

METHODOLOGY ABSTRACT

Our EU Taxonomy Solution Beyond Compliance

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Giacomo Bressan
Associate Director,
Methodology & Product Architecture

Dr Hendrik Garz
Executive Director,
Methodology & Product Architecture



Our EU Taxonomy Solution: Beyond Compliance

Methodology Abstract

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Methodology &
Product Architecture

Authors:¹

Giacomo Bressan
Associate Director,
Methodology & Product Architecture
giacomo.bressan@morningstar.com

Dr Axel Rosch
Director,
Methodology & Product Architecture
axel.rosch@morningstar.com

The EU taxonomy² is a regulatory classification framework designed to identify environmentally sustainable economic activities using science-based technical screening criteria with the aim of facilitating sustainable investments and addressing concerns about greenwashing. **Morningstar Sustainalytics EU Taxonomy Solution** supports our clients by leveraging the EU taxonomy framework to gain detailed insights about the involvement of companies in environmentally sustainable activities. It provides an assessment of our clients' individual holdings as well as portfolio level alignment to the taxonomy's Climate Change Mitigation (CCM) and Climate Change Adaptation (CCA) objectives.

Highlights

- Leveraging our **Activity-based Research (ABR)**: 89 business activities assess CCM, and 96 assess CCA.
- We ensure to correctly capture reported eligibility and alignment data from non-financial companies.
- As of September 2022, only a small share of companies (14% of researched companies) reports data on the EU taxonomy eligibility or alignment.
- To overcome the lack of reported alignment data, we leverage our **Sustainable Activities Involvement (SAI)** research to estimate alignment with **Green Safeguards (GS)** for 26 activities for the CCM objective.
- Similarly, we introduce the concept of **Coefficients** to estimate alignment for the CCA objective.
- Leveraging our Controversies and **Global Standard Screening (GSS)** research, we include Do No Significant Harm (DNSH) and Minimum Safeguards (MS) for all activities and companies.

Introduction

The EU Taxonomy

The EU taxonomy: A classification system for business activities

The EU taxonomy is a key pillar of the EU's plan to reach the objectives of the European Green Deal.³ It establishes a clear list of business activities that, under specific conditions, contribute to the transition to a sustainable economy. Companies and investors covered by the regulation are mandated to disclose the share of **Eligible** and **Aligned** activities in their business or portfolio. Through standardization, the EU taxonomy aims to prevent greenwashing, reduce market fragmentation, and enable a sustainable transition.

Aligned activities in the EU taxonomy

The EU taxonomy requires companies and investors to report on activities that bring a Substantial Contribution (SC) to one of the objectives set up in the regulation and specified in subsequent delegated acts,⁴ as follows:

- Climate change mitigation⁵
- Climate change adaptation⁶
- The Sustainable Use and Protection of Water and Marine Resources⁷
- The Transition to a Circular Economy⁸
- Pollution Prevention and Control⁹
- The Protection and Restoration of Biodiversity and Ecosystems¹⁰

Activities contributing substantially are classified as aligned activities. To conduct an aligned activity, a company (1) needs to be involved in a **Taxonomy-eligible Activity**; (2) the activity has to be conducted in a manner that satisfies the defined Technical Screening Criteria (TSC)¹¹; and (3) the activity needs to meet the Do No Significant Harm (DNSH) and Minimum Safeguards (MS) requirements.

The Road Ahead

A key but incomplete policy tool for sustainability

The EU taxonomy is an important policy tool for sustainable development, but it is currently incomplete for multiple reasons: (1) Complex data requirements are levied on companies, leading to fragmented reporting; (2) Lack of definitions for sectors that are less relevant to the transition, or for socially sustainable activities; (3) Exclusion of the use of estimates for regulatory reporting.¹²

Hence, taxonomy alignment of financial portfolios is generally low; however, alignment is expected to increase over time due to the higher data availability from companies, the actual transition to a more sustainable economy, and regulatory developments expanding coverage of the EU taxonomy.¹³

Morningstar Sustainalytics EU Taxonomy Solution

Based on the Climate Delegated Act on climate change adaptation and mitigation

Currently, our EU Taxonomy solution is based on the Climate Delegated Act on climate change adaptation and mitigation;¹⁴ and the Article 8 Delegated Act,

though we have not yet adopted a comprehensive solution for financial institutions.¹⁵ The Complementary Climate Delegated Act on gas and nuclear activities¹⁶, as well as the delegate acts for the other objectives, the social taxonomy, the report on Minimum Safeguards¹⁷, and the Delegated Acts under the Sustainable Finance Disclosure Regulation (SFDR)¹⁸ have not been considered at this stage.

