restating of prior year data historic emissions data will only be corrected and restated if material errors are discovered in the data itself, with no updates made to reflect updated data being made available. For example:
- If the latest data available as at 8 January 2024 is estimated, and later in the year reported data becomes available, we would not restate our emissions reporting as the data used was the latest available at the time of reporting.
- If it is discovered in future years that the incorrect data was used, for example as a result of an operational error leading to the emissions figure being changed, we would restate if this leads to a material change in the metrics we are disclosing.

- Timing of revenue/Enterprise Value Including Cash (EVIC) data – for the investment portfolio metrics, revenue and EVIC data are aligned in terms of timing with the latest emissions data available.
- Estimated data in some cases, data is estimated for the purposes of calculating our metrics. Where this is the case, we will disclose the methodology used to estimate that data and the sources and justification for any assumptions used in the estimation.
- Currency where exchange rates are required, average exchange rates over the year are used for cashflow metrics, such as revenue and GDP. Point in time exchange rates are used for point in time metrics, such as EVIC and market values. For point in time metrics that are not aligned with a year-end date, the year-end point in time exchange rate is used for the year in question. For example, for an EVIC as at August 2022, the year-end 2022 exchange rate would be applied.
- Manual overrides in some cases, the data from the sources identified is overridden using expert judgement. Whilst the data sourced from 3rd parties is relied upon for the purposes of our reporting, we carry out testing on the data against alternative sources, where available, to test the accuracy of those sources. In this process, a small number of clear outliers have been identified in the underlying data, and these have been manually overridden if alternative data is available, or removed from the calculations if no alternative data is available.
- Alignment with GHG protocol we consider our reporting to be in line with the GHG protocol. As defined by PCAF, we are using the financial control approach to emissions reporting, meaning that emissions from our investments are reported as Scope 3 Category 15 (financed emissions).

Uncertainty in TCFD reporting

The metrics disclosed in this report should be used with caution, given the inherent uncertainty in TCFD reporting. This is particularly true in the case of portfolio metrics, where there is significantly more uncertainty than, for example, financial metrics. This uncertainty is driven by a range of factors:

- Data availability there is limited data available for our investment counterparties, with coverage of 75% for the Weighted Average Carbon Intensity. That is, data is available for 75% of our portfolio by market value. We are therefore only able to disclose a partial picture of the emissions associated with our investment portfolio, and, whilst unlikely, it is possible that the metrics would change materially if we had data for the full portfolio.
- Methodological differences at our investment counterparties – where data is available, it is often reliant on underlying reporting from investment counterparties. Given climate reporting is in its relative infancy, the methodologies used by those investment counterparties to calculate the CO₂ equivalent emissions of their business may vary. The accuracy of our climate reporting relies on the accuracy of the climate reporting of our investment counterparties.
- Methodological differences in estimation approaches where no reported CO₂ equivalent emissions data is available, in some cases such data is estimated, either by MSCI or using our own methodologies. It is possible that other data providers would use different estimation methodologies, which could lead to changes in the metrics we have disclosed.
- Data accuracy where data is reported by investment counterparties, there is limited 3rd party assurance of such data, particularly when compared to audited financial data. While there is a growing trend for 3rd party assurance on climate-related disclosures, this is often to a lower level of assurance than a financial audit and is typically voluntary. This adds further uncertainty to the data that is reported by our investment counterparties.

Our external data sources

Where we have used external data sources, we have included links to the relevant source files in Appendix A.





2. Operational metrics

We have disclosed a number of metrics related to the operation of our business.

Energy consumption

- **Definition** the total energy (both gas and electricity) used in locations under PIC's operational control.
- Scope this includes all energy used in our office space from 1/1/2023 to 31/12/2023.
- Units kilowatt hours (kWh).
- Data source PIC's annual energy bills provided by our landlord.

Scope 1 emissions

- Definition the direct operational GHG emissions that occur from sources controlled by PIC. For PIC, this includes the emissions from natural gas that is used for heating our office space.
- Scope this includes all natural gas used in our office space from 1/1/2023 to 31/12/2023.
- Units tonnes of Carbon Dioxide equivalent (tCO2e).
- Data source PIC's annual energy bills provided by our landlord and UK Government Greenhouse gas reporting conversion factors (Data source 1).
- Methodology the annual gas consumption, based on the energy bills, is multiplied by a publicly available emissions factor. The emissions factor represents the total CO₂e emissions per tonne of gas consumed.
- Assumptions and simplifications it is assumed that the emissions associated with our gas consumption are in line with that implied by the UK Government factors. This is a widely used assumption for corporate emissions reporting.

