



EU TECHNICAL EXPERT GROUP ON
SUSTAINABLE FINANCE

FINANCING A SUSTAINABLE
EUROPEAN ECONOMY



TECHNICAL REPORT

**Taxonomy: Final report of the Technical Expert
Group on Sustainable Finance**

March 2020

What is the EU Taxonomy?

AT A GLANCE

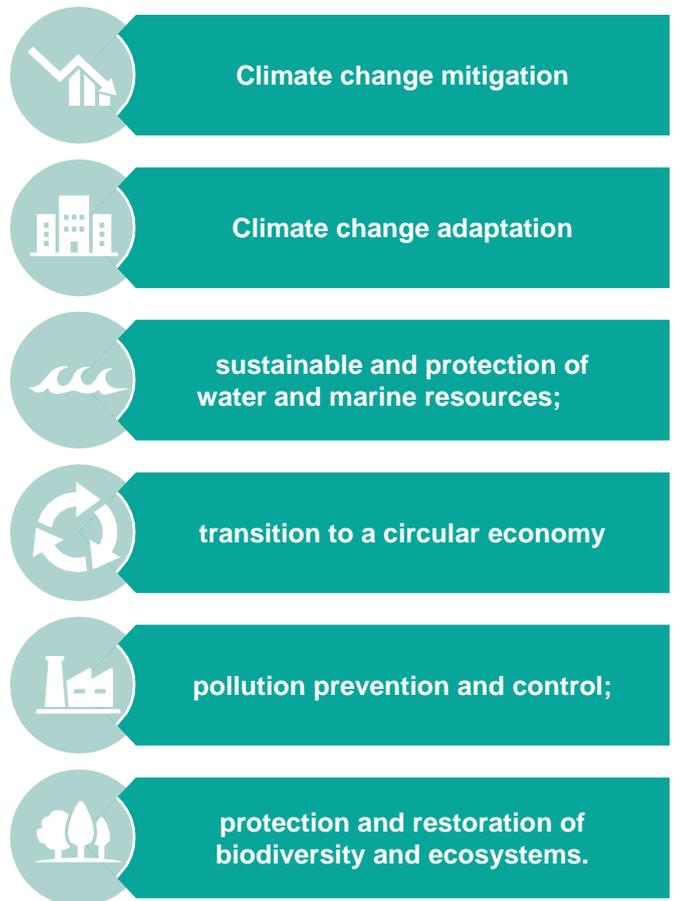
The EU Taxonomy is a tool to help investors, companies, issuers and project promoters navigate the transition to a low-carbon, resilient and resource-efficient economy.

The Taxonomy sets performance thresholds (referred to as 'technical screening criteria') for economic activities which:

- make a substantive contribution to one of six environmental objectives (Figure 1);
- do no significant harm (DNSH) to the other five, where relevant;
- meet minimum safeguards (e.g., OECD Guidelines on Multinational Enterprises and the UN Guiding Principles on Business and Human Rights).

The performance thresholds will help companies, project promoters and issuers access green financing to improve their environmental performance, as well as helping to identify which activities are already environmentally friendly. In doing so, it will help to grow low-carbon sectors and decarbonise high-carbon ones.

The EU Taxonomy is one of the most significant developments in sustainable finance and will have wide ranging implications for investors and issuers working in the EU, and beyond.



About this report

The Taxonomy Regulation (TR), agreed at the political level in December 2019, creates a legal basis for the EU Taxonomy. The TR sets out the framework and environmental objectives for the Taxonomy, as well as new legal obligations for financial market participants, large companies, the EU and Member States.

The TR will be supplemented by delegated acts which contain detailed technical screening criteria for determining when an economic activity can be considered sustainable, and hence can be considered Taxonomy-aligned. The European Commission established a Technical Expert Group on Sustainable Finance, which was tasked with developing recommendations on a range of topics, including what the Taxonomy technical screening criteria should be for the objectives of climate change mitigation and adaptation.

This report sets out the TEG's final recommendations to the European Commission. This report contains recommendations relating to the overarching design of the Taxonomy, as well as guidance on how users of the Taxonomy can develop Taxonomy disclosures. It contains a summary of the economic activities covered by the technical screening criteria.

This report is supplemented by a Technical Annex containing:

- A full list of revised or additional technical screening criteria for economic activities which can substantially contribute to climate change mitigation or adaptation (including assessment of significant harm to other environmental objectives); and
- Methodological statements to support the above recommendations.

These recommendations have been developed over 20 months and with substantial consultation and scientific and technical input. The TEG has received input from all parts of the investment chain, industry sector representatives, academia, environmental experts, civil society and public bodies. Combined, these reports contain detailed explanation of the rationale and methodologies behind the TEG's conclusions.

These reports supersede the two previous reports from the TEG (early feedback report – Dec 2018, technical report – June 2019).

This report represents the overall view of the members of the Technical Expert Group. However, although it represents such a consensus, it may not necessarily, on all details, represent the individual views of member institutions or experts. The views reflected in this report are the views of the experts only. This report does not reflect the views of the European Commission or its services.

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1. Recent developments

1.1 URGENCY AND TRANSITION

Since the TEG commenced work in June 2018, the urgency of the environmental challenges we face has increased.

Despite clear emission reduction objectives agreed in the 2015 Paris Agreement on Climate Change, global greenhouse emissions have continued to climb until 2019 where they flatlined.

There is now scientific consensus² that global emissions must drop by 50% over the next decade for the world to have a chance of staying at 1.5 degrees of global warming and thus avoid the most catastrophic consequences of climate change.³ This has clear and immediate implications for businesses.

The impacts of climate change are now inevitable. The last two decades included 18 of the warmest years on record, and Europe experienced extreme heatwaves in four of the last five years. Communities and businesses in Europe and around the world are already beginning to feel the impact of climate change, and will need to understand, and manage, the risks and effects that come from a changing climate.

We face continued environmental degradation on many fronts, with signs that we may be reaching several alarming tipping points, particularly in excessive air pollution, water stress and biodiversity loss that undermines our ecosystems, while progress towards a circular economy remains disjointed and inconsistent.⁴ Ecological destruction on this scale threatens human civilisation.

The message on the urgency of environmental and climate risks is getting through. In its 15th Global Risks Report published in January 2020, the World Economic Forum (WEF) found that, for the first time in the report's history, all of the "top long-term risks by likelihood" are environmental, and climate change is rated the biggest global threat.⁵

However, despite widespread recognition of the challenges that humanity faces, the current level of action aimed at changing course is too weak. A focus on sustainable environmental outcomes, including new tools, is needed to enable transition to a sustainable economy.

The role of finance

Consistent with the EU Action Plan on Financing Sustainable Growth, finance is a critical enabler of transformative improvements in existing industries in Europe and globally.

The OECD estimates that, globally, EUR 6.35 trillion a year will be required to meet Paris Agreement goals by 2030.⁶ Public-sector resources will not be adequate to meet this challenge, and mobilisation of institutional and private capital will be necessary.

While expansion of the low-carbon, resilient economy is essential, the most substantial contribution to the EU's environmental objectives will be from transitioning existing activities to a more sustainable footing. This is the central challenge to which the TEG is responding, and it is reflected through our design principles, technical screening criteria and guidance on use of the Taxonomy.

01 International Energy Agency, 2019, <https://www.iea.org/articles/global-co2-emissions-in-2019>

02 Point C1 of the Summary for Policy Makers of the Intergovernmental Panel on Climate Change (IPCC) Special Report on Global Warming of 1.5°C, <https://www.ipcc.ch/sr15/>

03 Section B, Summary for Policy Makers of the Intergovernmental Panel on Climate Change (IPCC) Special Report on Global Warming of 1.5°C

04 Stockholm Resilience Centre, Anthropocene and planetary boundaries, <https://www.stockholmresilience.org/publications/artiklar/2016-02-11-anthropocene-and-planetary-boundaries.html>

05 WEF Global Risks Report 2020, <https://www.weforum.org/reports/the-global-risks-report-2020>

06 OECD. 2017, Investing in Climate, Investing in Growth, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264273528-en>

The Taxonomy – a tool for transition

The trajectory of today's economy is not consistent with the EU's environmental goals. Few sectors of the economy are operating at a net-zero level, and emissions are not reducing fast enough. Few communities and businesses are systematically preparing for a changing climate.

The necessary scale and pace of the transition is underestimated. All sectors should pursue emissions reductions, but marginal emissions reductions in emissions-intensive sectors will not be enough to meet the climate challenge. To be sustainable, transition-related investments must be consistent with emissions-reduction pathways throughout their entire economic life.

