
EU Taxonomy Methodology

Morningstar Manager Research
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Methodology History

Version: 3.0
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Description: Second amendment

Introduction

The EU taxonomy classification system of environmentally sustainable activities and large EU corporations will disclose information that indicates how aligned the company's revenue, operating expenditure, and capital expenditure are to the EU goal of being net zero by 2050. The EU taxonomy will eventually cover six environmental green "objectives" and will be extended to social objectives and to identify "brown" activities.

EU-domiciled funds (or funds sold into the EU) must also calculate and disclose their portfolio's alignment with the EU taxonomy by providing an aggregation of the alignment of the underlying holdings. This methodology paper describes the calculation of those fund-level metrics. Morningstar calculates the alignment at the fund level for the revenue, capital expenditure, and operational expenditure alignment of the climate mitigation objective only. These will be calculated as a percentage of the fund's total portfolio and the portfolio excluding sovereign investments. These calculations will use underlying data from Sustainalytics, and this data may be estimated or collected.

Calculation Timings

The calculation will be performed upon the collection of the portfolio, and only data that is available to the market on the portfolio date will be used in the calculation of the aggregate values.

Holding Types

Not all security types are EU-taxonomy-eligible — for example, cash and commodity positions do not have associated revenues and therefore cannot be evaluated. The EU taxonomy regulation currently does not provide an evaluation mechanism for government/sovereign bonds (including, for this methodology, supranational and municipal bonds) and the regulation notes that derivative positions should not be assessed.

For the purpose of these calculations, Morningstar will assign one of five EU taxonomy holding types to all securities:

1. Cash or cashlike investments;
2. Commodities;
3. Government bonds (including supranational and municipal bonds);
4. Derivatives;
5. Corporate securities (Including stock, corporate bonds, property, and any other holdings including unidentified holdings).

Portfolio 'Look Through'

Morningstar will first attempt to "look through" any funds that are held by the portfolio to find the underlying holdings that are indirectly held. The "look through" function goes up to 10 portfolios "deep," —that is, when a portfolio holds a fund, and in turn, that fund hold other funds, the "look through" process will assess 10 "levels" of portfolios. The exception to this rule is for funds that are synthetically replicated; for the purpose of the EU taxonomic calculations, they will be treated as being equivalent to a portfolio holding derivatives. The derivative holding will not be "looked through" and, for the purposes of the calculations, are treated as "other holdings"—that is, not corporate nor sovereign holdings.

Total Portfolio Weights

Morningstar calculates portfolio weights based on the proportion of a portfolio that a holding represents once any fund holdings have been "looked through". The weights are based on the market value of the securities. For the EU taxonomic calculations, some additional steps will be taken to calculate the final portfolio weight:

1. Any securities that have both long and short positions will be "netted out"—that is, the short position weight will be subtracted from the long position weight;
2. Any remaining short positions will be removed;
3. Any currency offsets will be removed;
4. The portfolio weight will then be recalculated on the netted-out long positions only.

[1]

$$\text{Total Portfolio Weight } W_R = \frac{\text{Portfolio Weight}_i}{\sum_{i=1}^n \text{Portfolio Weight}_i}$$

Where

Total Portfolio Weight W_R	=	Rescaled portfolio weight
$\text{Portfolio Weight}_i$	=	Original portfolio weight
$i=1, n$	=	All long, noncash offset holdings

Portfolio Weights Excluding Sovereign Investments

Morningstar calculates portfolio weights based on the proportion of a portfolio that a holding represents excluding sovereign investments, once any fund holdings have been "looked through." For the EU taxonomy calculations, some additional steps will be taken to calculate the final portfolio weight:

1. Any securities that have both long and short positions will be "netted out"—that is, the short position weight will be subtracted from the long position weight;
2. Any remaining short positions will be removed;
3. Any currency offsets will be removed;
4. Any sovereign or supranational investments will be removed;
5. The portfolio weight will then be recalculated on the netted-out long positions only.