Scope 2 emissions

- Definition the indirect GHG emissions associated with the electricity used in the buildings operated by PIC. This includes the electricity used in our office space. Scope 2 emissions can be reported using either location-based or market-based methodology. Location-based uses an average emissions intensity for the grids on which the electricity consumption occurs. Market-based reflects the actual electricity that is used by the entity. For example, this would take into account a certified renewable electricity tariff in the calculation of the emissions. We have reported both location-based and market-based emissions.
- Scope this includes all electricity used in our office space from 1/1/2023 to 31/12/2023.
- Units tCO₂e.
- Data source PIC's annual energy bills provided by our landlord, UK Government Greenhouse gas reporting conversion factors (Data source 1), Association of Issuing Bodies European residual mix factors (Data source 2).
- Methodology the annual electricity consumption, • based on the energy bills, is multiplied by a publicly available emissions factor. For the location-based emissions calculation, the factor is sourced from the UK Government, reflecting the average emissions intensity of the grid, in tCO₂e per kWh of electricity. For the marketbased emissions calculation, the factor is provided by the Association of Issuing Bodies, which calculates residual mix factors for European countries. The residual mix factor represents the emissions associated with the electricity generation after allowances for certified renewable electricity, which has been removed from the calculation. For market-based emissions reporting, organisations who have a certified renewable electricity tariff would report zero emissions to reflect that tariff. Therefore, organisations without a certified renewable electricity tariff should use the "residual mix" factor, after the allowances for certified renewable electricity, to reflect the actual electricity they are using. As PIC does not have a certified renewable electricity tariff, the residual mix factor is used for the purposes of calculating market-based scope 2 emissions.
- Assumptions and simplifications it is assumed that the emissions associated with our electricity consumption are in line with that implied by the emissions factors. This is a widely used assumption for corporate emissions reporting and is appropriate given the centralised nature of the UK grid.

Intensity ratio: gross tons CO₂e/floor area

- **Definition** the total quantity of Scope 1 and Scope 2 GHG emissions per m² of floor area in PIC's offices.
- Scope this includes all Scope 1 and 2 emissions from 1/1/2023 to 31/12/2023, and the floor area as at 31/12/2023.
- Units tCO₂e/m²
- **Data source** Scope 1 and 2 emissions as calculated above and PIC's internal data for office floor area.
- **Methodology** intensity ratio is calculated as the Scope 1 and 2 emissions divided by the total floor area in m².
- Assumptions and simplifications there are no material assumptions or simplifications in this calculation.

Intensity ratio: gross tons CO₂e/FTE

- **Definition** the total quantity of Scope 1 and Scope 2 GHG emissions per full-time employee.
- **Scope** this includes all Scope 1 and 2 emissions from 1/1/2023 to 31/12/2023, and the FTE for 2023 as reported in the Annual Report and Accounts.
- Units tCO₂e/FTE.
- Data source Scope 1 and 2 emissions as calculated above and PIC's internal data for FTE.
- **Methodology** intensity ratio is calculated as the Scope 1 and 2 emissions divided by the number of FTEs.
- Assumptions and simplifications there are no material assumptions or simplifications in this calculation.





3. Investment portfolio metrics

The following metrics relate to our investment portfolio. Given the nature of our business, the emissions associated with our portfolio far outweigh those associated with our operations. For this reason, we have focussed our efforts to measure and monitor emissions on the portfolio metrics and included only portfolio metrics in scope of the limited assurance opinion provided by KPMG LLP. Metrics marked with a shave been included in scope of this assurance. The scope of the portfolio emissions is reported or estimated emissions of PIC plc's investment counterparties, based on the investment portfolio as at 31/12/2023.

Portfolio breakdown

The following sections detail the methodologies used to calculate the TCFD metrics. These methodologies vary by asset class, in line with the PCAF methodologies. For the purposes of our disclosure, we have aligned the breakdown of our investment portfolio with our Annual Report & Accounts for the year ended 31 December 2023. As at 31 December 2023, the investment portfolio can be broken down by asset class as follows:

Financial investments by asset class (31 December 2023)



Debt securities – Gilts and Governments Bonds	36.2%
Debt securities – Corporate	33.4%
Debt securities – Private investments	17.8%
Equity release mortgages	2.4%
Mortgage backed and other asset backed securities	0.6%
Participation in investment schemes	8.7%
Deposits with credit institutions	0.9%

This graph shows the breakdown of PIC Group financial investments.

However, the methodologies used to calculate the TCFD metrics are set at a more granular level than the above breakdown. For example, the methodology for a project finance investment is different to the methodology for a private loan to a local authority, but both of these investments would be included in 'Debt securities - Private investments' above. Further, the methodology and data sources are not consistent for all sectors. For example, the data sources and methodology to estimate emissions for private lending to a local authority are different from those for private lending to a university. Whilst we have set our methodologies at this more granular level, our disclosure is aligned with the above breakdown. The below table shows the mapping from the asset class breakdown for which the methodologies are disclosed and the asset class breakdown for which the metrics are disclosed.