The Taxonomy is a tool to help plan and report the transition to an economy that is consistent with the EU's environmental objectives. The Taxonomy disclosure obligations encourage the reporting of progress towards meeting the screening criteria as well as reporting on their achievement. Not every investment and financing decision is expected to create additional environmental benefits or be in economic activities that have a substantial environmental footprint.

The Taxonomy criteria are likely to be relevant for all countries pursuing net-zero emissions by 2050. For countries with net-zero emissions objectives in the years well after 2050, principles for harmonisation of taxonomies on an international basis are provided in this report.

The Taxonomy provides many tools for financing the transition of economies towards clear environmental goals. These include screening criteria that are currently high but will ratchet down over time, the recognition of capital and operational expenditures that contribute to meeting the screening criteria over time, and the inclusion of improvement measures to reduce emissions and improve energy efficiency where the best available technologies and practices are used today. While all economic activities have a role to play, not all economic activities will substantially contribute to environmental goals

In future, finance and investments that are marketed as financing the transition to climate mitigation objectives will need to be explained in terms of the Taxonomy criteria. Disclosures in this area will help the market determine whether the environmental performance of an underlying economic activity is making a substantial contribution to climate mitigation objectives. Transition finance that does not meet the SC criteria may still reduce harm to environmental objectives, but would not, in reference to the Taxonomy criteria, be considered sustainable.

Additional tools are needed to explain the necessary speed of reductions from highly emissions-intensive activities in the economy. The TEG welcomes the decision to study future so-called 'brown' Taxonomy criteria. Emissions levels in some economic activities are currently too high and threaten to continue to be too high throughout the economic transition to be consistent with Europe's emissions-reduction goals. Developing criteria for significantly harmful emission levels will help investors, companies, issuers and project promoters to understand the necessary speed and depth of the transition task ahead.

1.2 THE EUROPEAN GREEN DEAL

In December 2019, the European Commission presented the European Green Deal, an overarching framework and programme of actions to transform the European economy.

A key component of the Green Deal is the proposed 'Climate Law' embedding a legal commitment for the EU to achieve climate neutrality by 2050. The EU will bring forward a comprehensive plan to increase the EU 2030 climate target to at least 50%.

The EU will also bring forward a revised and more ambitious strategy on adaptation to climate change, building from the 2013 strategy and the adaptation goals of the Paris Agreement and the SDGs.

Other core components of the Green Deal are strategies and actions on supplying clean, affordable and secure energy, biodiversity, zero pollution, a circular economy and sustainable food production.

These overarching objectives will be addressed through financial and real-economy policy, across the public and private sectors.

Table 1: Finance and industry reforms in the EU Green Deal

Finance reform	Economic reforms
<ul style="list-style-type: none">• Sustainable Europe Investment Plan• Renewed Strategy on Sustainable Finance	<ul style="list-style-type: none">• Rapid decarbonization of energy systems• Innovation in sustainable industry• Large-scale renovation of existing buildings• Development of cleaner public and private transport• Progress towards sustainable food systems

The need for a sustainable Taxonomy pre-dates the Green Deal, but it is an important enabler of the Green Deal's comprehensive sustainable economy reforms. The key environmental objectives are consistent between the Taxonomy framework and the economic sectors targeted for policy reform under the Green Deal.

As part of the Sustainable Europe Investment Plan and the European Commission's next multi-annual financial framework (MFF 2021-27), the InvestEU Programme, the single budgetary guarantee of the EU, will aim to leverage EUR 279 billion of public and private climate financing. The European Commission is considering how the Taxonomy can be applied in the climate and environmental tracking and sustainability proofing guidelines of the InvestEU Programme. The Commission will also reflect on how the Taxonomy might be used to guide the policy objectives of other parts of the public sector.

1.21 Taxonomy Regulation

The EU's Action Plan on Financing Sustainable Growth (March 2018) called for the creation of a classification system for sustainable activities or Taxonomy. In May 2018, the European Commission issued a proposal for a regulation which sets out the obligations for investors and the overarching framework for the Taxonomy⁷ (proposal for a regulation on the establishment of a framework to facilitate sustainable investment – hereafter, Taxonomy Regulation (TR)). This will be supplemented by delegated acts containing the technical screening criteria.

The TEG was asked to develop recommendations for technical screening criteria which respond to the framework set out in the TR. The TEG mandate has been to focus on economic activities that can make a substantial contribution to climate change mitigation or adaptation, while avoiding significant harm to the other environmental objectives.

In December 2019, the co-legislators reached political agreement on the overarching Regulation. The agreed text maintains many aspects of the Commission proposal, but reconsiders parts of the scope, user obligations, timeline and technical framework. Where they are relevant to the TEG's mandate, the TEG has considered the implications of these changes. Commentary can be found throughout this report.

The key changes in the Regulation relevant to the TEG mandate are listed below.

Several changes affected the scope of the Regulation and the obligations on users. A fuller discussion can be found in Section 3: Taxonomy in practice. Key points are highlighted below:

- Financial market participants offering financial products in Europe must now incorporate disclosures with reference to the Taxonomy.⁸ The disclosure requirements vary depending on product categories, which have been aligned with the definitions in the Regulation on Sustainability-Related Disclosures in the Financial Services Sector.⁹
- Companies subject to disclosure requirements under the Non-Financial Reporting Directive (NFRD) must make disclosures with reference to the Taxonomy.
- The European Commission will develop delegated acts to further specify elements of the Taxonomy Regulation. In particular:

⁰⁷ See https://ec.europa.eu/info/law/better-regulation/initiatives/ares-2017-5524115_en#pe-2018-3333

⁰⁸ Individual financial instruments, such as bonds, are not captured in the definition of financial products and are not directly required to disclose against the Taxonomy.

⁰⁹ See <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R2088&from=EN>

- Delegated acts containing technical screening criteria will be developed in two phases: The first technical screening criteria, for activities which substantially contribute to climate change mitigation or adaptation, will be adopted by the end of 2020 and enter into application by the end of 2021. The second set of technical screening criteria, which cover economic activities substantially contributing to the other four environmental objectives, will be adopted by end 2021 and enter into application by end 2022.
- By 1 June, 2021, the European Commission will adopt a delegated act specifying how the corporate disclosure obligations should be applied in practice. The delegated act will consider the differences between non-financial and financial companies.
- Further development of the Taxonomy will be managed by the European Commission with input from a yet to be established Platform on Sustainable Finance.¹⁰ In addition, a Member State Expert Group will contribute in an advisory capacity.

The political agreement also adds specifications to the overarching technical framework for the Taxonomy. The relevant points are discussed in **Section 2: Recommendations: Taxonomy design**. They are summarised below:

- The Regulation puts greater emphasis on 'enabling activities'.
- For climate change mitigation specifically, the Regulation specified different routes to a substantial contribution, including a new definition of transition activities.
- The Regulation put greater emphasis on life-cycle considerations throughout the technical framework.
- Minimum safeguards for Taxonomy-aligned activities were expanded to reference the UN Guiding Principles on Business and Human Rights and the OECD Guidelines for Multinational Enterprises, including the principles and rights set out in the eight fundamental conventions identified in the International Labour Organization's declaration on Fundamental Rights and Principles at Work and the International Bill of Human Rights.
- An existing review clause which permitted the Commission to consider extending the Taxonomy to social objectives was amended to include the possibility of extending the Taxonomy to include performance criteria for activities which are significantly environmentally harmful ('brown' Taxonomy).

1.3 TECHNICAL EXPERT GROUP: WORK PROGRAMME

1.3.1 Mandate of the TEG

The TEG was mandated by the European Commission to develop recommendations for technical screening criteria regarding economic activities that make a substantial contribution to climate change mitigation or adaptation, while avoiding significant harm to other European Union environmental policy objectives, in particular: sustainable use and protection of water and marine resources, transition to a circular economy, pollution prevention control, and protection and restoration of biodiversity and ecosystems (environmental objectives 3–6).

The TEG included three further work areas: the development of a Green Bond Standard that will link to the Taxonomy; design of corporate sustainability and climate-related disclosures, including disclosure guidelines in relation to the Taxonomy; guidelines on climate change-related investment benchmarks.

1.3.2 Call for feedback

In December 2018, the TEG published a first draft proposal for the Taxonomy and asked for public feedback. Then, in June 2019, the TEG released a technical report containing proposed technical screening criteria for substantial contribution to climate change mitigation across 67 economic activities, as well as setting out the conceptual approach for climate change adaptation and initial guidance on how to use the Taxonomy.