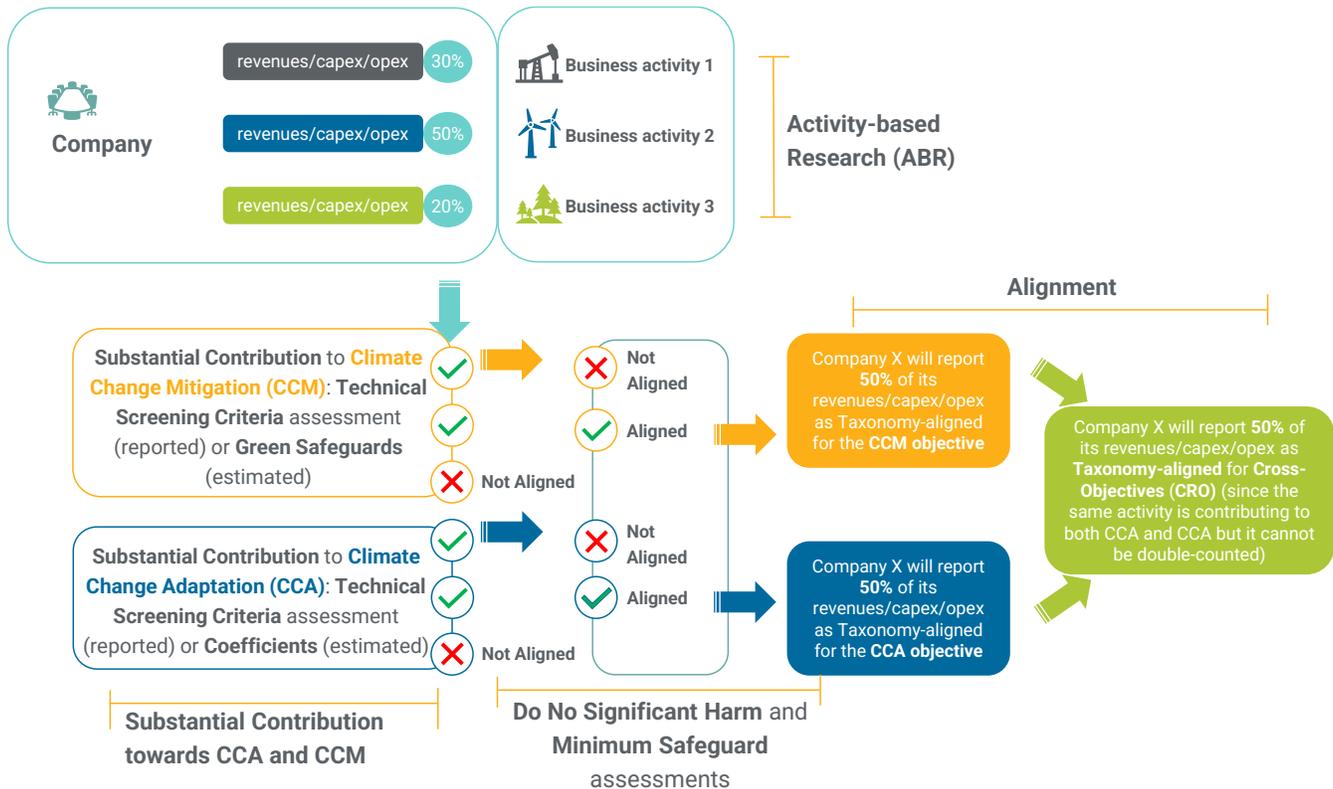
A solution to support investors beyond compliance

We developed our solution to support investors using the taxonomy, also beyond regulatory compliance. Thus, our methodology includes estimated data to complement the scattered and generally low-quality reporting. This document summarizes the main methodological components of our assessment. For the full details on our approach, please refer to the complete methodology document.¹⁹

Taxonomy Assessment

Exhibit 1 illustrates the steps leading to the assessment of taxonomy alignment.

Exhibit 1: EU Taxonomy - Assessment Workflow



Source: Morningstar Sustainalytics

Taxonomy-eligible Activities: Activity-based Research

Identifying eligible activities

The assessment of taxonomy alignment starts from the company under analysis, seen as a portfolio of activities. Each activity has a set of financial metrics associated with it, namely revenues,²⁰ capital expenditures (capex), and operational expenditures (opex).²¹ Our Activity-based Research (ABR) identifies these activities and the corresponding metrics in three screening steps.