PIC asset class (used for setting methodology)	Asset class for disclosing metrics
Corporate bonds	Debt securities – Corporate or Debt securities – Private investments (if a private Ioan)
Sovereign bonds	Debt securities – Government
Supranational bonds	Debt securities – Corporate
Loans to UK local authorities	Debt securities – Corporate or Debt securities – Private investments (if a private Ioan)
Loans to UK universities	Debt securities – Private investments
Equity-release mortgages	Equity release mortgages
Loans to housing associations	Debt securities – Corporate or Debt securities – Private investments (if a private Ioan)
Renewable energy project financed	Debt securities – Private investments
Loans to student accommodation properties	Debt securities – Corporate or Debt securities – Private investments (if a private Ioan)
Investment properties	Not included in the above breakdown

The assets are classified for disclosure using internal data, aligned with what is used for the above breakdown in the Annual Report & Accounts.

Financed emissions (Scope 1 and 2) As

- Definition the GHG emissions which PIC finance through our investment portfolio, in line with Scope 3 Category 15 of the GHG Protocol (Data source 3).
- Scope this metric relates to the reported or estimated • absolute scope 1 and 2 emissions of our investment counterparties, based on our investment portfolio as at 31/12/2023. The emissions of the investment counterparties are based on the latest available data at the time of calculating the metrics. All assets where we are able to access the data required from the external data sources included in Appendix A, as well as assets where we have estimated the emissions, have been included in the calculation. By market value, this results in 55% of the investment portfolio being included in the calculation. For Sovereign emissions, production emissions are used. Production emissions are emissions produced domestically. An alternative approach would be to use consumption emissions, which refers to emissions associated with what is consumed domestically, including imported products. PCAF defines Production emissions as Scope 1 emissions of a country.
- Units tCO₂e.
- Methodology the methodology for calculating financed • emissions is based on the 2nd edition of the Global GHG Accounting and Reporting Standard for the Financial Industry published by the Partnership for Carbon Accounting Financials (PCAF) (Data source 4) on 19 December 2022. PCAF set emissions attribution factors for a range of asset classes, which determines the proportion of the emissions associated with an investment that should be attributed to the investor. The PCAF standard does not cover all asset classes in the PIC portfolio. For some asset classes, we have aligned our financed emissions formula to a similar asset class that is covered by the standard. The table below details the asset classes that have been included in our financed emissions calculations, the PCAF asset class that we have used to inform our methodology, and the financed emissions formula we have used:

PIC asset class (used for setting methodology)	PCAF asset class mapping	Financ	ed emissions formula		
Corporato bondo	Corporate bonds	7	Outstanding loan amount	*locuer omissions	
Corporate bonds	and listed equity	2	Issuer EVIC	issuer emissions	
Sovereign bende	Sovereign debt	7	Outstanding loan amount	*Sovereign emissions	
Sovereign bonds		2	PPP-adjusted GDP		
Supremetional bonds	Corporate bonds	7	Outstanding loan amount	*1	
supranational bonas	and listed equity	2	Issuer EVIC	issuer emissions	
Loans to UK local	Coversion date	7	Outstanding loan amount	*!	
authorities	Sovereign debt	Σ	PPP-adjusted LA GDP		
Loopo to LIK universities	Business loans and unlisted equity	Σ	Outstanding loan amount	*loculor omissions	
Loans to ok universities			Total equity+debt outstanding		
Equity-release	Martagaa	7	Outstanding loan amount	*Llourohold omissions	
mortgages	Montgages	Σ	Property value		
Renewable energy	Drojaat finanaa	7	Outstanding loan amount	*locuer emissions	
project finance	Project finance	Σ	Total debt+equity outstanding	ISSUER EMISSIONS	
Loans to housing	Business loans	7	Outstanding loan amount	*locuer emissions	
associations	and unlisted equity	$\boldsymbol{\Sigma}$	Total debt+equity outstanding	inding	
Invoctment properties*	Commercial real estate	Σ	Outstanding loan amount	*Duilding one issue	
investment properties			Property value		

* Note that the investment properties included in the calculation are fully owned by PIC, so in practice 100% of the building emissions are included in Financed emissions (Scope 1 and 2).

PIC asset class (used for setting methodology)	Data source	Data source reference (Appendix A)	Data used from source
Cornerate bends	MSCI	6	Enterprise Value Including Cash (EVIC) and Scope 1 and 2 emissions.
Corporate bonas	Wellington	N/a	EVIC and Scope 1 and 2 emissions for assets managed by Wellington.
	EDGAR	7	Production emissions
Sovereign bonds	World Bank	8	Purchasing Power Parity adjusted Gross Domestic Product
Supranational bonds	MSCI	6	Enterprise Value Including Cash (EVIC) and Scope 1 and 2 emissions.
	UK Government	9	Scope 1 and 2 emissions
Loans to UK local	World Bank	8	PPP adjustment for GDP
authorities	Office for National Statistics	10	Local authority GDP
Loans to UK universities	Higher Education Statistics Authority (HESA)	11	Scope 1 and 2 emissions and total equity and debt outstanding of UK universities.
	Internal data	N/a	Property values as at 31 December 2023
Fauity-release	Energy Performance Certificates database	12	Emissions estimates for the properties in our portfolio
mortgages	Internal estimates	N/a	Emissions estimates for properties in our portfolio not covered in the EPC database. Full methodology can be found in Appendix B.
Loans to UK housing associations	Housing association reported data	13	Emissions and total equity and debt outstanding of housing associations
Renewable energy project finance	Project reported data	N/a	Total equity, debt outstanding, and generation capacity of renewable energy projects
Investment properties	Energy Performance Certificates database	12	Emissions estimates for the properties in our portfolio ¹

• Data sources – given the above methodology, the data required varies by asset class:

1 Note that given EPC ratings are used, the shared areas of residential buildings are not accounted for in the estimate.

For all asset classes, the outstanding loan amount is sourced from PIC's internal systems.

