

Portfolio Carbon Footprint 2023

Calculation methodology

Below is the formula for the calculation of portfolio carbon footprint

$$\sum_N^i \left(\frac{\text{Current value of investment}_i}{\text{Investee company's enterprise value}_i} \times \text{Investee company's Scope 1 and Scope 2 GHG emissions}_i \right) \div \text{Current portfolio value (\$ million)}$$

Scope 1: Direct GHG emissions that occur from sources owned or controlled by the investee company.

Scope 2: Indirect GHG emissions from the generation of purchased or acquired electricity, steam, heating, or cooling consumed by the investee company.

Scope 1 and **Scope 2** GHG emissions from investments and debts are allocated to the reporting institution based on the proportional share of investment or debt in the investee company. The current portfolio value (in USD) is used to normalize the data.

BEA Union Investment Management Limited (BU) makes reference to the PCAF Standard in calculating the portfolio carbon footprint for various asset classes. For bridging GHG emission data gaps, BU has adopted a hierarchy approach as follows: where investee companies do not report GHG emission, BU uses direct CO2 emission if available, and then Bloomberg proprietary model for GHG emission estimation.

Portfolio Carbon Footprint (as at 29 December 2023)

Fund Name	Asset Type	Portfolio Carbon Footprint (tonnes/ USD\$ million)	Portfolio Coverage (%)
BU Investment Series OFC			
BU Asia Pacific Flexi Allocation Fund	Mixed Assets	81.6	99.8%
BU China Gateway Fund	Mixed Assets	103.6	98.9%
BU China Phoenix Fund	Equity	60.7	100.0%
BU RMB Core Bond Fund	Fixed Income	128.5	100.0%
BU Fund Series OFC			
BU Asia Impact Bond Fund	Fixed Income	59.9	99.4%
BU Asian Bond Fixed Maturity Fund 2025	Fixed Income	241.1	95.1%
BEA Union Investment Series			
BEA Union Investment Asia Pacific Multi Income Fund	Mixed Assets	93.6	99.3%
BEA Union Investment Asian Bond and Currency Fund	Fixed Income	303.0	86.0%
BEA Union Investment Asian Opportunities Fund	Equity	70.1	100.0%
BEA Union Investment Asian Strategic Bond Fund	Fixed Income	195.0	95.6%
BEA Union Investment Asian A Opportunities Fund	Equity	163.3	100.0%
BEA Union Investment China A-Share Equity Fund	Equity	138.0	100.0%
BEA Union Investment China Bond Selection Fund	Fixed Income	207.3	96.6%
BEA Union Investment Capital Growth Fund			
BEA Union Investment Asia Pacific Investment Grade Bond Fund	Fixed Income	134.8	99.0%
BEA Union Investment Asia Strategic Growth Fund	Equity	58.2	100.0%
BEA Union Investment Global Bond Fund	Fixed Income	189.5	99.1%
BEA Union Investment Global Equity Fund	Equity	33.4	100.0%
BEA Union Investment Greater China Growth Fund	Equity	101.1	100.0%
BEA Union Investment Hong Kong Dollar (HK\$) Bond Fund	Fixed Income	49.9	97.2%
BEA Union Investment Hong Kong Growth Fund	Equity	79.9	100.0%

MPF Fund Name	Asset Type	Portfolio Carbon Footprint (tonnes/ USD\$ million)	Portfolio Coverage (%)
BEA (MPF) Master Trust Scheme			
BEA (MPF) Growth Fund	Mixed Assets	66.1	65.6%
BEA (MPF) Balanced Fund	Mixed Assets	96.2	76.8%
BEA (MPF) Stable Fund	Mixed Assets	118.6	81.1%
BEA (MPF) Global Equity Fund	Equity	29.0	88.3%
BEA (MPF) Asian Equity Fund	Equity	51.6	92.1%
BEA (MPF) Greater China Equity Fund	Equity	95.2	100.0%
BEA (MPF) Hong Kong Equity Fund	Equity	72.0	89.8%
BEA (MPF) Global Bond Fund	Fixed Income	165.3	100.0%
BEA (MPF) Core Accumulation Fund	Mixed Assets	94.4	100.0%
BEA (MPF) Age 65 Plus Fund	Mixed Assets	157.4	100.0%
BEA (MPF) Industry Scheme			
BEA (Industry Scheme) Growth Fund	Mixed Assets	65.0	64.6%
BEA (Industry Scheme) Balanced Fund	Mixed Assets	95.5	75.9%
BEA (Industry Scheme) Stable Fund	Mixed Assets	118.0	80.9%
BEA (Industry Scheme) Asian Equity Fund	Equity	51.4	92.4%
BEA (Industry Scheme) Greater China Equity Fund	Equity	95.7	96.7%
BEA (Industry Scheme) Hong Kong Equity Fund	Equity	72.0	89.5%
BEA (Industry Scheme) Core Accumulation Fund	Mixed Assets	94.2	100.0%
BEA (Industry Scheme) Age 65 Plus Fund	Mixed Assets	157.0	100.0%
BEA (MPF) Value Scheme			
BEA Growth Fund	Mixed Assets	77.6	99.0%
BEA Balanced Fund	Mixed Assets	103.6	99.0%
BEA Stable Fund	Mixed Assets	123.5	94.6%
BEA Global Equity Fund	Equity	32.8	100.0%
BEA Asian Equity Fund	Equity	53.4	100.0%
BEA Greater China Equity Fund	Equity	98.5	100.0%
BEA Global Bond Fund	Fixed Income	185.0	100.0%
BEA Core Accumulation Fund	Mixed Assets	94.4	100.0%
BEA Age 65 Plus Fund	Mixed Assets	157.1	100.0%

*Portfolio coverage (%): Percentage of a fund's holdings which are covered with GHG emission data.

Assumptions & Limitations

- Portfolio carbon footprint data shown does not cover GHG emission data of Exchange Traded Funds (ETFs) or third party collective investment schemes that may be held by the fund.
- Time lag in data availability.
- GHG emission data coverage vary by countries and companies.
- Portfolio carbon footprint data is only a snapshot in time, which is not a forward looking indicator.

No portfolio carbon footprint data will be available for a fund if the coverage of its underlying securities is under 50%. BU's carbon footprint methodology is considered as working in progress, which is subject to periodic review and revision in the light of regulatory requirements, data availability and the evolution of climate change issues.