[2]

$$\text{Portfolio Weight Excluding Sovereign } W_{ES} = \frac{\text{Portfolio Weight}_i}{\sum_{i=1}^{es} \text{Portfolio Weight}_i}$$

Where

$\text{Portfolio Weight Excluding Sovereign } W_{ES}$	=	Rescaled excluding sovereign portfolio weight
$\text{Portfolio Weight}_i$	=	Original portfolio weight
$i=1, es$	=	All long, noncash offset, nonsovereign/supranational holdings

EU Taxonomy Calculations

The calculations will be based on the EU taxonomy holding type and underlying corporate level data from Sustainalytics, a Morningstar company that provides sustainability research. Morningstar will link the corporate holding in the portfolio with the corporate-level data collected or estimated by Sustainalytics. Corporate bond holdings are linked to the issuing company's alignment data. Note that green bonds will use the same underlying taxonomy data as a standard corporate bond—that is, the data of the issuing entity. They will not have their own separate alignment data.

Calculations Based on Portfolio Weights Excluding Sovereign Investments

For the taxonomy, calculations that follow the formulas for total portfolio breakdowns and portfolio excluding sovereigns breakdowns will be identical except the total portfolio breakdowns will use total portfolio weight, W_R , and portfolio excluding sovereigns breakdowns will use portfolio weight excluding sovereigns, W_{ES} . To obtain the formulas for portfolio excluding sovereigns calculations, replace W_R with W_{ES} .

First, Morningstar will calculate the percentage of the portfolio that is covered by Sustainalytics research.

[3]

$$\text{Portfolio CCM Covered}_R = \sum_{i=1}^S W_R$$

Where

$\text{Portfolio \% Covered}_R$	=	The proportion of the portfolio covered by Sustainalytics corporate research
$i = 1, s$	=	All securities with Sustainalytics corporate research

Calculations Based on Revenue, Capital Expenditure, or Operational Expenditure

Sustainalytics undertakes company-level activity-based research to assess the proportion of a company's revenue, capital expenditure, or operational expenditure that is aligned to the EU taxonomy for the climate change mitigation objective. This is aggregated at a portfolio level to calculate the proportion of the portfolio that is in sustainable investments. In the formulas below, replace "metric" with the relevant type (revenue, capital expenditure, or operational expenditure) to obtain the calculation for that particular metric.

[4]

$$\text{Portfolio CCM \% Sustainable Investments metric} = \sum_{i=1}^n W_R * \text{CCM \% aligned metric}$$

W_R	=	Rescaled portfolio weight
CCM % aligned metric	=	The percentage of a company's metric (where metric means either revenue, capital expenditure, or operational expenditure) aligned to the EU taxonomy objective for climate change mitigation

This will be further broken down to indicate where the company-level data was reported by the corporation or estimated by Sustainalytics.

[5]

$$\begin{aligned} & \text{Portfolio CCM \% Sustainable Investments metric (reported)} \\ & = \sum_{i=1}^n W_R * \text{CCM \% aligned metric (reported)} \end{aligned}$$

W_R	=	Rescaled portfolio weight
CCM % aligned metric (reported)	=	The percentage of a company's metric (where metric means either revenue, capital expenditure, or operational expenditure) aligned to the EU taxonomy objective for climate change mitigation as reported by the company

[6]

$$\begin{aligned} & \text{Portfolio CCM \% Sustainable Investments metric (estimated)} \\ & = \sum_{i=1}^n W_R * \text{CCM \% aligned metric (estimated)} \end{aligned}$$

W_R	=	Rescaled portfolio weight
CCM % aligned metric (estimated)	=	The percentage of a company's metric (where metric means either revenue, capital expenditure, or operational expenditure) aligned to the EU taxonomy objective for climate change mitigation as estimated by Sustainalytics

The sustainable investment proportion of the portfolio can also be broken down to the contribution type, whether it is an "Own Contribution," "Enabling," or "Transition" activity as defined by the regulation. "Own Contribution" refers to economic activities that are being performed in an environmentally sustainable way. "Enabling" activities are those that enable a substantial contribution to be made by other activities, such as the manufacture of a component that improves the environmental performance of another activity. "Transition" activities are those that contribute to a transition to a net-zero emissions economy in 2050 but that are not currently close to a net-zero carbon emissions level. These activities are critical to the economy but must significantly enhance their performance beyond the industry average, without lock-in to carbon-intensive assets or processes.