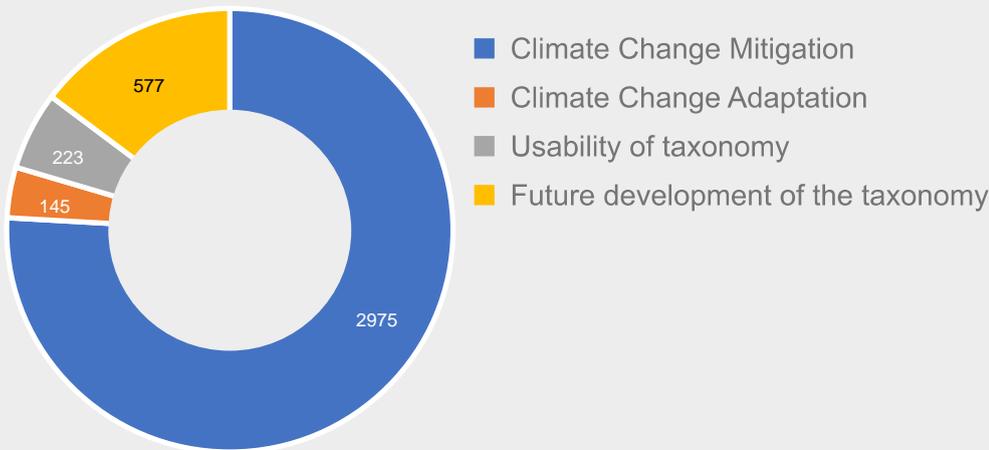
¹⁰ This is distinct from the International Platform on Sustainable Finance. https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/191206-international-platform-sustainable-finance-factsheet_en.pdf

The TEG opened a call for feedback, inviting input on the report from a wide range of stakeholders. This was open until the 16th September, 2019. It covered all 67 proposed economic activities which could make a substantial contribution to climate change mitigation, as well as questions on climate change adaptation, use of the Taxonomy and the future development of the Taxonomy.

In total, there were 830 responses. The vast majority of respondents were based in Europe, and 48% were private individuals, 24% were from the general business sector and 10% were from the financial business sector.

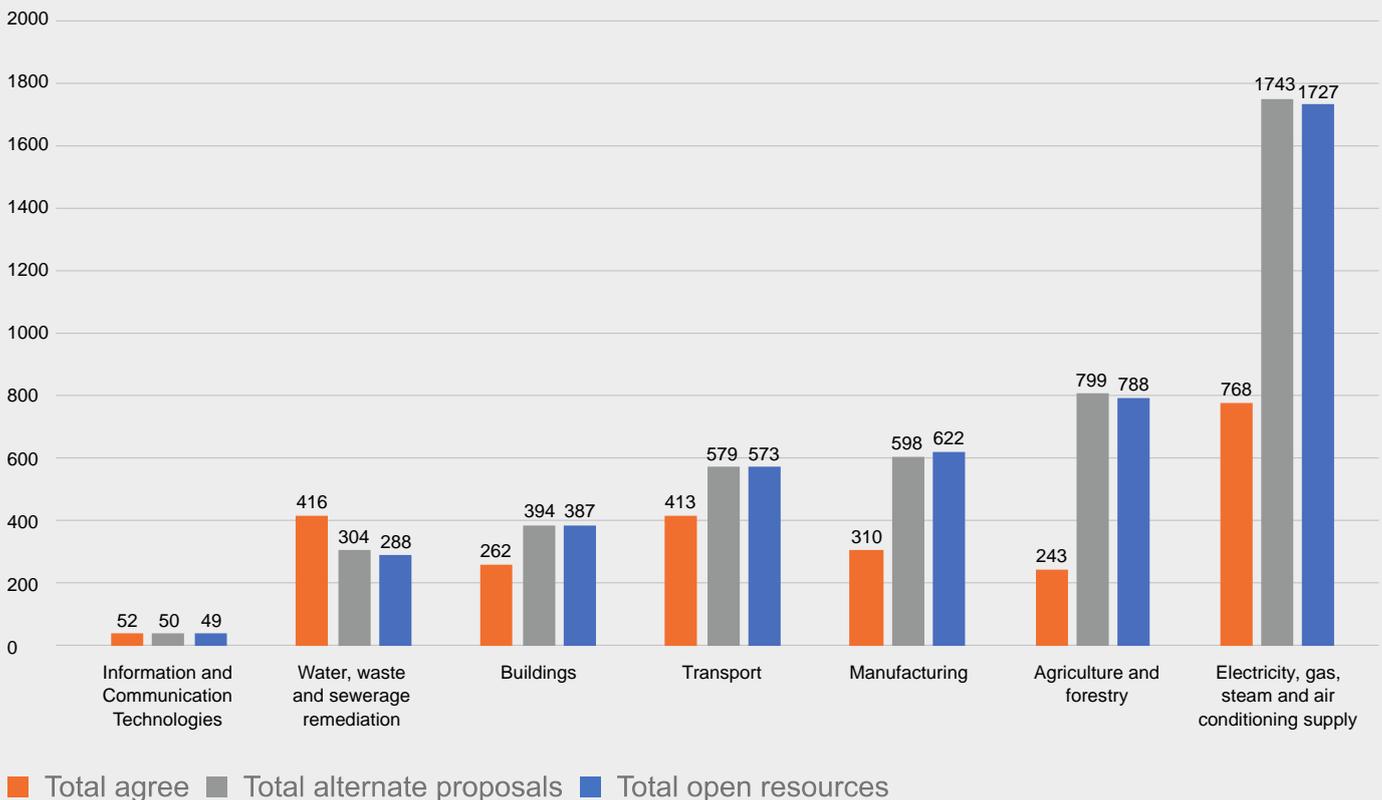
Most respondents addressed several different topics when completing the questionnaire, and most commented on multiple sectors under climate change mitigation. In total, 3,920 individual items of feedback were received. The distribution of these responses can be seen in Figure 4.

Figure 1: Distribution of responses to the consultation by theme



Within climate change mitigation, respondents were able to provide commentary, or request alternative approaches, across sectors. The distribution of these responses by sector can be found in Figure 2.

Figure 2: Distribution of responses by sector (climate change mitigation only)



The TEG is extremely grateful for the detailed and thoughtful responses to the call for feedback. Given the detailed and varied nature of the responses, it is not possible to provide a full description of all issues raised. Furthermore, some of the feedback was not of a technical nature or did not directly relate to the questions being asked.

The TEG's response to the feedback received is distributed throughout this report and the Technical Annex as follows:

- The TEG has commented on sector-specific feedback (feedback on the economic activities identified as substantially contributing to climate change mitigation) in the Technical Annex. A summary of feedback and changes can be found in the sector preambles. Where respondents proposed an alternative threshold, the TEG found considerable variations of opinion within the responses, including around the level of ambition of the technical screening criteria. This included those arguing for more stringent criteria as well as those arguing for more lenient criteria. While the TEG has reviewed this feedback for technical insights, the TEG's responsibility is to set the ambition of the technical screening criteria in alignment with the EU's environmental objectives, consistent with the design principles for the Taxonomy.
- Feedback on the climate change adaptation principles and approach are discussed further in Section 2.3: Climate change adaptation, and particularly in Section 2.3.2: Changes as a result of feedback received.
- Feedback on the application of the Taxonomy in practice (usability) has extensively informed Section 3: Taxonomy in practice.
- Feedback on future development of the Taxonomy is discussed in Section 4: Forward looking.

1.3.3 Second extension of the TEG mandate

The TEG's original mandate was to work until June 2019, with a possible extension until December 2019. In late 2019, the TEG and the EU Commission agreed to a second extension of the TEG's mandate. This was necessary for two reasons:¹¹

1. Due to the high volume of feedback received in the call for feedback on the Taxonomy report, the TEG felt it necessary to delay publication of this report to ensure that sufficient consideration was given to all points raised;
2. Following political agreement on the Taxonomy Regulation in December 2019, an extension would enable the TEG to reflect on the political agreement and make any necessary adjustments to the technical recommendations.

The TEG's mandate was therefore extended until September 2020. After the publication of this final report, the TEG will continue to operate in an advisory capacity until the new Platform on Sustainable Finance – a permanent body set up under the Taxonomy Regulation – is operational.

On Taxonomy in particular, the TEG will reflect on potential approaches for the other environmental objectives as well as on further usability questions, including digital tools.

