Introduction
The EU taxonomy is a 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 6 Environmental green 'objectives' and will be extended to social objectives and to identify 'brown' activities.

EU Domiciled funds (or fund 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 alignment of the climate mitigation objective only, using underlying data from Sustainalytics and this data may be estimated or collected data.

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 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 cash like 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)

A full list of all security types and how they map to the EU holding types can be found in appendix A.
Portfolio 'look through'

Morningstar will firstly attempt to 'look through' any funds that are held by the portfolio to find the underlying holdings that are indirectly held. The exception to this rule will be where a fund is synthetically replicated, for the purpose of EU taxonomic calculation they will be treated as being equivalent to the portfolio holding derivatives.

Portfolio weights

Morningstar calculates portfolio weights based upon the proportion of a portfolio a holding represents, 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' i.e. 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

\[ W_R = \frac{\text{Portfolio Weight}_i}{\sum_{i=1}^{n} \text{Portfolio Weight}_i} \]

Where

- \( W_R \) = Rescaled portfolio weight
- \( \text{Portfolio Weight}_i \) = Original portfolio weight
- \( i = 1, n \) = All long, non cash offset holdings

EU Taxonomy Calculations

The calculations will be based upon the EU taxonomy holding type and underlying corporate level data from Sustainalytics, Morningstar will link the corporate holding in the portfolio with the corporate level data collected or estimated by Sustainalytics. Corporate bond holdings are link to the issuing company's alignment data.

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

\[ \text{Portfolio Covered}_R = \sum_{i=1}^{s} W_R \]

Where

- \( \text{Portfolio % Covered}_R \) = The proportion of the portfolio covered by Sustainalytics corporate research
- \( i = 1,s \) = All securities with Sustainalytics corporate research
Sustainalytics undertake company level activity based research to assess the proportion of a company's revenue that is aligned to the EU taxonomy for the climate change mitigation (CCM) objective. This is aggregated at a portfolio level to calculation to proportion of the portfolio that is in Sustainable investments.

\[ [3] \]
\[ \text{Portfolio } \% \text{ Sustainable Investments revenue} = \sum_{i=1}^{n} W_R \times \text{CCM } \% \text{ aligned revenue} \]

| \( W_R \) | = Rescaled portfolio weight |
| CCM % aligned Revenue | = The percentage of a company’s revenue aligned to 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.

\[ [4] \]
\[ \text{Portfolio } \% \text{ Sustainable Investments revenue \ (reported)} = \sum_{i=1}^{n} W_R \times \text{CCM } \% \text{ aligned revenue \ (reported)} \]

| \( W_R \) | = Rescaled portfolio weight |
| CCM % aligned revenue \ (reported) | = The percentage of a company’s revenue aligned to the EU taxonomy objective for climate change mitigation as reported by the company |

\[ [5] \]
\[ \text{Portfolio } \% \text{ Sustainable Investments revenue \ (estimated)} = \sum_{i=1}^{n} W_R \times \text{CCM } \% \text{ aligned revenue \ (estimated)} \]

| \( W_R \) | = Rescaled portfolio weight |
| CCM % aligned revenue\ (estimated) | = The percentage of a company’s revenue 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.

\[ 6a \]
\[
\text{Portfolio \% Sustainable Investments revenue own contribution} = \sum_{i=1}^{n} W_R \times \text{CCM \% aligned revenue own contribution}
\]

\[ 6b \]
\[
\text{Portfolio \% Sustainable Investments revenue enabling} = \sum_{i=1}^{n} W_R \times \text{CCM \% aligned revenue enabling}
\]

\[ 6c \]
\[
\text{Portfolio \% Sustainable Investments revenue transition} = \sum_{i=1}^{n} W_R \times \text{CCM \% aligned revenue transition}
\]