Identifying activities...

First, activities are identified, leading to a full classification of all those that are taxonomy-eligible for the analyzed company. The detailed list of activities covered is provided in a mapping file²² that is part of our client deliverables. Notably, activities per se are generally agnostic of the taxonomy objectives. Hence, ABR itself is objective agnostic.

... quantifying involvement...

Second, the degree of involvement in each activity is assessed via shares of revenues, capex and opex. We established several processes to ensure eligibility and alignment, ensuring data reported by companies are correctly captured.²³

Moreover, we combine an artificial intelligence (AI) model²⁴ and analyst research to capture data when companies do not report according to the EU taxonomy. By complementing reported data and different estimation techniques, we ensure maximum quality and minimize the number of missed involvements.

... and alignment

Third, the alignment of these activities with the EU taxonomy's requirements is assessed to reach a conclusion about an activity's Substantial Contribution. This step leverages reported data,²⁵ Green Safeguards, or Coefficients. Different from eligibility, alignment is objective specific. Our EU Taxonomy Solution covers climate change mitigation and climate change adaptation, and their combination as **Cross-objectives (CRO)**. CRO is derived by a sum of contributions to one or multiple objectives per activity, with a double-counting caveat stemming from the Article 8 Delegated Act: While an activity can contribute to multiple objectives, its revenue, capex, opex shall be considered only once when aggregating across objectives.²⁶ Thus, we cover this objective by combining our climate change mitigation and climate change adaptation research and correcting for double counting.

Relying on reported alignment data when available, and estimation to fill the gap of non-reporters

We use reported alignment data when available, and two types of estimation for non-reporters: (1) Company-specific analysis relying on 'greenness' conditions as proxied by our Green Safeguards (GS), for CCM; (2) **Taxonomy Alignment Coefficients** (or 'Coefficients') for CCA.

Depending on the activity, Substantial Contribution is characterized by a 'type' as follows:

- Three types are identified for CCM: Own performance²⁷, transition²⁸, and enabling.²⁹
- Two types are identified for CCA: Own performance³⁰ and enabling.³¹

Green Safeguards

Green Safeguards are applied only where a sufficient level of satisfactory 'greenness' can be achieved

A Green Safeguard (GS) represents a set of criteria for assessing the 'greenness' of an activity and its contribution to the transition to a sustainable economy. GS, a part of our Sustainable Activities Involvement (SAI), are applied only where a sufficient level of 'greenness' can be achieved and are not applied where it is not possible to define satisfactory criteria. Three types of criteria are used to characterize GS: **Default Inclusion**, **Qualitative Safeguards**, and **List Safeguards**. Currently, 80 sustainable corporate activities are covered in SAI.

Activities failing the Green Safeguards are estimated to be not aligned

We map 26 GS to taxonomy-eligible activities. Then, we leverage the percentage of revenues passing the safeguard and apply it to revenue, capex, and opex in the EU taxonomy to estimate alignment.³² Activities failing the GS, or for which no GS are defined, are estimated to be not aligned.

Auto-alignment

For some activities, GS are not needed to estimate alignment, since these are regarded as providing a SC by their nature. We call these activities **Auto Aligned**. Any revenue, capex or opex that could be associated with them is classified 'estimated aligned' with a given EU taxonomy objective once they pass the

corresponding DNSH and MS screening. Currently, no auto aligned activities exist for CCA.

Coefficients

Adaptation finance is trailing mitigation

Despite increasing global warming, significant barriers to climate change adaptation still exist (IPCC, 2022),³³ leading to a situation where the gap between what is done to adapt and what would be needed is progressively widening (UNEP, 2021).³⁴ In fact, adaptation finance is trailing mitigation [(CPI, 2021),³⁵ (Joint MDB, 2021)³⁶]. Therefore, very limited data are available on adaptation finance, increasing the complexity of estimating EU taxonomy alignment to CCA.

Deriving climate change adaptation coefficients

Against this background, we developed our coefficients approach to quantify portfolio-level alignment to CCA. Coefficients represent the share of revenues, capex, opex that can be expected to be aligned with the CCA objective for a sufficiently large and diversified portfolio. We base our coefficients approach on the limited adaptation finance data available. First, we proxy the amount of CCA financing in the economy (Joint MDB, 2021); second, we allocate the share to sectors and activities; third, we then combine these data with information on the number of activities, and total financing, to compute coefficients.