[7a]

$$\begin{aligned} & \text{Portfolio CCM \% Sustainable Investments metric own contribution} \\ & = \sum_{i=1}^n W_R * \text{CCM \% aligned metric own contribution} \end{aligned}$$

[7b]

$$\begin{aligned} & \text{Portfolio CCM \% Sustainable Investments metric enabling} \\ & = \sum_{i=1}^n W_R * \text{CCM \% aligned metric enabling} \end{aligned}$$

[7c]

$$\begin{aligned} & \text{Portfolio CCM \% Sustainable Investments metric transition} \\ & = \sum_{i=1}^n W_R * \text{CCM \% aligned metric transition} \end{aligned}$$

W_R	=	Rescaled portfolio weight
CCM % aligned metric <i>own contribution</i>	=	The percentage of a company's metric (where metric means either revenue, capital expenditure, or operational expenditure) aligned to the EU taxonomy objective for climate change mitigation defined as "Own Contribution"
CCM % aligned metric <i>enabling</i>	=	The percentage of a company's metric (where metric means either revenue, capital expenditure, or operational expenditure) aligned to the EU taxonomy objective for climate change mitigation defined as "Enabling"
CCM % aligned metric <i>transition</i>	=	The percentage of a company's metric (where metric means either revenue, capital expenditure, or operational expenditure) aligned to the EU taxonomy objective for climate change mitigation defined as "Transition"

The other holdings of the portfolio that are not aligned will be classified as:

- ▶ Eligible but not aligned (that is, the activity can be assessed but failed one of the required criteria to be aligned)
- ▶ Not eligible (that is, the activity or holding cannot be assessed under the EU taxonomy)
- ▶ No research available (that is, the holding or activity has no research available and so the alignment cannot be determined; in these cases, the alignment is assumed to be 0%. This is the prudent approach and prevents potential greenwashing).

The eligible but not aligned calculations are similar to the aligned calculations, namely:

[8]

$$\begin{aligned} & \text{Portfolio CCM \% Eligible not aligned metric} \\ &= \sum_{i=1}^n W_R * \text{CCM \% eligible not aligned metric (reported)} + W_R \\ & \quad * \text{CCM \% eligible not aligned metric (estimated)} \end{aligned}$$

W_R	=	Rescaled portfolio weight
CCM % eligible not aligned metric	=	The percentage of a company's metric (where metric means either revenue, capital expenditure, or operational expenditure) that failed one of the criteria to be aligned with the EU taxonomy objective for climate change mitigation

This will be further broken down into the proportions where the company-level data was reported by the corporation or estimated by Sustainalytics.

[9]

$$\begin{aligned} & \text{Portfolio CCM \% Eligible not aligned metric (reported)} \\ &= \sum_{i=1}^n W_R * \text{CCM \% eligible not aligned metric (reported)} \end{aligned}$$

W_R	=	Rescaled portfolio weight
CCM % eligible not aligned metric (reported)	=	The percentage of a company's metric (where metric means either revenue, capital expenditure, or operational expenditure) that failed one of the criteria to be aligned with the EU taxonomy objective for climate change mitigation, as reported by the company

[10]

$$\begin{aligned} & \text{Portfolio CCM \% Eligible not aligned metric (estimated)} \\ &= \sum_{i=1}^n W_R * \text{CCM \% eligible not aligned metric (estimated)} \end{aligned}$$

W_R	=	Rescaled portfolio weight
CCM % eligible not aligned metric (estimated)	=	The percentage of a company's metric (where metric means either revenue, capital expenditure, or operational expenditure) that failed one of the criteria to be aligned with the EU taxonomy objective for climate change mitigation, as estimated by Sustainalytics

The proportion of the portfolio that is invested in eligible revenues (comprising both activities that are aligned and eligible but not aligned) will be calculated.