¹¹ See communication: https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/191219-sustainable-finance-teg-extension_en.pdf

2 Recommendations: Taxonomy design

This section contains the main overarching recommendations of the TEG in relation to the design of the Taxonomy. More detail on the methodologies applied for climate change mitigation and adaptation, details of individual technical screening criteria, and the associated rationale can be found in the Technical Annex.

The TEG's mandate was based on the Commission proposal issued in March 2018. The political agreement on the Taxonomy Regulation (TR) resulted in some changes to the user obligations and technical framework of the Taxonomy. Where relevant in this section, we have included commentary on the updated Regulation and implications for key design questions.¹² The user obligations are discussed in **Section 3: Taxonomy in practice**. This is not a comprehensive list of all changes, but rather those which are most material to the TEG's final recommendations.

2.1 OVERARCHING DESIGN ISSUES

2.1.1 Sectors covered – and not covered yet – by the Taxonomy

Economic sectors and economic activities included in the Taxonomy to date have the potential to make a substantial contribution to climate change mitigation or climate change adaptation. The approach differs for each of these objectives, reflecting their nature.

For climate change mitigation, sectors responsible for 93.5% of direct greenhouse gas emissions in the EU were prioritised when identifying economic activities for which technical screening criteria were developed.¹³ The TEG prioritised sectors that have a large emissions footprint. Identifying activities making a substantial contribution to climate change mitigation in these sectors is likely to have a large impact. The TEG has not yet performed the technical work on other economic activities or cross-cutting activities to identify those that it would be most beneficial to include in the Taxonomy. Nor has technical work been performed to identify those economic activities that are unlikely to make a substantial contribution to climate change mitigation objectives, while also unlikely to cause significant harm.

The TEG considers it likely that, in a fully resolved Taxonomy, not all economic activities will have a performance threshold for substantial contribution to climate change mitigation. This follows for investment portfolios and financing decisions. Not all investments or financing decisions will align with a substantial contribution threshold. In such cases, it would still be possible to recognise improvement measures, such as through improved energy efficiency of buildings, where these are considered to make a substantial contribution in their own right. **See Section 2.1.3: Improvement measures within an economic activity.**

The technical screening criteria for substantial contribution to climate change adaptation can, in principle, apply to any economic activity. The TEG has not considered any single part of the economy as having higher priority for the purposes of climate change adaptation. However, to be included in the Taxonomy, an economic activity must have criteria for the avoidance of significant harm to the other environmental objectives, including climate change mitigation. This means that activities which undermine climate change mitigation objectives could not count improvements in their resilience as Taxonomy-aligned.

To test the substantial contribution to adaptation criteria, the TEG decided to leverage the existing work undertaken to establish Do No Significant Harm (DNSH) criteria to environmental objectives 3–6. The starting point for the adaptation Taxonomy is therefore the same as that for the climate change mitigation Taxonomy. However, this does not indicate that these activities are more important than any other for climate change adaptation objectives. The TEG has amended and added some activities, and further activities will be added to the Taxonomy which can make a substantial contribution to climate change adaptation.

¹² All TR text is extracted from the text of the final political agreement issued on 17 December, 2019. At the time of writing, the text had not been published in the Official Journal. The final OJ version will be subject to legal-linguistic review and update of (i.e. changes to) article numbers.

¹³ See the Technical Annex for restatement of the TEG's methodology.

The TEG's recommendations provide the basis for the first EU Taxonomy. Further work is required for economic activities that can substantially contribute to climate change mitigation or adaptation but do not yet have technical screening criteria. The implications are discussed in detail in **Section 3: Taxonomy in practice**, and key points are summarised below.

Encouraging disclosures by those performing non-covered activities

Companies that perform activities not yet covered by the Taxonomy should be able to reflect their situation in their Taxonomy-related disclosures. They could complement their Taxonomy-alignment disclosure with an explanation that the results reflect the fact that their activities are not yet covered by the Taxonomy – as opposed to them being unable to meet technical screening criteria. TEG believes this is an important signal for companies to be able to send.

Economic activities for which there are currently no NACE codes

NACE codes were used as a framework to capture all economic sectors, and hence almost all economic activities. There are, however, economic activities that are not directly covered by NACE codes. Some of these are important for climate change mitigation and adaptation. For example, buildings do not have their own specific NACE code. The TEG has therefore identified buildings as a cross-cutting activity for both climate change mitigation and adaptation.

It is likely that additional NACE codes will need to be added to enable Taxonomy coverage of activities such as:

- services and facilities to support changes in life-style choices – for example, increased plant-based diets or prioritising walking over driving;
- natural capital preservation, restoration and creation and related services.

Full development of the Taxonomy will necessitate the addition of NACE codes in a timely manner. As was the case for buildings, it may also be necessary to identify activities that are unlikely to have NACE codes.

For ease of translation to alternative sector-classification systems, translations to other classification systems are provided in an Excel format. In order to facilitate use by all interested parties, the TEG recommends that tables matching proprietary classifications with the NACE codes should be published on relevant Platform for Sustainable Finance website(s) and should be updated regularly.

2.1.2 Types of economic activity that substantially contribute

For each environmental objective, the Taxonomy Regulation (TR) recognises two distinct types of substantial contribution that can be considered Taxonomy-aligned:

1. Economic activities that make a substantial contribution based on their own performance: For example, an economic activity being performed in a way that is environmentally sustainable.¹⁴
2. Enabling activities: Economic activities that, by provision of their products or services, enable a substantial contribution to be made in other activities. For example, an economic activity that manufactures a component that improves the environmental performance of another activity.

There is no change in the meaning or application of the Taxonomy to the first category of economic activities (those that make a substantial contribution based on their own performance). As enabling activities are specifically addressed in the TR, we provide clarification on the changes here.

The TR explicitly recognises the role of enabling activities. The text reflects recommendations proposed by the TEG on enabling activities in our June 2019 report. As with all activities identified as Taxonomy-aligned, enabling activities meet both SC and DNSH criteria.

¹⁴ In the TEG's June report, these were referred to as "greening of" activities. "Greening by" activities referred to enabling activities. This terminology has been simplified in this report.

Article 11a – Enabling activities

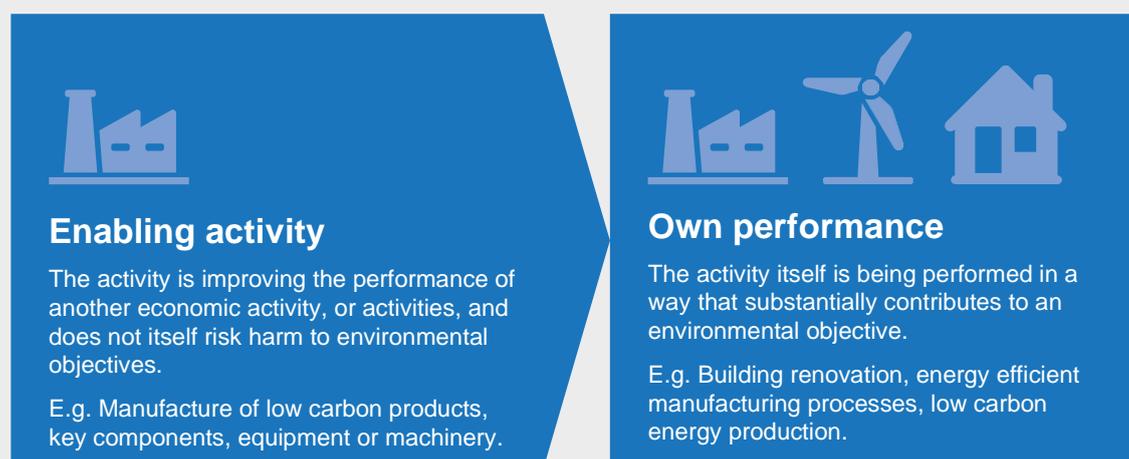
An economic activity shall be considered to contribute substantially to one or more of the environmental objectives set out in Article 5 by directly enabling other activities to make a substantial contribution to one or more of those objectives, and where that activity:

- a) does not lead to a lock-in in assets that undermine long-term environmental goals, considering the economic lifetime of those assets;
- b) has a substantial positive environmental impact on the basis of life-cycle considerations.

Again, there is no change in meaning from the June TEG report in respect of enabling activities, although the Regulation makes it clear that this category is relevant to all environmental objectives in the Taxonomy.

Examples of enabling activities in the Taxonomy to date include manufacture of low-carbon technologies and information and communications technology for climate change mitigation, some non-life-insurance products, and professional, scientific and technical activities for climate change adaptation. See Figure 3: Relationship of enabling activities to substantially contributing based on their own performance.