- Assumptions and simplifications the following assumptions and simplifications have been used in the calculations:
 - Corporate bonds no material assumptions or simplifications.
 - Sovereign bonds no material assumptions or simplifications.
 - Loans to UK local authorities no PPP-adjusted GDP is available at a local authority level, and we have therefore applied an adjustment factor calculated based on data from the World Bank. To calculate this adjustment factor, we divide the PPP-adjusted UK GDP by the UK GDP.
 - Loans to UK universities no material assumptions or simplifications.
 - Equity release mortgages the estimation methodology for equity release mortgages can be found in Appendix B.

- Loans to UK housing associations no material assumptions or simplifications.
- Renewable energy project finance it is assumed that the emissions intensity of the wind power generation projects in our portfolio is 0.9g CO₂e/MWh of electricity generated, and the emissions intensity of solar projects in our portfolio is 10g CO₂e/MWh of electricity generated. These assumptions are based on Data Source 15 and 16. It is also assumed that the electricity generated is in line with projections at the time of lending. Full detail of our estimation methodology can be found in Appendix C.
- Investment properties only properties that are in their operational phase (i.e. being used for the purpose in which they are designed, having been built and fit out) are included, as no data is available for emissions associated with properties in their construction phase. For properties that are included, it is assumed that their emissions are in line with the estimate in the EPC database.

Financed emissions (Scope 1 and 2) split by asset class

- **Definition** Financed emissions (Scope 1 and 2) (as defined in the Financed emissions (Scope 1 and 2) section on P9, P10, and P11 of this document) split by the following asset classes:
 - Debt securities Government
 - Debt securities Corporate
 - Debt securities Private investments
 - Mortgage backed and asset backed securities (including Equity Release Mortgages)
 - Investment properties
- Scope in line with Financed emissions (Scope 1 and 2).
- Units tCO₂e.
- **Methodology** the Financed emissions (Scope 1 and 2) are calculated as explained above at an asset-by-asset level. The assets are then classified based on PIC's internal classifications and the Financed emissions calculation is split based on the classification.
- **Data sources** data sources are in line with the Financed emissions (Scope 1 and 2) calculation.
- Assumptions and simplifications no material assumptions or simplifications.

Financed emissions (Scope 3)

- **Definition** the GHG emissions which PIC finance through our investment portfolio, in line with Scope 3 Category 15 of the GHG protocol.
- Scope this metric includes the reported or estimated scope 3 emissions of our investment counterparties, based on our investment portfolio as at 31/12/2023. The emissions of the investment counterparties are based on the latest available data at the time of calculating the metrics. All assets where we are able to access the data required have been included in the calculation. For Sovereign emissions, production emissions are used.
- Units tCO₂e.
- **Methodology** for Financed emissions (Scope 3), only corporate bonds are included in the calculations. The attribution factor is in line with that used for Financed emissions (Scope 1 and 2).
- Data sources data is sourced from MSCI. Note that for Scope 3 emissions, the majority of the data sourced from MSCI will be estimated by MSCI, as corporate reporting of Scope 3 emissions is limited.
- Assumptions and simplifications as noted for Financed emissions (Scope 1 and 2) above, the use of nominal value in the attribution factor is a prudent simplification.

Carbon footprint (Scope 1 and 2) As

- **Definition** the Financed emissions (Scope 1 and 2) (as defined in the Financed emissions (Scope 1 and 2) section on P9, P10, and P11 of this document) per £m invested.
- **Scope** the scope is in line with the scope for Financed emissions (Scope 1 and 2).
- Units tCO2e per £m invested.
- **Methodology** the total Financed emissions (Scope 1 and 2) is divided by the total market value invested in the assets for which Financed emissions (Scope 1 and 2) data is available. If no Financed emissions (Scope 1 and 2) data is available for a given asset, the market value of that asset is not included in the calculation.
- **Data sources** data sources are in line with the data sources for Financed emissions (Scope 1 and 2). Asset market values are sourced from PIC's internal finance systems.
- Assumptions and simplifications no material assumptions or simplifications are made for the metric beyond those highlighted for Financed emissions (Scope 1 and 2) above.