These portfolio-level coefficients are applied at the company-level in our dataset, to facilitate usability. However, they should not be regarded as company-level estimates of alignment.

Do No Significant Harm (DNHS) & Minimum Safeguards (MS)

DNSH and MS screens

To complete our estimated alignment data, we apply DNSH and MS screens. Companies that breach these screens are deemed as not aligned.

Do No Significant Harm

Avoiding negative externalities

The concept of Do No Significant Harm (DNSH) implies that to contribute to one of the taxonomy's objectives, activities should not create negative externalities on the other five objectives. The DNSH principle requires companies to comprehensively assess the direct environmental impact of their activities under the criteria defined by the EU taxonomy. Our assessments comprise four possible outcomes: **Pass**, **Reasonable Assurance**, **Watch** and **Breach**.

Category 4 and 5 events lead to 'breach'

To arrive to these conclusions, we leverage our existing Controversy Research capabilities.³⁷ As part of this research, we screen high-category events (i.e., category 4 and 5 events) using **Event Indicators** that are mapped to the environmental objectives of the EU taxonomy. If a company has a category 4 or 5 event, it is assessed to be in breach of DNSH under the corresponding environmental objective. If a company has a category 3 event, it is assessed as a 'watch' conclusion, i.e., cases where severe breaches have not been identified yet, but further due diligence may be necessary.

Minimum Safeguards

The Minimum Safeguards (MS) requirements of the EU taxonomy refer to the standards embedded in the OECD Guidelines on Multinational Enterprises (MNEs), the UN Global Compact (UNGC) and the ten UN Guiding Principles on Business and Human Rights (UNGP), with specific reference to the ILO Core Labour Conventions.

MS are based on Global Standard Screening research

Our MS assessment is fully based on Global Standard Screening (GSS) research conclusions, which take a purely norm-based perspective, for creating the ‘breach’ signals within our current EU Taxonomy Solution. This makes the assessment fully grounded in the UNGP, the UNGC, the OECD MNE Guidelines, as well as their underlying conventions and treaties.³⁸ The signal is further enhanced by Incidents- and Events research assessments to reach ‘watch’ conclusions.

The assessment yields the following conclusions:

- Pass: Activities that ‘pass’ the MS screen, i.e., carried out by companies that are compliant under GSS for all social and governance related principles.
- Watch: Activities that have a ‘watch’ signal, i.e., being either watch-listed under GSS or having a cat 3, 4 or 5 event under related social or governance areas.
- Not Eligible: Activities in ‘breach’, i.e., being carried out by companies that obtain a non-compliant status under GSS.

Activity, Company, and Portfolio-level Conclusions

By combining Substantial Contribution, Do No Significant Harm, and Minimum Safeguards, we identify at the activity level and at the company level what share of revenues, capex and opex are **Aligned**, **Not Aligned**, or **Not Eligible**, towards climate change adaptation and climate change mitigation. These can then be combined to obtain the cross-objective-alignment (CRO). Once company data are obtained, they can be aggregated at the portfolio level.

Identifying three company level figures beyond compliance

Hence, we provide three different company-level figures, serving multiple use cases for the data, also beyond regulatory compliance, as follows:

Reported only

1. Reported only. These figures provide, at the company level, only reported data for CCA, CCM, and CRO. No estimates are used. We refer to these figures as **Reported Aligned** and **Reported Not Aligned**.

Reported or estimated

2. Reported or estimated. These figures provide, at the company level, either the reported or estimated data, where estimates are conducted only using Green Safeguards (GS). Thus, at the portfolio level, some companies will have reported data and some companies will have estimated data. As GS are currently used for CCM only, this dataset will comprise reported or estimated data for CCM, plus reported data for CCA, corrected for double counting. We

denote figures estimated with GS as **Estimated Aligned** and **Estimated Not Aligned**.

Reported, estimated or coefficients

3. Reported, estimated or coefficients. These figures provide, at the company level, either the reported, estimated or coefficient data. Thus, this represents the largest data set as it includes reported data and both estimation types covered by our methodology. As coefficients are used for CCA only, this dataset will comprise reported or estimated data for CCM, plus reported or coefficients data for CCA, corrected for double counting. We denote figures estimated with coefficients as **Coefficients Aligned** and **Coefficients Not Aligned**.