Figure 3: Relationship of enabling activities to those substantially contributing based on their own performance



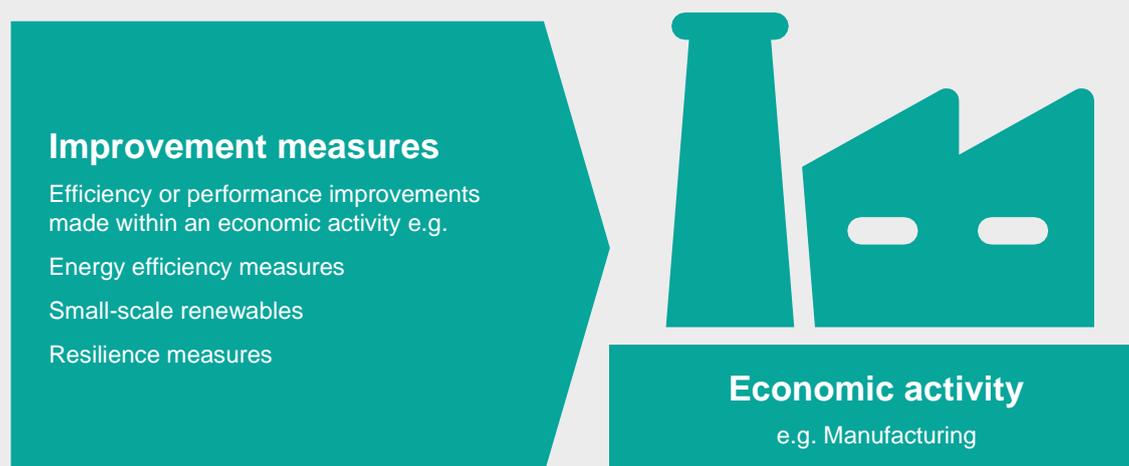
2.1.3 Improvement measures within an economic activity

A central component of the TEG's work – and hence the final recommendations – is that the Taxonomy must be a tool for financing the transition to a more sustainable economy. This means that it must incentivise capital to flow towards improvements in environmental performance (and resilience) of all sectors of the economy which do not directly undermine environmental goals.¹⁵

Some economic activities will already meet the technical screening criteria. For those that do not, the TEG recommends that the financing of improvement measures (capex and, if relevant, opex) can be counted as Taxonomy-aligned if they are part of an implementation plan to meet the activity threshold over a defined time period (TEG recommends a limit of five years for these plans). In the case of climate change adaptation, the plan should directly respond to the climate risks identified in the assessment required by the adaptation principles. See Figure 4: Relationship of improvement measures to improved economic activities.

¹⁵ In the June 2019 Taxonomy report, the TEG has identified that dedicated transportation or storage of fossil fuels, including building renovation, should not be included.

Figure 4: Relationship of improvement measures to improved economic activities



The TEG expects that some quantitative technical screening criteria will be tightened over time.¹⁶ This is particularly the case for CO₂ intensity metrics which are highly likely to trend towards zero over the period to 2050. The TEG recommended that criteria are reviewed on a consistent timing cycle, and it indicated likely review periods in relevant technical screening criteria. Any implementation plan to meet the technical screening criteria may target any current criteria but should be flexible enough to respond to future tightening of the criteria if the plan extends beyond the next criteria review cycle. For example, a plan of three years should consider any likely ratcheting down or tightening of criteria expected within the next three years. The TEG has signalled a recommended trajectory for many of the quantitative climate change mitigation criteria

For climate change mitigation, an economic activity can count turnover from this economic activity only after the technical screening criteria are met. For climate change adaptation, turnover can only be counted where the activity is enabling adaptation by others. This is discussed further in Section 3: Taxonomy in practice.

The climate change adaptation criteria are based on material risks to a particular economic activity and its relevant assets. As such, the adaptation criteria are not likely to tighten or be modified over time.

Counting improvement measures without a plan

In addition, the TEG has identified and included in the Taxonomy some exceptional cases where individual improvement measures can be considered to make a substantial contribution without needing to be part of a plan to meet the economic activity thresholds. To date, these are primarily low-carbon technologies and building-renovation measures, and they reflect the highest existing standards of environmental performance in the market. These reflect the fact that widespread deployment and use of these technologies is critical to reducing emissions in the EU's current building stock. The TEG recommends that additional improvement measures across all sectors in the Taxonomy are considered for inclusion in future.

2.1.4 Life-cycle considerations

The final political agreement puts greater emphasis on life-cycle considerations. Life-cycle considerations are mentioned in:

- Article 14: overarching principles for technical screening criteria;
- Article 12(1a): definition of avoiding significant harm to environmental objectives;
- Article 11(a): defining enabling activities;
- Article 9: defining substantial contribution to the circular economy.

¹⁶ The Taxonomy Regulation requires the European Commission to review all technical screening criteria regularly and, in particular, to review "transition" activities under Article 6(1a) at least every three years.

Life-cycle considerations have been part of the TEG's analysis since the inception of the project. To the extent feasible, given methodological and data developments, the TEG has sought to consider impacts over the whole life cycle of economic activities. In some cases, the TEG has indicated that a life-cycle metric is the preferred metric and that it should be adopted as soon as is feasible.

The inclusion of life-cycle considerations in the legal text ensures that future Taxonomy technical screening criteria will incorporate life-cycle considerations. The treatment of life-cycle considerations is specified for individual economic activities in the relevant technical screening criteria.

2.1.5 Minimum safeguards

The European Parliament and the Council established that for an economic activity to be Taxonomy-aligned, the activity should be carried out **“in alignment with the OECD Guidelines for Multinational Enterprises and UN Guiding Principles on Business and Human Rights, including the International Labour Organisation’s (‘ILO’) declaration on Fundamental Rights and Principles at Work, the eight ILO core conventions and the International Bill of Human Rights”**. Where applicable, more stringent requirements in EU law still apply.

This section aims to provide readers with an understanding of these standards' frameworks and how to apply them in the context of the Taxonomy.

Scope and application of the OECD Guidelines for Multinational Enterprises

Legal nature and government backing

The OECD Guidelines for Multinational Enterprises are a legal international instrument on responsible business conduct (RBC). The Guidelines reflect the expectation that governments and businesses act responsibly. While the recommendations of the Guidelines are non-binding for enterprises, countries adhering to the Guidelines make a binding commitment to promote and implement them across enterprises operating in or from their territories. Fifty countries from across the world, including 25 EU member states,¹⁷ have adhered to the Guidelines or started the adherence process. The principle of proportionality, which includes the size of the company and the local context, applies to all companies, but it is particularly relevant to SMEs and companies from non-adhering countries when operating in a non-signatory country.

Substantive scope

While the Guidelines are addressed to multinational enterprises, they are not aimed at introducing differences of treatment between multinational and domestic enterprises; they reflect good practice for all. Governments adhering to the Guidelines should encourage small to medium-sized enterprises to observe the Guidelines' recommendations to the greatest extent possible, while acknowledging that they may not have the same capacities as larger enterprises.

The Guidelines bring together all thematic areas of business responsibility, including human rights and labour rights, as well as information disclosure, environment, bribery, consumer interests, science and technology, competition, and taxation. This comprehensiveness is a unique feature of the Guidelines, making them the only government-backed instrument covering all major sustainability risks.

The Guidelines also recommend that enterprises apply good corporate governance practices drawn from the OECD Principles of Corporate Governance.¹⁸

The Guidelines provide a comprehensive list of recommendations on how companies should act. The TEG encourages companies to implement all recommendations to the greatest extent possible. For the purposes of the implementation of the Taxonomy, the TEG considers that both companies and investors should centre compliance on (1) human rights, (2) labour rights, and (3) combating bribery, bribe solicitation and extortion. This is because, in addition to these recommendations referring directly to international safeguards, the Taxonomy applies them at activity level and not company or institution level. Those conducting the activities – candidates to be Taxonomy-aligned – ought to ensure that they are carried out in line with the principles and standards embedded in the OECD Guidelines and UNGPs. However, it is beyond the scope of the Taxonomy to assess other activities that a company or other issuer might also conduct, as well as an institution itself.

¹⁷ All EU Member States adhere to the Guidelines, with the exception of Cyprus, Malta and Bulgaria. Bulgaria and Uruguay formally started the adherence process in 2019.

¹⁸ See <https://www.oecd.org/daf/ca/Corporate-Governance-Principles-ENG.pdf>

The environmental contribution and the management of any adverse impact on the environment are already extensively achieved through the substantial contribution criteria and DNSH criteria.