Carbon footprint (Scope 1 and 2) split by asset class As

- Definition the Carbon footprint (Scope 1 and 2) (as defined in the Carbon footprint (Scope 1 and 2 section on P12 of this document) is split by asset class. The asset classes are in line with those used for the Financed emissions (Scope 1 and 2) split by asset class.
- Scope in line with Carbon footprint (Scope 1 and 2).
- Units tCO₂e/£m invested.
- **Methodology** the Financed emissions (Scope 1 and 2) split by asset class is divided by the market value of assets for which Financed emissions data is available in each asset class.
- **Data sources** data sources are in line with the data sources for Financed emissions (Scope 1 and 2).
- Assumptions and simplifications no material assumptions or simplifications.

Carbon footprint (Scope 3)

- Definition the Financed emissions (Scope 3) (as defined in the Financed emissions (Scope 3) section on P11 and P12 of this document) per £m invested.
- **Scope** the scope is in line with the scope for Financed emissions (Scope 3).
- Units tCO₂e per £m invested.
- Methodology the Financed emissions (Scope 3) metric is divided by the total market value invested in the assets for which Financed emissions (Scope 3) data is available. If no Financed emissions (Scope 3) data is available for a given asset, the market value of that asset is not included in the calculation.
- **Data sources** data sources are in line with the data sources for Financed emissions (Scope 3). Asset market values are sourced from PIC's internal finance systems.
- Assumptions and simplifications no material assumptions or simplifications are made for the metric beyond those highlighted for Financed emissions (Scope 3) above.

Weighted Average Carbon Intensity (WACI) (Scope 1 and 2)

- **Definition** the carbon intensity of an issuer is defined as the tonnes of CO₂-equivalent emissions per \$m of revenue made by the issuer in a given year. The Weighted Average Carbon Intensity is a weighted average of this carbon intensity metric across all issuers in our portfolio, weighted by the market value of the investment.
- Scope this metric includes the reported or estimated scope 1 and 2 emissions of our investment counterparties, based on our investment portfolio as at 31/12/2023. The emissions of the investment counterparties are based on the latest available data at the time of calculating the metrics. Revenue data is used for the same year as the latest available emissions data. For example, if emissions data for 2021 is the latest available data for a given counterparty, but revenue data of 2021 would be used to calculate the carbon intensity. All assets where we are able to access the data required have been included in the calculation. For Sovereign emissions, production emissions are used.
- Units tCO₂e/\$m revenue.
- **Methodology** the approach to calculating carbon intensity of investment counterparties varies by asset class. This is because not all our investment counterparties are companies with a publicly disclosed revenue. The following tables shows the calculation approach for the carbon intensity for the assets that have been included in the calculation:

PIC asset class (used for setting methodology)	Issuer carbon intensity formula		
Corporate bands	Issuer emissions		
	Issuer revenue		
Sovereign bends	Sovereign emissions		
Sovereign borids	PPP-adjusted GDP		
	Local Authority emissions		
UK Local Authorities	PPP-adjusted Local Authority GDP		
LIK upix orbition	Issuer emissions		
OK Universities	lssuer revenue		
Equity-release	Household emissions		
mortgages	Achievable rent on property		
	Issuer emissions		
HOUSINg associations	lssuer revenue		
Denevyskie enevysy	Project emissions		
Renewable energy	Project revenue		
Student	Building emissions		
accommodation ¹	Rent received on property		

1 Student accommodation has not been included in the Financed emissions table, as no data is available for the property value, which is required for the Financed emissions calculation. Data is available for the rent received on the property, meaning a carbon intensity calculation is possible. In some cases, emissions for the above asset classes are estimated. Details for the estimation methodology can be found below.

• Data sources – given the above methodology, the data required varies by asset class:

PIC asset class (used for setting methodology)	Data source	Data source reference (Appendix A)	Data used from source
	MSCI	6	Revenue and Scope 1 and 2 emissions.
Corporate bonds	Wellington	N/a	Revenue and Scope 1 and 2 emissions for assets managed by Wellington.
Sovereign bonds	Emissions Database for Global Atmospheric Research (EDGAR)	7	Production emissions
	World Bank	8	Gross Domestic Product
	UK Government	9	Scope 1 and 2 emissions
Loans to UK local authorities	Office for National Statistics	10	Local authority GDP
	World Bank	8	PPP adjustment for GDP
Loans to UK universities	Higher Education Statistics Authority (HESA)	11	Scope 1 and 2 emissions and total equity and debt outstanding of UK universities.
	Internal data	N/a	Property values as at 31 December 2023
Fauity-release	Energy Performance Certificates database	12	Emissions estimates for the properties in our portfolio
mortgages	Internal estimates	N/a	Emissions estimates for properties in our portfolio not covered in the EPC database. Full methodology can be found in Appendix B.
Loans to UK housing associations	Housing association reported data	13	Emissions and total equity and debt outstanding of housing associations
	National Renewable Energy Laboratory	15	Emissions factor (CO2e per kWh of electricity) for offshore wind power
Renewable energy project finance	National Renewable Energy Laboratory	16	Emissions factor (CO₂e per kWh of electricity) for solar power
	Project reported data	N/a	Revenue and generation capacity
	EPC database	12	Emissions
Student accommodation	Building landlords	N/a	Emissions
	Project reported data	N/a	Revenue