Conclusion

Meeting the evolving needs of the market

The EU taxonomy is an ambitious policy tool, aiming to reign in a scattered reporting landscape and ultimately enable the transition to a more sustainable economy. Investors need large amounts of data to effectively deliver on regulatory compliance and beyond. To this end, Morningstar Sustainalytics EU Taxonomy solution is well-placed to support investors. Combining reported data with a sophisticated estimation methodology, including AI techniques, we ensure maximum quality and minimize the number of missed involvements. Moreover, we are constantly investing in our solution to keep it up to date with regulatory requirements and meet the evolving needs of the market.

Glossary of Terms

Activity-based Research (ABR)	Research conducted on the specific business activities of a given company.
Aligned, Taxonomy-aligned	Revenues, capital expenditures and/or operational expenditures associated with an activity that is: i) included in the EU taxonomy; ii) compliant with Substantial Contribution criteria; iii) passing Do No Significant Harm and Minimum Safeguards screening.
Auto Aligned	A signal indicating that any revenue—capital expenditures and/or operational expenditures—is associated with an activity, which is directly classified as reported or estimated in alignment with the EU taxonomy (once they pass the corresponding Do No Significant Harm and Minimum Safeguards screening).
Breach	A signal that indicates whether any breaches to Do No Significant Harm or Minimum Safeguards criteria have occurred.
Coefficients (Taxonomy Alignment Coefficients)	Coefficients represent a portfolio-level expected percentage of aligned revenues—capital expenditures or operational expenditures—toward a given objective for a sufficiently large and diversified portfolio. They are expressed as a percentage value ranging from 0% (i.e., the activity is never aligned) to 100% (i.e., the activity is always aligned). They are derived at the sector and regional level and based on aggregate adaptation investments. They are currently used for Climate Change Adaptation only.
Coefficients Aligned	Share of revenues—capital expenditures and/or operational expenditures—for a given activity that are estimated via a coefficient to be aligned with the EU taxonomy. This share is computed for each activity but does not represent an activity-specific estimate of alignment.
Coefficients Not Aligned	Share of revenues—capital expenditures and/or operational expenditures—for for a given activity that are estimated via a Coefficient, or breaches of Do No Significant Harm and/or Minimum Safeguards, to be not aligned with the EU taxonomy. This share is computed for each activity but does not represent an activity-specific estimate of alignment.
Cross-objectives (CRO)	Share of eligible/aligned revenues/capex/opex across all taxonomy objectives.
Default Inclusion	Default inclusion safeguards are related to inherently sustainable activities. As such, any revenue generated from activities linked to these safeguards is considered aligned.
Eligible (Activity), Taxonomy-eligible	Our methodology is based on the taxonomy-eligible activities as defined by the latest Climate Delegated Acts. The detailed list of activities covered is provided in the Appendix of this document and in the mapping file that is part of our client deliverables (it also contains the detailed definitions of these activities). As described by the Delegated Act, activities generally correspond to the Statistical Classification of the Economic Activities in the European Community classification as defined by Eurostat but may divert from it where they are either more or less granular.
Estimated Aligned	Share of revenues—capital expenditures and/or operational expenditures—for a given activity that are estimated via a Green Safeguard to be aligned with the EU taxonomy, or auto-aligned activities.
Estimated Not Aligned	Share of revenues—capital expenditures and/or operational expenditures—for a given activity that are estimated via a Green Safeguard, or breaches of Do No Significant Harm and/or Minimum Safeguards, to be not aligned with the EU taxonomy.
Event, Event Indicator	An indicator that provides a signal about a potential failure of management as reflected by an involvement in controversies. We categorize events with negative ESG stakeholder impacts and business risk into five event categories: Category 1 (low); category 2 (moderate); category 3 (significant); category 4 (high); and category 5 (severe).
Global Standards Screening (GSS)	The Global Standard Screening (GSS) product assesses the impact that companies have on stakeholders and the extent to which companies cause, contribute or are linked to violations of international norms and standards. Specifically, GSS provides Morningstar Sustainalytics' opinion as to whether a company is violating, or is at risk of violating, a principle(s) of the United Nations Global Compact.