OECD Guidelines and Due Diligence Guidance for Responsible Business Conduct (RBC)

The OECD has also developed **guidance to help businesses** integrate expectations of the Guidelines into their management and operations. A key element of RBC is risk-based due diligence – a process through which businesses can identify, prevent and mitigate their actual and potential negative impacts, and account for how those impacts are dealt with. The OECD Due Diligence Guidance for Responsible Business Conduct, adopted in June 2018, is the first government-backed reference on due diligence that applies to all sectors and all businesses. The OECD has also developed sector-specific guidance for the mineral, extractive, garment and footwear, agriculture and financial sectors.

Relationship to other instruments and RBC frameworks

The OECD Guidelines for Multinational Enterprises are aligned with the UN Guiding Principles and the fundamental ILO labour conventions and integrate considerations of the environment, bribery, disclosure, and other areas where businesses can have an impact. Human and labour rights abuses do not exist in a vacuum. For example, corrupt practices often facilitate human rights or environmental abuses.

The OECD, ILO and UN Office of the Human Rights Commissioner published a brochure in 2019 to explain how these various instruments reinforce each other.¹⁹ The UN Working Group on Business and Human Rights also made a strong call in 2018 for companies to use OECD RBC instruments as a means to implement the UN Guiding Principles, attesting to their wide relevance and responding to business demands to align implementation of standards internationally.²⁰

Scope and nature of the UN Guiding Principles on Business and Human Rights

The UN Guiding Principles (UNGPs) on Business and Human Rights²¹ represent a global standard for preventing human rights violations, and addressing any potential risk, resulting from economic activities. The UNGPs provide full guidance on how to implement the UN 'Protect, Respect and Remedy' framework. While states have a duty to protect human rights, businesses' responsibility is to respect them. With the Guiding Principles, United Nations member states have affirmed that business enterprises have an independent responsibility to respect human rights, distinct from obligations of states. For companies, this entails a responsibility **to act with due diligence to avoid infringement, and to address adverse impacts on human rights.**

- It comprises all companies, of all sizes, in every sector, in any country.
- The Guiding Principles clarify that business enterprises have an independent responsibility to respect human rights and that in order to do so they are required to **exercise human rights due diligence.**

This report further describes how companies and other issuers can integrate the social standards embedded in the OECD MNEs Guidelines and in the UNGPs in **Section 3: Taxonomy in practice.**

It also provides some guidance on how investors can assess compliance to minimum safeguards as well as DNSH through due diligence in **Section 3.3.11: Due diligence: DNSH and minimum safeguards.**

2.1.6 International use of the EU Taxonomy

By virtue of globally integrated capital markets and economic supply chains, the disclosure obligations on financial product issuers and corporations in the EU will create implications for international actors. This fact, in respect of the EU Taxonomy, is no different to other corporate or financial product reporting obligations already in place in the EU. This international influence of the Taxonomy will exist despite there being no intention to bind third countries on their own sustainability or sustainable finance activities.

¹⁹ See <https://mneguidelines.oecd.org/Brochure-responsible-business-key-messages-from-international-instruments.pdf>

²⁰ http://ap.ohchr.org/documents/dpage_e.aspx?si=A/73/163

²¹ The Guiding Principles for operationalising the Protect, Respect and Remedy framework in Resolution 17/4 were endorsed by the UN Council unanimously in 2011.

To address these international or extra-EU considerations, the TEG proposes disclosure principles to help companies with operations outside the EU, and investors in those companies, to manage likely gaps in performance data and differences in expectations about environmental objectives and company performance. These principles are in **Section 3: Taxonomy in practice**.

In some cases, the TEG has identified technical screening criteria that have global relevance. Where the TEG has considered technical screening criteria as being internationally relevant, the thresholds are described as follows:

It is the view of the TEG that this criterion is globally relevant. The performance level in the criterion is designed to be consistent with a net zero by 2050 goal. The performance level is not tied specifically to EU regulations, though cross-reference is made where appropriate to those regulations to assist EU users.

Companies and investors completing their disclosure in order to fulfil EU disclosure obligations should use these thresholds as the basis of their disclosure irrespective of the location of the underlying economic activity.

The TEG also recognises that locally relevant standards may reasonably be applied in countries outside the EU, when considering either substantial contribution or DNSH performance. This may be due to the local economic development context, lack of available data or reporting systems, or lack of access to technology solutions. In cases where a locally relevant threshold has been used to assess the environmental performance of an economic activity, including on DNSH, companies and investors may wish to provide an additional, second disclosure setting out the details and rationale for variation from the TEG standard.

The second disclosure will improve understanding about the environmental performance of the activity but would not make the activity EU Taxonomy-aligned (unless the criteria is equivalent to or more ambitious than the EU threshold). Further details are found in **Section 3: Taxonomy in practice**.

2.2 CLIMATE CHANGE MITIGATION

2.2.1 EU climate change mitigation objectives

In establishing thresholds for Taxonomy screening criteria, the TEG understands climate change mitigation objectives to mean net-zero emissions by 2050 and a 50–55% reduction by 2030,²² consistent with the commitments under the EU Green Deal.

To reach these goals, the TEG recognises that sectors already at near-zero carbon levels must be expanded, and heavily emitting sectors must rapidly decarbonise. In order for an economic activity to be considered as substantially contributing to climate change mitigation, it must demonstrate consistency with medium- and long-term climate goals.

To establish transition pathways for heavily emitting sectors for which low-carbon solutions are not available, consistent with these goals, the TEG adopted two principles:

1. ensuring no lock-in of assets inconsistent with these goals, and
2. environmental performance well above the sector average.

This is discussed in more detail below, and further explanation of the underlying assumptions on sectoral transition pathways and implications for activity thresholds are provided in the preamble text for each economic sector in the Technical Annex. The TEG expects that the criteria for all economic activities will be reviewed periodically to ensure that they continue to be aligned with the EU climate change mitigation goals.

²² Against 1990 levels.

2.2.2 Substantial contribution to climate change mitigation

Near-zero and transition activities

New Article 6(1a) sets out the framework for evaluating transition activities.

Article 6(1a).

For the purposes of paragraph 1, an economic activity for which there is no technologically and economically feasible low carbon alternative, shall be considered to contribute substantially to climate change mitigation as it supports the transition to a climate-neutral economy consistent with a pathway to limit the temperature increase to 1.5 degrees Celsius above pre-industrial levels including by phasing out greenhouse gas emissions, in particular from solid fossil fuels, where that activity:

- I. *has greenhouse gas emission levels that correspond to the best performance in the sector or industry;*
- II. *does not hamper the development and deployment of low-carbon alternatives; and*
- III. *does not lead to a lock-in in carbon-intensive assets considering the economic lifetime of those assets.*

For the purpose of this paragraph and the establishment of technical screening criteria in accordance of Article 14, the Commission shall assess the potential contribution and feasibility of all relevant existing technologies.

The TEG believes this formulation is consistent with its June 2019 Technical Report, where we outlined three sub-categories of substantial contribution to climate change mitigation (section 6.4):

1. *Activities that are already low carbon (i.e., activities associated with sequestration or very low and zero emissions). These activities require capital to increase their development and wider deployment. The technical screening criteria for these activities are likely to be stable and long-term. At the time, these were called 'green' activities.*
2. *Activities that contribute to a transition to a net-zero emissions economy in 2050 but 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. The technical screening criteria for these activities will be subject to regular revision, approaching zero over time. At the time, these were called 'greening of activities'.²³*
3. *Activities that enable low-carbon performance or enable substantial emissions reductions. At the time, these were called 'greening by' activities. They are now called enabling activities.*

At an individual economic activity level, the regulation indicates that to avoid lock-in, the environmental performance of the activity must not persist at levels incompatible with environmental goals over the economic lifespan of the activity.²⁴

The TEG interprets that the TR does not change the green threshold-based design of the Taxonomy. All activity types identified in the TR remain consistent with 2030 and 2050 climate goals and are therefore appropriate for the Taxonomy to signal that they can be considered sustainable if they meet the performance criteria.

Commentary on regulation:

The final political agreement of the TR introduces some changes to the definition of "substantial contribution to climate change mitigation". While many aspects of the definition remain the same, the TR contains further specification of pathways for an economic activity to contribute (Article 6), including near-zero carbon emission and transition activities, and reflects the overall principle to include enabling activities (Article 11a). Furthermore, Article 14 retains the requirement for technology neutrality but excludes energy from solid fossil fuels from the Taxonomy.