- Assumptions and simplifications the following assumptions and simplifications have been used in the calculations:
 - Corporate bonds no material assumptions or simplifications.
 - Sovereign bonds no material assumptions or simplifications.
 Loans to UK local authorities no PPP-adjusted GDP is available at a local authority level, and we have therefore applied an assumed adjustment factor in line with the adjustment factor between the UK GDP and the PPP-
 - adjusted UK GDP. This PPP-adjustment is calculated based on data from the World Bank (Data source 14).
 Loans to UK universities – no material assumptions or simplifications.
- Equity release mortgages it is assumed that the properties in the PIC portfolio for which no EPC rating is available are in line with the average property for a given region, property type, and value.
- Loans to UK housing associations no material assumptions or simplifications.
- Renewable energy project finance it is assumed that the emissions intensity of the wind power generation projects in our portfolio is $0.9g CO_2e/MWh$ of electricity generated, and the emissions intensity of solar projects in our portfolio is $10g CO_2e/MWh$ of electricity generated. These assumptions are based on Data Source 15 and 16. It is assumed that the electricity generated is in line with projections at the time of lending.
- Student accommodation commercial mortgages where no primary energy use data is available, it is assumed that the emissions are in line with the estimate made in the EPC rating assessment.

Weighted average carbon intensity (Scope 1 and 2) split by asset class (S

There are two ways to split the Weighted average carbon intensity by asset class. First, we can disclose the WACI for each asset class individually. For example, the WACI of our Fixed Income – Corporate assets. This shows the relative carbon intensity of the different asset classes in the portfolio. Second, we can disclose the contribution of each asset class to the overall portfolio WACI. This reflects both the relative carbon intensity of each asset class, and the total market value allocated to each asset class. For example, we may have a very carbon intensive asset class with a very small market value. The initial WACI for each asset class would show that this asset class is very carbon intensive, but the contribution by asset class would show that this makes up a small part of our total portfolio WACI, because of the low market value.

We have disclosed both the WACI by asset class, as described below, and the WACI contribution by asset class, as described in the following section.

- Definition the Weighted Average Carbon Intensity (Scope 1 and 2) (as defined in the Weighted Average Carbon Intensity (Scope 1 and 2) section on P13, P14, and P15 of this document), is split by asset class. The carbon intensity of each asset is calculated, and a weighted average by market value is taken within each asset class.
- Scope in line with WACI (Scope 1 and 2).
- Units tCO2e/\$m revenue.
- Methodology a weighted average of the carbon intensity of each asset where data is available is taken within each asset class.
- Data sources data sources are in line with those used for WACI (Scope 1 and 2).
- Assumptions and simplifications no material assumptions or simplifications are made for the metric beyond those highlighted for WACI (Scope 1 and 2) above.

Weighted average carbon intensity (Scope 1 and 2) contribution by asset class

- **Definition** the WACI (Scope 1 and 2) (as defined in the Weighted Average Carbon Intensity section on P13, P14, and P15 of this document), is split into the contribution arising from each asset class.
- Scope in line with WACI (Scope 1 and 2).
- Units tCO₂e/\$m revenue.
- Methodology for each individual asset, the carbon intensity is multiplied by the market value. For each asset class, a sum is taken of the carbon intensity multiplied by the market value and divided by the total market value for the whole portfolio.
- Data sources data sources are in line with those used for WACI (Scope 1 and 2).
- Assumptions and simplifications no material assumptions or simplifications are made for the metric beyond those highlighted for WACI (Scope 1 and 2) above.

Weighted average carbon intensity (WACI) (Scope 3)

- **Definition** the carbon intensity of an issuer is defined as the tonnes of CO₂-equivalent Scope 3 emissions per \$m of revenue made by the issuer in a given year. The weighted average carbon intensity is a weighted average of this carbon intensity metric across all issuers in our portfolio, weighted by the market value of the investment.
- Scope this metric includes the reported or estimated Scope 3 emissions of our investment counterparties, based on our investment portfolio as at 31/12/2023. The emissions of the investment counterparties are based on the latest available data at the time of calculating the metrics. Revenue data is used for the same year as the latest available emissions data. For example, if emissions data for 2021 is the latest available data for a given counterparty, but revenue data of 2021 would be used to calculate the carbon intensity. All assets where we are able to access Scope 3 emissions data have been included in the calculation.
- Units tCO₂e/\$m revenue.
- Methodology for WACI (Scope 3), only corporate bonds are included in the calculations. The methodology is in line with that used for WACI (Scope 1 and 2).
- **Data sources** data is sourced from MSCI. As highlighted for Financed emissions (Scope 3), the Scope 3 emissions data sourced from MSCI will primarily be estimated.
- Assumptions and simplifications no material assumptions or simplifications are made.