Green Safeguards (GS)	A Green Safeguard (GS) represents a set of criteria for assessing the ‘greenness’ of an activity and its contribution to the transition of the economy. While not being as stringent as the EU Taxonomy Technical Screening Criteria, green safeguards assure that a given activity is performed at a best-in-class level. If the requirements of a Green Safeguard are met, an activity gets incorporated under the ‘estimated aligned’ category only.
List Safeguards	These safeguards are assessed using a closed list of requirements such as certifications, products, services, which are considered ‘sustainable’. The share of revenues from activities satisfying the requirements of the list pass the safeguard.
Morningstar Sustainalytics EU Taxonomy Solution	Morningstar Sustainalytics’ solution to help clients leverage the EU Taxonomy framework to gain detailed insights about the involvement of companies in environmentally sustainable activities as defined by the EU Taxonomy. It provides an assessment of individual holdings as well as portfolio level alignment to the taxonomy’s climate change mitigation objective.
Not Aligned	Revenues—capital expenditures and/or operational expenditures—for associated with an activity that is i) included in the EU taxonomy for Substantial Contribution to Climate Change Mitigation or Adaptation; ii) not passing TSC, Do No Significant Harm and/or Minimum Safeguards screenings.
Not Eligible	A signal that indicates, in the context of overall aggregation of financial metrics for a given company, the share of the metrics that are not covered by taxonomy-eligible activities.
Pass	A signal that indicates, in the context of Do No Significant Harm and/or Minimum Safeguards, that an activity is satisfying the relevant screening criteria without raising concerns.
Qualitative Safeguards	Safeguards that are assessed by a rigorous judgement call from an analyst, who determines the share of revenues which is coherent with a given set of criteria, such as activities supporting disadvantaged groups, or the production of drugs and the development of therapies targeting major or neglected diseases. The share of revenues from activities satisfying the criteria passes the safeguard
Reasonable Assurance	A signal that indicates, in the context of Do No Significant Harm (DNSH), an activity where no evidence of breaches is found, nor other warning signals apply, but the DNSH provision is ‘non-legislation based’ only. In this case a check of the provision at the activity level would be required, which is currently not possible due to the lack of available information. Hence, unless the respective DNSH provision is reported by the company itself, a ‘reasonable assurance’ assessment made by us can lead to an ‘estimated aligned’ call only.
Reported Aligned	Share of revenues—capital expenditures and/or operational expenditures—for a given activity that are reported by companies to be ‘aligned’ with the EU taxonomy.
Reported Not Aligned	Share of revenues—capital expenditures and/or operational expenditures—for a given activity that are reported by companies to be ‘not aligned’ with the EU taxonomy.
Sustainable Activities Involvement (SAI)	Morningstar Sustainalytics Sustainable Activities Involvement research measures companies’ level of involvement in economic activities that contribute to achieving a more just and sustainable world.
Watch	A signal that indicates, in the context of Do No Significant Harm and Mitigation Safeguards, an activity where no evidence of a breach is found, but our findings suggest that additional scrutiny appears appropriate.

Change Log

Version	Date	Initiator	Main items that changed	Comment / Rationale
1.0	15.12.2023	Impact & Compliance MPA	N/A	N/A