[11]

$$\begin{aligned} \text{Portfolio CCM \% Eligible} &= \text{Portfolio CCM \% Sustainable Investments metric} \\ &+ \text{Portfolio CCM \% Eligible not aligned metric} \end{aligned}$$

The not eligible portion of the portfolio is a sum of the different types of holdings and activities that cannot be assessed under the EU Taxonomy. The activities that cannot be assessed and the different holding types (cash, commodities, government bonds, and derivatives) that cannot be assessed are first calculated separately:

[12]

$$\text{Portfolio CCM \% Not eligible activities metric} = \sum_{i=1}^n W_R * \text{CCM \% not eligible metric}$$

W_R	=	Rescaled portfolio weight
CCM % not eligible metric	=	The percentage of a company's metric (where metric means either revenue, capital expenditure, or operational expenditure) in activities that are not eligible for the EU taxonomy objective climate change mitigation.

[13]

$$\text{Portfolio CCM \% Not eligible Cash} = \sum_{i=1}^n W_R \text{Cash holdings}$$

$W_R \text{Cash Holdings}$	=	Rescaled portfolio weight of the portfolio holdings that are identified as having the EU taxonomy type of cash
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[14]

$$\text{Portfolio CCM \% Not eligible Commodities} = \sum_{i=1}^n W_R \text{Commodities}$$

$W_R \text{Commodities}$	=	Rescaled portfolio weight of the portfolio holdings that are identified as having the EU taxonomy type of commodity
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[15]

$$\text{Portfolio CCM \% Not eligible Government bonds} = \sum_{i=1}^n W_R \text{Government Bonds}$$

$W_R \text{Government Bonds}$ = Rescaled portfolio weight of the portfolio holdings that are identified as having the EU taxonomy type of government bonds (including municipal and supranational bonds)

[16]

$$\text{Portfolio CCM \% Not eligible Derivatives} = \sum_{i=1}^n W_R \text{Derivatives}$$

$W_R \text{Derivatives}$ = Rescaled portfolio weight of the portfolio holdings that are identified as having the EU taxonomy type of derivatives

These then will be summated to calculate the overall "not eligible" percentage of the portfolio.

[17]

$$\begin{aligned} & \text{Portfolio CCM \% Not eligible metric} \\ &= \sum_{i=1}^n (W_R * \text{CCM \% not eligible metric}) + W_R \text{Cash} + W_R \text{Commodity} \\ &+ W_R \text{Government} + W_R \text{Derivative} \end{aligned}$$

The proportion of the portfolio with no research excludes those "not eligible" holdings and consists of other holdings without research and holdings that have not been matched. This will include all real estate and infrastructure holdings where we are unable to assess alignment. For the purposes of the calculations, these are treated as having 0% alignment.

[18]

$$\text{Portfolio CCM \% No research} = \sum_{i=1}^n W_R \text{No Research}$$

$W_R \text{No Research}$ = Rescaled portfolio weight of the portfolio holdings that are identified as having the EU taxonomy type of corporate and do not have underlying Sustainability research.

Morningstar will also create a statistic for all holdings that are not aligned called "other investments." This includes all activities that are eligible but not aligned, not eligible activities and holdings, and holdings where the research is not available.

[18]

$$\begin{aligned} & \text{Portfolio CCM \% Other Investments metric} \\ = & \sum_{i=1}^n (W_R * \text{CCM \% not aligned metric}) + W_R \text{Cash} + W_R \text{Commodity} \\ & + W_R \text{Government} + W_R \text{Derivative} + W_R \text{No Research} \end{aligned}$$

CCM % not aligned metric = The percentage of a company's metric (where metric means either revenue, capital expenditure, or operational expenditure) that is not aligned to the climate change mitigation objective of the taxonomy. This includes activities that are eligible but not aligned and activities that are not eligible.



Methodology History

Version: 1.0	31 June 2021	Original publication
Version: 2.0	31 Dec 2021	Addition of CCM percentage of eligible revenue.
Version: 3.0	30 April 2022	Addition of information for calculations of capital expenditure and operational expenditure and excluding sovereigns statistics.