Implied temperature rise

- Definition the weighted average implied global temperature increase of our investment portfolio, based on MSCI's Implied Temperature Rise metric. Our portfolio Implied Temperature Rise is a market value weighted average of the MSCI ITR for assets in our portfolio which are covered by MSCI.
- **Scope** all assets for which MSCI has an ITR metric available are included in the calculation.
- Units implied °C.
- Methodology MSCI calculates the Implied Temperature Rise of companies based on the total carbon emissions by sector/geography that would lead to a 1.5°C increase in global temperatures. This defines the "carbon budget" that each sector/geography has remaining to ensure the global 1.5°C target is met. In turn, this sector/geography "carbon budget" is allocated out to the specific companies in that sector/geography. Each company's current and future expected emissions are then compared to their "carbon budget", with any over or undershoot translated into higher or lower Implied Temperature Rise. Further detail on MSCI's methodology can be found here. We have taken a weighted average of the ITR by market value for the assets in our portfolio where the ITR is available.
- Data sources data is sourced from MSCI.
- Assumptions and simplifications there are inherent judgements and simplifications in the approach taken by MSCI. PIC has not applied any additional material assumptions or simplifications.

Science Based Targets exposure

- **Definition** the percentage of our portfolio by market value which is invested in issuers that have set a Science Based Target for carbon emissions reduction, which has been validated by the Science Based Target initiative.
- Scope full asset portfolio.
- Units % of portfolio market value.
- **Methodology** the market value of assets where the issuer has set a science based target is divided by the total market value of the portfolio to calculate the % exposure to Science Based Targets.
- Data sources data is sourced from MSCI.
- Assumptions and simplifications no material assumptions or simplifications.

PCAF data quality

 Definition – the Partnership for Carbon Accounting Financials (PCAF) have developed a data quality scoring methodology for Financed emissions reporting. This metric discloses the market value with each PCAF data quality score in the Financed emissions (Scope 1 and 2) calculation. The definition of each PCAF data quality score is as follows:

Score Definitions Audited GHG emissions data or actual primary

1	energy data.
2	Non-audited GHG emissions data or other primary data.
3	Averaged data that is peer/(sub-)sector specific.
4	Proxy data on the basis of region or country.
5	Estimated data with very limited support.

There are specific nuances to the score definitions by asset class. Full detail is available in the PCAF standard.

- **Scope** all assets for which Financed emissions (Scope 1 and 2) data is available.
- Units £m of AUM.
- Methodology the methodology for assigning PCAF data scores to our portfolio varies by asset class as follows:
- Corporate bonds Financed emissions (Scope 1 and 2) data is sourced from MSCI. MSCI also provide a PCAFaligned data quality score. The market value for each score is added to the overall portfolio figures for disclosure.

- Sovereign bonds sovereign data has been given a data quality score of 1, as data from EDGAR is verified.
- UK local authorities UK local authorities data has been given a data quality score of 1, as data from ONS is verified.
- UK universities UK universities data has been given a data quality score of 2, as data from HESA is reported at an individual university level, but not necessarily verified.
- Equity release mortgages ERM data has been given a data quality score of 5, as the estimation approach is not based on floor area or actual building emissions, which would lead to a data quality score of 3/4 or 1/2 respectively.
- Housing associations housing associations data has been given a data quality score of 2, as data is reported by the underlying housing associations, but not necessarily verified.
- **Renewable energy** renewable energy has been given a data quality score of 3, as the outstanding amount of equity and debt are know, and the emissions are estimated based on the project's production.
- **Data sources** data sources are in line with the Financed emissions (Scope 1 and 2) data sources.
- Assumptions and simplifications no material assumptions or simplifications.

Amount invested in sustainable assets

- Definition the total market value of investments in sustainable assets. Sustainable assets are defined qualitatively as assets that have a lasting positive impact on stakeholders such as the communities in which the company operates and the environment. We give careful consideration on a case-by-case basis to the overall impact of an investment, including both environmental and social impacts.
- **Scope** the full asset portfolio is taken into consideration and a qualitative judgement made on which assets should be considered sustainable.
- Units £m invested.
- Methodology qualitative judgement.
- Data sources PIC's internal systems.
- Assumptions and simplifications no material assumptions or simplifications.

Appendix A: External data sources

The following table contains links to the data sources referred to in the main body of this document.