Endnotes

- ¹ The authors would like to thank their Sustainalytics colleagues who helped in the preparation of the report. Feedback on an earlier draft of the paper was provided by Bahar Yay Celik, Kate Dzhaha. Cristina Zabalaga performed the editorial review.
- ² Text that is highlighted in bold teal indicates a term that is explained in the glossary of terms in the Appendix.
- ³ The European Green Deal aims to make Europe the first climate-neutral continent, through the achievement of three objectives: (a) no net emissions of greenhouse gases by 2050; (b) economic growth decoupled from resource use; (c) no person and no place left behind. See also; accessed at (11.12.2023): https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal_en.
- ⁴ The acts for Climate Change Mitigation and Adaptation have been adopted in 2021; accessed (09.10.2023) at: https://finance.ec.europa.eu/publications/sustainable-finance-package_en; and the acts for the remaining objectives have been adopted in 2023; accessed (09.10.2023) at: https://finance.ec.europa.eu/publications/sustainable-finance-package-2023_en. Note that the regulatory package included, in addition to the delegated acts for remaining objectives, also amendments to the climate change mitigation and adaptation delegated acts, as well as to the disclosure delegated act. In the context of the climate change mitigation and adaptation objectives, the Complementary Climate Delegated Act on gas and nuclear activities was published in the Official Journal on 15 July 2022; accessed (29.08.2022) at: https://ec.europa.eu/info/publications/220202-sustainable-finance-taxonomy-complementary-climate-delegated-act_en. The regulatory package is complemented by the so-called Article 8 Delegated Act; accessed (04.12.2023) at: <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32021R2178>.
- ⁵ The first environmental objective defined in the EU taxonomy as “the process of holding the increase in the global average temperature to well below 2 °C and pursuing efforts to limit it to 1,5 °C above pre-industrial levels, as laid down in the Paris Agreement”.
- ⁶ The second environmental objective defined in the EU taxonomy as “the process of adjustment to actual and expected climate change and its impacts”.
- ⁷ The third environmental objective defined in the EU taxonomy as “achieving the good status of water bodies, including surface water and groundwater bodies, or to preventing their deterioration when they are already in good status, or to achieving the good environmental status of marine waters, or to preventing their deterioration when they are already in good environmental status.”
- ⁸ The fourth environmental objective defined in the EU taxonomy as “covering multiple aspects of the transition to a circular economy such as increases in efficiency in the use of natural resources, durability of products, etc.”
- ⁹ The fifth environmental objective defined in the EU taxonomy as “covering prevention and/or reduction of pollutant emissions into air, water or land, improvement levels of air, water or soil quality, etc.”
- ¹⁰ The sixth environmental objective defined in the EU Taxonomy as “covering natural and biodiversity conservation, sustainable land use and management, sustainable agricultural practices, etc.”
- ¹¹ The term Technical Requirements (TR) is used synonymously at times.
- ¹² The question on estimates is debated across the EU Action Plan. See Bressan, Garz, Our EU Taxonomy Solution – Beyond Compliance. Methodology document Version 3.1, and ESMA – Concepts of estimates across the EU sustainable finance framework; accessed (30.11.2023) at: [ESMA30-1668416927-2548 Concept of estimates across the EU Sustainable Finance framework \(europa.eu\)](https://www.esma.europa.eu/press-material/press-conferences-and-events/2023/11/30/esma-30-1668416927-2548-concept-of-estimates-across-the-eu-sustainable-finance-framework-europa.eu).
- ¹³ E.g., the application of the Corporate Sustainability Reporting Directive (CSRD, Directive (EU) 2022/2464; accessed (09.10.2023) at: https://finance.ec.europa.eu/capital-markets-union-and-financial-markets/company-reporting-and-auditing/company-reporting/corporate-sustainability-reporting_en, accessed.); and the Sustainable Finance Disclosure Regulation (SFDR, Regulation (EU) 2019/2088; accessed (20.10.2023) at: <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32019R2088>.

- ¹⁴ Note that our solution does not currently take into account the amendment to this delegated act published on 13th June 2023; accessed (04.12.203) at: https://finance.ec.europa.eu/publications/sustainable-finance-package-2023_en.
- ¹⁵ As a consequence, this document applies to non-financial companies only.
- ¹⁶ Morningstar Sustainalytics provides a standalone deliverable which includes reported and estimated data on gas and nuclear activities covered by the EU Taxonomy. Estimations for these activities are based on Morningstar Sustainalytics' Product Involvement Research and are different from the approach discussed in this document. See Morningstar Sustainalytics EU Taxonomy Nuclear and Gas Deliverable_December 2023.
- ¹⁷ The Platform on Sustainable Finance published its draft report on Minimum Safeguards on 11th July 2022; accessed (29.08.2023) at: https://finance.ec.europa.eu/publications/call-feedback-draft-report-platform-sustainable-finance-minimum-safeguards_en.
- ¹⁸ For a more comprehensive discussion of requirements under the SFDR see Bressan, Garz, (2022), "Principle Adverse Impact Data Solution – Methodology version 1.1", Sustainalytics and Sustainalytics (2021), "EU Taxonomy Solution Guidance Document".
- ¹⁹ Bressan, Garz (2023). "Our EU Taxonomy Solution – Beyond Compliance – Methodology version 3.1".
- ²⁰ The term 'turnover' is used in the regulation, distinctively from revenues. However, revenues are considered a reasonable approximation of turnover at this stage.
- ²¹ As highlighted by the TEG, OPEX represent short-term expenses required to meet the ongoing operational costs of running a business. Hence, their role toward the sustainable transition is very much contingent on individual cases, i.e., OPEX can be relevant if considered part of a plan to meet TSC and relevant DNSH criteria.
- ²² Morningstar Sustainalytics - EU Taxonomy Solution Methodology - Version 3.0 - Mapping File_Oct 2022. Please request the document to your client advisor
- ²³ We ensure to capture reporters by developing tailored Boolean searches (i.e., logical relationship of the predefined words using the Boolean operators OR and AND) to retrieve relevant sources from the web and regular expression searches (used in text mining to find relevant text snippets from the sources retrieved by the crawler) for text mining. These are used to find textual disclosure related to EU taxonomy reporting on sources retrieved by a dedicated crawler. They are designed to screen all companies for reported EU taxonomy data with a high recall, thus minimizing the number of missed involvements.
- ²⁴ We chose a tree-based machine learning model equipped to handle a set of characteristics unique to our predictive task: It involves multi-dimensional, non-independent inputs and outputs shaped by a non-linear relationship. The model performs well in terms of coverage and error while reducing manual overhead that would otherwise have to be spent to estimate activity involvements based on proxy data. For more information on the model, see Theil, Gianni, Garz (2023), 'Predicting Activity Involvement – Methodology version 1.0', Morningstar Sustainalytics.
- ²⁵ For more information and analysis on reported data, see Morningstar Sustainalytics, 2023, "Our EU Taxonomy Solution – Version 6.0 – Reported Data Analysis", October 2023.
- ²⁶ Article 8 DA, Annex I, 1.2.2.2.
- ²⁷ Activities that directly contribute to the low carbon transition (e.g., renewable energy generation).
- ²⁸ Activities that are not considered 'sustainable' but are nevertheless essential to the economic transition and carried out at the 'best possible' performance level (e.g., the manufacturing of cement with associated specific emissions lower than the value of the related European Union Emission Trading System benchmark).
- ²⁹ Activities that enable reductions of emissions in other parts of the economy (e.g., the manufacturing of energy efficient technologies).

