

Robeco carbon report 2020

Description of methodology and definitions

Introduction

Robeco's Sustainability Report 2020 discloses the carbon impact of our investments. While our client reporting has included carbon impact for a number of years already, this is the first time that we publicly disclose our financed emissions, in line with our commitment to the Dutch Climate Accord. This supporting document describes the methodology and definitions that are used for producing the carbon impact figures.

Scope

The scope of our carbon report are all Robeco Funds, both corporate equity and corporate bonds, but not including segregated client mandates. Governments bonds are not in scope as their footprint methodology is not yet well-established for financial accounting purposes. Green bonds are also not included in the aggregate footprint calculation, also for methodological reasons. We report scope 1 and 2 only, since scope 3 is prone to too many data challenges at this stage.

Carbon metrics

We calculate three different carbon metrics that cover the PCAF method ("carbon footprint"), the TCFD method ("carbon intensity") as well as the total carbon emissions attributable to our investments.

Total carbon emissions

$$Total\ emissions\ in\ tCO_2eq = \sum_{i=1}^N I_i \times Emissions_i \times \frac{Investment\ in\ asset_i}{EV_i}$$

Where:

- *Total emissions in tCO₂e* are the total GHG emissions in tons of CO₂ equivalent (tCO₂eq) attributed to Robeco
- *I_i* is an indicator function which is 1 if asset *i* is in scope and has footprint data and 0 otherwise
- *Emissions_i* are the total scope 1+2 GHG emissions of the company *i* in tCO₂eq
- *Investment in asset_i* is the total value of the investment in the company *i* in equity and fixed income
- *EV_i* is the enterprise value (EV) of the company *i*

Carbon footprint

$$\text{Carbon footprint} = \frac{\sum_{i=1}^N w_i \times I_i \times \frac{\text{Emissions}_i}{\text{EV}_i}}{\sum_{i=1}^N w_i \times I_i}$$

Where:

- *Carbon footprint* is CO2eq per one million USD invested
- w_i is the weight of the investment of company i in equity and fixed income in the total AUM in million USD, calculated as

$$w_i = \frac{\text{Investment in asset}_i}{\text{Total AUM}}$$

- Other parameters are defined as above

Carbon intensity

The weighted average carbon intensity (WACI) is calculated as

$$\text{WACI} = \frac{\sum_{i=1}^N w_i \times I_i \times \frac{\text{Emissions}_i}{\text{Revenues}_i}}{\sum_{i=1}^N w_i \times I_i}$$

Where

- *Carbon intensity* is CO2eq per one million USD revenues
- Other parameters are defined as above

Data sources

The carbon emissions data per 2018 fiscal year end (FY) is sourced from Robeco CH. Reported values from companies are captured from the following third parties:

- Corporate Sustainability Assessment Campaign 2020 (CSA S&P)
- Carbon Disclosure Project (CDP)
- Company reports (annual and sustainability reports)

Robeco CH sources EV and revenue data from third party data provider Worldscope. All information about account data comes from PUMA. The assets under management numbers we use for calculating the footprint data are extracted from Robeco's internal holdings database.

Data quality and coverage

When reported carbon values are unavailable or inconsistent, estimated carbon values are used. The estimations are based on regressions of scope 1+2 emissions as a function of revenues, done per peer group. Of the 11'692 companies covered in the total universe, around 22% are based on reported numbers, with the remaining 78% estimated. About 8% of the company provided data had to be rejected and corrected (7%) or estimated (1%) due to inconsistencies or obvious errors (e.g. wrong units).

Given all out-of-scope exclusions, we can calculate the coverage on which the reported footprint measures are based. Aggregation of all funds that are in-scope gives us the *In – scope AUM*. This is the base on which the coverage is calculated.

$$coverage = \frac{\sum_{i=1}^N w_i \times I_i^{in\ scope} \times I_i^{Carbon\ data}}{\sum_{i=1}^N w_i \times I_i^{in\ scope}}$$

Where

- *Coverage* is the share of total AUM in % for which we have carbon data available (company provided data or estimated data)
- $I_i^{in\ scope}$ is an indicator which is 1 if asset *i* is in-scope and 0 otherwise
- $I_i^{Carbon\ data}$ is an indicator function which is 1 if the issuer of asset *i* has carbon data and 0 otherwise

Results

	Robeco funds			
	Equities	Fixed income	Multi Assets	Total
Portfolio AUM (USD)	64'705'869'031	39'267'587'063	4'381'821'998	108'355'278'093
<i>of which reported here</i>	63'438'351'395	28'214'948'909	3'998'207'303	95'651'507'607
<i>share of total AUM (%)</i>	31%	19%	2%	51%
Total emissions (tons of CO2eq)	6146106	2925394	258907	9330407
Carbon footprint (tons of CO2eq / USD mln)	98	128	67	104
Carbon intensity (tons of CO2eq / USD mln)	130	192	97	145
Data coverage	99%	81%	96%	93%