²³ The term "greening of" was used by the TEG in previous reports. See: https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/190618-sustainable-finance-teg-report-taxonomy_en.pdf

²⁴ Lock-in, and carbon lock-in, are established terms in environmental economics, but refer to market-wide dynamics, as opposed to individual economic activities. Erickson et al (2015) define carbon lock in as follows: The term 'carbon lock-in' refers to the tendency for certain carbon-intensive technological systems to persist over time, 'locking out' lower-carbon alternatives, and owing to a combination of linked technical, economic, and institutional factors. These technologies may be costly to build, but relatively inexpensive to operate and, over time, they reinforce political, market, and social factors that make it difficult to move away from, or 'unlock' them. As a result, by investing in assets prone to lock-in, planners and investors restrict future flexibility and increase the costs of achieving agreed climate protection goals.

Exclusion of solid fossil fuels

In the TEG's Technical Report (June 2019), we stated: The transition to a low carbon economy will involve phase-out of some economic activities, such as unabated fossil fuel-based power generation. While there may be some short-term advantages to reducing the environmental harm caused by these activities, the TEG considers that these cannot be considered to make a 'substantial' contribution to climate change mitigation. The EU Taxonomy should therefore exclude activities which would ultimately undermine climate change mitigation objectives if their operation was locked in for the long term. Including such activities in a sustainability-oriented Taxonomy would send inappropriate signals regarding their long-term contribution to climate objectives. Activities that were identified as failing this principle in the TEG work to date include renovations to transport facilities or buildings (including storage) that are dedicated to fossil fuels and may create lock in of these assets for fossil fuel purposes.

TR Article 14(2a) states: The technical screening criteria referred to in paragraph 1 shall ensure that power generation activities that use solid fossil fuels are not considered environmentally sustainable economic activities.

Furthermore, Article 6(1.b) states that improvement in energy efficiency in power generation activities referred to in Article 14(2a) cannot be considered to make a substantial contribution to climate change mitigation. Article 6(1a(new)) sets out the conditions under which an economic activity may be considered to contribute to a transition (discussed above).

With respect to fossil fuels, including liquid and gaseous fuels, the TEG's view remains:

- Activities related to dedicated storage and/or transportation of any fossil fuels, including gaseous or liquid fossil fuels, should not be considered as making a substantial contribution to climate change mitigation, as this risks leading to lock-in which would undermine Article 6(1a).²⁵
- Energy generation from gaseous or liquid fossil fuels should only be considered to make a substantial contribution to climate change mitigation where it meets the technical screening criteria, which we recommend be set at <100 g CO₂e/kWh reducing in five-year increments to 0 g CO₂e/kWh by 2050. The implications of this are discussed further in the energy sector commentary.

2.2.3 Avoiding significant harm to climate change mitigation

The majority of economic activities covered in the TEG's June report had technical screening criteria to demonstrate a substantial contribution to climate change mitigation. They were accompanied by technical screening criteria for avoiding significant harm to the other environmental objectives: climate change adaptation, pollution prevention and control, water and protection of marine resources, a circular economy, resource efficiency and recycling, and protection of ecosystems. The Taxonomy Regulation framework recognises that an economic activity may also make a substantial contribution to one or more of these other environmental objectives.

Commentary on regulation:

Article 12 sets out the criteria for technical screening criteria to avoid significant harm to environmental objectives. The political agreement increases emphasis on considering the full life-cycle implications of an economic activity, but the definition of substantial harm to climate change mitigation is unchanged.

Of relevance for the first phase of Taxonomy disclosures, the TEG's approach to climate change adaptation recognises that all sectors of the economy must improve resilience. The TEG's principles for substantial contribution to adaptation can therefore be applied to any economic activity, irrespective of sector. However, the Taxonomy framework requires that significant harm to other environmental objectives is avoided. The TEG had already completed this analysis for objectives 3–6 for the economic activities identified as having a substantial contribution to climate change mitigation. The TEG therefore took these activities as the starting universe when formulating the adaptation Taxonomy. The adaptation principles can be found in Section 2.3: Climate change adaptation.

²⁵ See more detailed analysis in Technical Annex: energy.

To complete the adaptation Taxonomy, the TEG had to ensure that the selected economic activities would not result in significant harm to climate change mitigation. This is based on the framework established for evaluating significant harm across all environmental objectives. This was done in two stages:

1. Risk assessment

The TEG evaluated the likely risk that these economic activities may be performed in a way that undermines climate change mitigation.²⁶

For example, production of electricity from solar PV is unlikely to be performed in a way that substantially undermines climate change mitigation objectives, as the life-cycle emissions will likely always fall well below the substantial contribution thresholds recommended by the TEG. The TEG therefore has not felt it necessary to define a DNSH threshold for this activity.

By contrast, use of passenger cars and commercial vehicles can be performed in a way that substantially undermines climate change mitigation objectives. The TEG therefore defined a DNSH threshold for this activity.

Table 2: Examples of assessing whether activities require a DNSH threshold for mitigation criteria

Example activity	Likelihood of significant harm to climate change mitigation	TEG approach
Production of electricity from solar PV	Low	No criteria needed for avoiding significant harm to climate change mitigation
Passenger cars and commercial vehicles Passenger cars and commercial vehicles	High	Additional technical screening criteria required to avoid significant harm to climate change mitigation

2. Criteria setting

Where a significant risk was identified, the TEG has defined technical screening criteria for how this harm should be avoided. Of the 66 activities, 51 were identified as posing risks to climate change mitigation and thus have a DNSH threshold for mitigation criteria. These screening criteria took the form of either process-based or quantitative performance criteria and are listed in the adaptation criteria of the Technical Annex. The rationale for each DNSH threshold for mitigation criteria is provided in the Technical Annex. In general the TEG expects that the DNSH to Mitigation criteria, although defined under the CC Adaptation objective part of the Taxonomy, would have a general applicability across the whole of the Taxonomy.

2.3 CLIMATE CHANGE ADAPTATION

2.3.1 Changes in the final Regulation

The following substantive changes to the Regulation were made:

- Article 7 introduced additional safeguards on solutions implemented to adapt economic activities, requiring that they lead to no increase in the risk of an adverse impact on other people, nature and assets. This safeguard is in addition to the previously established safeguards against harm caused by the economic activity itself, either to adaptation itself or to the other five environmental goals addressed by the Taxonomy (captured via the DNSH criteria).
- The new Article 11a clarifies the conditions under which activities can be recognised as enabling activities. These requirements are that the enabling activity:
 - 1 does not lead to a lock-in in assets that undermine long-term environmental goals, considering the economic lifetime of those assets; and
 - 2 has a substantial positive environmental impact on the basis of life-cycle considerations.

²⁶ The TEG's view is that the performance of the economic activity, not the adaptation measures taken, should be the basis of this assessment.

- Lastly, due to changes in terminology in the Regulation and in this report, readers are advised that economic activities which were previously referred to as ‘adaptation of’ are now referred to as ‘adapted activities’, activities which were previously referred to as ‘adaptation by’ are now referred to as ‘activities enabling adaptation’, and measures through which activities are adapted are referred to as ‘adaptation measures, actions or solutions’.

2.3.2 Changes as a result of feedback received

Feedback on adaptation received from stakeholders in the 2019 call for feedback is summarised here.

- Most respondents supported the approach of setting qualitative, context-specific criteria for adaptation that are consistent across all sectors.
- Many respondents requested additional guidance on usability of the screening criteria for activities that make a substantial contribution on adaptation. The burden of compliance was raised as a concern, especially for small to medium-sized enterprises. Access to climate information was also cited as a constraint. To address these:
- The TEG has developed additional guidance on use of the Taxonomy in practice, including adaptation case studies, throughout Section 3: Taxonomy in practice.
- The TEG recommends that the Platform prioritise the development of guidance to apply the adaptation Taxonomy, including work on the use of climate data and information, how to carry out physical climate risk and vulnerability assessments, how to make decisions under uncertainty, how to develop an adaptation plan, and how to select and use indicators to monitor adaptation results.
- Respondents indicated preference for a number of economic activities that the TEG should consider adding to the Taxonomy due to their potential for substantial contribution to adaptation. The adaptation screening criteria can be applied to any economic activity but is currently limited to the economic activities for which DNSH criteria have been developed. The application of the Taxonomy will be expanded to more economic activities as criteria for DNSH thresholds for other environmental objectives are developed.

The TEG recommends that the Platform develop DNSH criteria for a number of activities for the purposes of including these activities in the Taxonomy.