- 30 Activities that include adaptation solutions to reduce the risk or impacts from adverse current or future climate (e.g., adapting manufacturing activities).
- 31 Activities that provide solutions to prevent or reduce the risk or impacts from adverse current or future climate (e.g., the restoration of wetlands).
- 32 As SAI research currently provides revenues only, the assumption is that the share of capex and opex alignments can be proxied by the ones for revenue. We recognize this is a strong assumption, especially for CAPEX, as it entails companies' investments are aligned with its current business model. However, in light of the current lack of data, it is not possible to formulate better assumptions. We plan to improve this assumption in the future.
- 33 IPCC, 2022; accessed (04.12.2023) at: <https://www.ipcc.ch/report/ar6/wg2/>.
- 34 UNEP, 2021 ; accessed (04.12.2023) at <https://www.unep.org/resources/adaptation-gap-report-2021>.
- 35 CPI, 2021; accessed (04.12.2023) at: <https://www.climatepolicyinitiative.org/publication/global-landscape-of-climate-finance-2021/>.
- 36 Joint MDB, 2021; accessed (04.12.2023) at: https://www.miga.org/sites/default/files/2021-08/2020-Joint-MDB-report-on-climate-finance_Report_final-web.pdf.
- 37 Incident and Events Research overview: Event indicators provide a signal about the severity of a company's involvement in media-reported controversial activities. The indicator outcome typically reflects (potential) management failures or a track record of failures. In that sense, event indicators are similar to performance indicators by nature. An Event is based on a group or series of isolated or related incidents that pertain to the same material ESG issue. In turn, an Incident reflects a company's involvement in cases of specific alleged misconduct with negative environmental and/or social impacts. Incidents form the most granular level of analysis we conduct. They are identified based on a comprehensive daily media analysis. Our analysts provide two assessments at the incident level, a stakeholder impact assessment and a reputational risk assessment. Incidents typically inform the event indicator outcome for a period of three years (can be longer in exceptional cases). Events are classified into 40 thematic groups, each of which is represented by an event indicator. To assess an event, we ask our analysts to look at following three aspects: (1) Impact: Negative impact that the incidents have caused to the environment and society; (2) Risk: Business risk to the company as a result of the incidents; (3) Management: A company's management systems and response to incidents. In their event assessment, our analysts apply an additional layer of analysis, which means that the underlying incident scores are not the only and final determinant of the event indicator outcome. In particular, they may get overridden because of company's response to incidents or a broader business risk identified by the analyst. Events are scored on a scale of 0 (no evidence of relevant incidents) to 5 (impact and risks are severe and irreversible). These five levels are called Event Categories. For more information, see "ESG Risk Ratings – Methodology" document.
- 38 It is important to note here that, while the GSS methodology covers the identified international standards in full, some specialized chapters of the OECD Guidelines (i.e., III - Disclosure, IX - Science and Technology) are not linked to 'watchlist' or 'non-compliant' assessments in practice in terms of research outcomes. Also, minor violations of chapters of the OECD Guidelines are not resulting in a 'watchlist' / 'non-compliant' status when allegations are too weak and/or vague to meet criteria for a downgrade.

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