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<td>CCM % aligned revenue own contribution</td>
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The other investments of the portfolio holdings will be classified as:
- Eligible but Not Aligned (i.e. the activity failed one of the required criteria to be aligned)
- Not Eligible (i.e. the activity or holding cannot be assessed under the EU taxonomy)
- No Research available (i.e. 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 prevent potential 'greenwashing').
The eligible but not aligned calculations are similar to the aligned calculations namely:

\[ 7 \]

\[
\text{Portfolio } \% \text{ Eligible not aligned revenue} = \sum_{i=1}^{n} W_R \times CCM \% \text{ eligible not aligned revenue} \ (\text{reported}) + W_R \times CCM \% \text{ eligible not aligned revenue} \ (\text{estimated})
\]

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

\[ 8 \]

\[
\text{Portfolio } \% \text{ Eligible not aligned revenue} \ (\text{reported}) = \sum_{i=1}^{n} W_R \times CCM \% \text{ eligible not aligned revenue} \ (\text{reported})
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\[ 9 \]

\[
\text{Portfolio } \% \text{ Eligible not aligned revenue} \ (\text{estimated}) = \sum_{i=1}^{n} W_R \times CCM \% \text{ eligible not aligned revenue} \ (\text{estimated})
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The not eligible portions of the portfolio will be calculated as follows:

\[ \text{Portfolio} \times \text{Not eligible activities revenue} = \sum_{i=1}^{n} W_R \times \text{CCM} \times \text{not eligible revenue} \]

- \( W_R \) = Rescaled portfolio weight
- \( \text{CCM} \times \text{not eligible revenue} \) = The percentage of a company's revenue in activities that are not eligible for the EU taxonomy objective climate change mitigation.

\[ \text{Portfolio} \times \text{Not eligible Cash} = \sum_{i=1}^{n} W_R \times \text{Cash holdings} \]

- \( W_R \times \text{Cash Holdings} \) = Rescaled portfolio weight of the portfolio holdings that are identified as having the EU taxonomy type of Cash

\[ \text{Portfolio} \times \text{Not eligible Commodities} = \sum_{i=1}^{n} W_R \times \text{Commodities} \]

- \( W_R \times \text{Commodities} \) = Rescaled portfolio weight of the portfolio holdings that are identified as having the EU taxonomy type of Commodity

\[ \text{Portfolio} \times \text{Not eligible Government bonds} = \sum_{i=1}^{n} W_R \times \text{Government Bonds} \]

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

\[ \text{Portfolio} \times \text{Not eligible Derivatives} = \sum_{i=1}^{n} W_R \times \text{Derivatives} \]

- \( W_R \times \text{Derivatives} \) = Rescaled portfolio weight of the portfolio holdings that are identified as having the EU taxonomy type of derivatives
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.

\[ \text{Portfolio } \% \text{ No research} = \sum_{i=1}^{n} W_{R} \text{No Research} \]

\[ W_{R} \text{No Research} = \text{Rescaled portfolio weight of the portfolio holdings that are identified as having the EU taxonomy type of corporate and do not have underlying Sustainalytic research.} \]

For ease of use Morningstar will summate all of the ‘Not Eligible’ type to calculate the total percentage of the portfolio in any not eligible holding or activity.

\[ \text{Portfolio } \% \text{ Not eligible revenue} = \sum_{i=1}^{n} (W_{R} \times CCM \% \text{ not eligible revenue}) + W_{R}\text{Cash} + W_{R}\text{Commodity} + W_{R}\text{Government} + W_{R}\text{Derivative} \]

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

\[ \text{Portfolio } \% \text{ Other Investments revenue} = \sum_{i=1}^{n} (W_{R} \times CCM \% \text{ not aligned revenue}) + W_{R}\text{Cash} + W_{R}\text{Commodity} + W_{R}\text{Government} + W_{R}\text{Derivative} + W_{R}\text{No Research} \]

\[ CCM \% \text{ not aligned revenue} = \text{The percentage of a company's revenue that is not aligned to the climate change mitigation objective of the taxonomy. This includes activities that are eligible but not aligned and activities that not eligible.} \]