ID	Data used	Source	Link
1	Scope 1 & 2 (location- based) emissions factor	UK Government	Greenhouse gas reporting: conversion factors 2023 – GOV.UK (www.gov.uk)
3	Scope 2 emissions factor – market-based	Association of Issuing Bodies	2022 AIB (aib-net.org)
4	Scope 3 category 15 methodology	GHG protocol	Chapter15.pdf (ghgprotocol.org)
5	PCAF standard for financed emissions	Partnership for Carbon Accounting Financials	https://carbonaccountingfinancials.com/files/downloads/ PCAF-Global-GHG-Standard.pdf
6	EVIC, revenue, and emissions of investment counterparties	MSCI	Powering better investment decisions – MSCI
7	Sovereign emissions	Emissions Database for Global Atmospheric Research (EDGAR)	EDGAR – The Emissions Database for Global Atmospheric Research (europa.eu)
8	Purchasing power parity adjusted GDP	World Bank	GDP, PPP (current international \$) Data (worldbank.org)
9	Local authority emissions	UK Government	UK local authority and regional greenhouse gas emissions national statistics – GOV.UK (www.gov.uk)
10	Local authority GDP	Office for National Statistics	Regional gross domestic product: local authorities – Office for National Statistics (ons.gov.uk)
11	Universities EVIC, revenue, and emissions	Higher Education Statistics Agency	Table 1 – Consolidated statement of comprehensive income Table 3 – Consolidated balance sheet 2015/16 to 2021/22 HESA Table 3 – Emissions and waste HESA
12	EPC ratings of ERM properties	UK Government EPC Register	Find an energy certificate – GOV.UK (www.gov.uk)
13	Emissions, revenue, and total equity and debt of Housing Associations	Housing association reports	N/a
14	Adjustment to GDP for Purchasing Power Parity	World Bank	GDP, PPP (current international \$) Data (worldbank.org) GDP (current US\$) Data (worldbank.org)
15	Wind power operational emissions factor	National Renewable Energy Laboratory	Wind LCA Harmonization (Fact Sheet), NREL (National Renewable Energy Laboratory)
16	Solar power operational emissions factor	National Renewable Energy Laboratory	Life Cycle Greenhouse Gas Emissions from Solar Photovoltaics (Fact Sheet), NREL (National Renewable Energy Laboratory)
17	Estimated achievable rent – England	ONS	Private rental market summary statistics in England – Office for National Statistics (ons.gov.uk)
18	Estimated achievable rent – Scotland	Scotland government	Private Sector Rent Statistics, Scotland, 2010 to 2022 – gov.scot (www.gov.scot)
19	Estimated achievable rent – Wales	Wales government	Private sector rents (gov.wales)
20	Estimated achievable rent – Northern Ireland	Northern Ireland Housing Executive	Performance of the Private Rental Market in Northern Ireland, H2 2022 (nihe.gov.uk)

Appendix B: Equity release mortgages estimation methodology

We have estimated the emissions associated with our Equity Release Mortgage (ERM) portfolio using the following methodology:

Step 1: Access data from EPC database

The EPC database includes an estimate of the annual emissions from a property based on the EPC assessment. However, due to challenges in matching address lines to the EPC database, we calculate the average CO_2 emissions per property by postcode and assign the emissions to the properties in our portfolio based on postcode. This maximises the coverage of emissions for the properties in our portfolio, giving an emissions estimate for 92% of the properties in the portfolio. For operational reasons, all historic EPC ratings, including expired ratings, have been used in calculating the average emissions per property by postcode.

Step 2: Calculate emissions factors

Based on the estimated emissions calculated in Step 1, we calculate emissions factors for each region and property type, which is data available from PIC's internal systems. The properties are classified into the following regions and property types:

Property types
Detached house
Flat
Mid-terraced house
Semi-detached house
End-terraced house
Other

For each property type and region, we take the total emissions divided by the total home value to calculate the emissions factor. We also calculate emissions factors for each region (for all property types) and each property type (for all regions).

Step 3: Apply emissions factors

For the properties where no EPC data is available, we multiply the emissions factors calculated in step 2 by the property values to estimate the emissions associated with the property. Where property type and region are available, we use the emissions factor calculated for that property type and region. Where only one of property type/region is available, we use the emissions factor for that property type/region. Where no property type or region is available, we use a generic emissions factor calculated across the whole portfolio.

We have also estimated the rent that would be achievable from the properties for the purposes of calculating carbon intensity, as highlighted in the Weighted Average Carbon Intensity (Scope 1 and 2) section on P14. The estimated annual rents by region are sourced from data sources 17, 18, 19, and 20, and converted to USD for the calculation using the 2022 average exchange rate.

Appendix C: Renewables estimation methodology

We have estimated the emissions associated with our Renewables portfolio using the following methodology:

Project data

We have information on the total generation capacity of the renewable energy projects that we invest in, based on public information about the projects themselves.

Parameters

We use the following parameters:

Parameter	Renewable technology	Value	Source
Estimate of the total electricity produced (in kWh) per kW of capacity	Offshore wind	3,251	Energy Trends: UK renewables – GOV.UK (www.gov.uk)
Estimate of the total electricity produced (in kWh) per kW of capacity	Solar	907	Energy Trends: UK renewables – GOV.UK (www.gov.uk)
Estimate of the operational emissions associated with electricity generated (gCO2e per kWh)	Offshore wind	0.9	Wind LCA Harmonization (Fact Sheet), NREL (National Renewable Energy Laboratory)
Estimate of the operational emissions associated with electricity generated (gCO2e per kWh)	Solar	10	Life Cycle Greenhouse Gas Emissions from Solar Photovoltaics (Fact Sheet), NREL (National Renewable Energy Laboratory)

Calculation

Based on the information gathered on the generation capacity of the projects, we estimate the electricity generated in 2023 using the parameters above. We estimate the emissions associated with that electricity generation using the operational emissions parameters above.

Revenue is gathered from report and accounts of the holding companies of the renewable projects that we invest in.



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