2.3.3 Areas of development in the technical work

Evolution in adaptation principles (SC and DNSH) as a result of regulatory changes

To reflect the new wording in Article 7 (namely, that the solutions for adapting an activity do not increase the risk of an adverse impact on other people, nature and assets), the criteria for adapted activities have been made more consistent to ensure that an economic activity and its adaptation measures:

- do not lead to increased climate risks for others or hamper adaptation elsewhere;
- do not increase the risks of an adverse climate impact on other people, nature and assets;
- consider the viability of ‘green’ or ‘nature-based’ solutions over ‘grey’ solutions to address adaptation.

The obligation to be consistent with sectoral, regional, and/or national adaptation efforts remains.

To reflect the strengthened focus on enabling activities and the conditions under which they can substantially reduce the risks of climate change as per Article 7 and 11a, the criteria for activities enabling adaptation in other economic activities include a new requirement to assess the effectiveness of their contribution to reducing physical climate risks to other economic activities.

In the case of adaptation, the TEG considers that an activity can be considered as having a positive environmental impact if it meets both the substantial contribution criteria for adaptation and the DNSH criteria relating to other environmental objectives. Additional ex-ante screening could be developed to determine which economic activities should be included in the Taxonomy and which may be filtered out on the basis of their environmental impact and life-cycle considerations.

Scope of the adaptation criteria

The technical screening criteria that determine whether an economic activity makes a substantial contribution to climate change adaptation can be applied to any economic activity. However, to be eligible for the Taxonomy, an activity must also be performed in line with technical screening criteria for avoidance of significant harm to the other environmental objectives.

In June 2019, the TEG set out recommended technical screening criteria for 67 economic activities, identifying when those activities can be considered as making a substantial contribution to mitigation and doing no significant harm to climate change adaptation, pollution prevention and control, use and protection of water and marine resources, circular economy, and protection and restoration of biodiversity and ecosystems.

The criteria to identify when those activities make a substantial contribution to adaptation were also set out, but the TEG had not, at that stage, set out the DNSH criteria for the other five objectives. This gap has now been filled, which means that subject to meeting the relevant criteria, these activities²⁷ can now be recognised as sustainable, either via their substantial contribution to mitigation and/ or their substantial contribution to adaptation.

In addition, several further economic activities have been included in this report as examples because they can make a substantial contribution to adaptation. These economic activities are the provision of non-life-insurance, research and development (natural sciences and engineering), engineering activities and related technical consultancy dedicated to adaptation to climate change. It is recommended that entities performing these activities disclose information on them, consistent with the guidance in Section 3: Taxonomy in Practice. It is also recommended that the Platform on Sustainable Finance develop DNSH criteria for these activities to aid their inclusion in the Taxonomy.

On what can be counted when making a substantial contribution to adaptation

Further clarity is now provided on what types of expenditures can be counted as sustainable in relation to an activity that is making a substantial contribution to adaptation and does no significant harm to the other five environmental goals. In summary, in the case of adapted activities, only the cost of the actions required to adapt the activity can be counted at this stage. In some circumstances, investments required to adapt an economic activity may be large and implemented in phases as part of an adaptation plan developed in response to a climate risk assessment. In these circumstances, investments in measures included in a full programme of actions that collectively reduce the material physical climate risks to the economic activity can be counted in phases, even if the whole adaptation plan has not been executed.

In the case of 'activities enabling adaptation', the revenues and/ or expenditure associated with the whole activity can be counted.

²⁷ The final number of activities is slightly different, as some activity boundaries were redefined and, in some cases, additional economic activities were added which could make a substantial contribution to climate change mitigation.

2.4 WATER; CIRCULAR ECONOMY; POLLUTION; BIODIVERSITY

In addition to substantially contributing to one or more environmental objectives, Taxonomy-aligned activities must avoid significant harm to all other environmental objectives (where there is a risk of such harm taking place).

The TEG's mandate was only to consider these environmental objectives (pollution prevention and control, use and protection of water and marine resources, circular economy, and protection and restoration of biodiversity and ecosystems) in the context of avoiding significant harm. A full evaluation of economic activities that can substantially contribute to one or more of these objectives will be completed by the Platform on Sustainable Finance.

2.4.1 Changes in the final Regulation

The technical framework for avoiding significant harm to environmental objectives 3–6 has not materially changed in the final Taxonomy Regulation. Recitals 20 and 24 and Article 14 further emphasise the importance of life-cycle impacts as well as short- and long-term impacts on environmental objectives 3–6. To the greatest extent possible, these were already considered by the TEG. However, long-term impacts should be subject to further consideration by the Platform on Sustainable Finance.

2.4.2 Changes resulting from feedback received

Feedback on the technical screening criteria was extremely detailed and mostly related to the specifics of an individual economic activity. This feedback has been considered on a case-by-case basis.

At an overarching level, the key consideration has been to ensure consistency and harmonisation across different economic activities. This has included:

- Standardisation of wording where technical screening criteria relate to environmental management systems (EMS) and biodiversity and ecosystems.
- Standardisation of wording where technical screening criteria relate to water management (DNSH criteria to objective 3), including a standardised reference to EU water legislation.
- Ensuring consistency in how the technical screening criteria refer to EU Best Available Technique reference documents (BREFs).

3 Taxonomy in practice

3.1 WHO HAS TO DO WHAT, AND BY WHEN?

The Taxonomy Regulation sets out three groups of Taxonomy users:



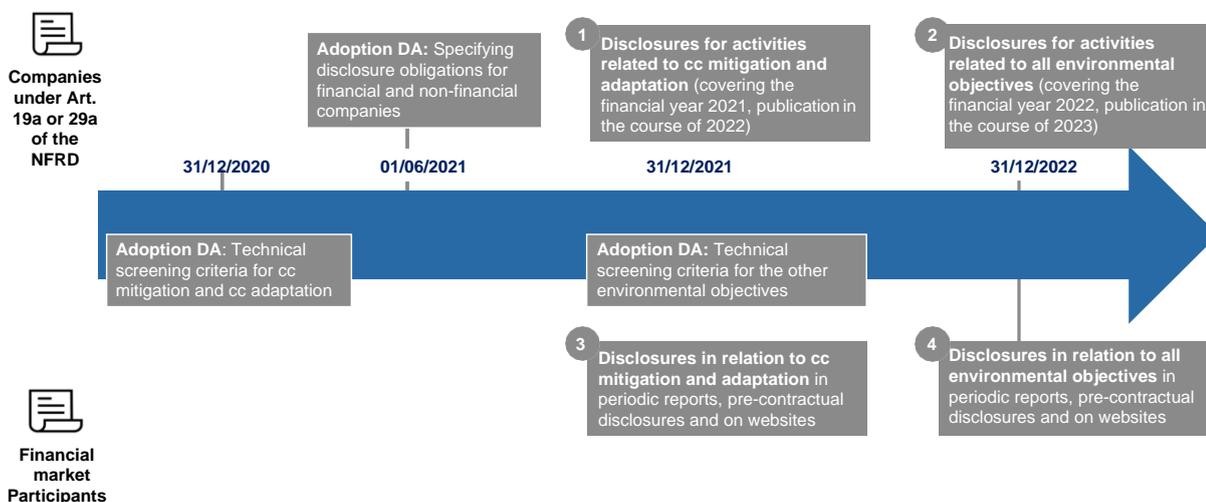
1. Financial market participantsⁱ offering financial productsⁱⁱ in the EU, including occupational pension providers;
2. Large companies who are already required to provide a non-financial statement under the Non-Financial Reporting Directive; and
3. The EU and Member States, when setting public measures, standards or labels for green financial products or green (corporate) bonds.²⁸

This report focusses on the obligations created under the Taxonomy Regulation. However, we note that the EU Taxonomy will have many applications beyond these.

Financial market participants will be required to complete their first set of disclosures against the Taxonomy, covering activities that substantially contribute to climate change mitigation and/or adaptation, by the 31st of December, 2021. Companies will be required to disclose in the course of 2022. The technical screening criteria will be issued as part of the explicit legal requirements from the European Commission by the end of 2020. The TEG recognises that the timeline presents challenges to implementation, as corporate disclosures may not be available for financial market participants to use in their 2021 disclosures.

An expanded set of disclosures covering activities that substantially contribute to all six environmental objectives will be required by the end of 2022. Technical screening criteria for activities that make a substantial contribution to water, a circular economy, pollution prevention and control, and protection of ecosystems will be issued by the end of 2021.

The obligations for financial market participants and large companies are discussed in more detail in subsequent sections.



ⁱ Financial market participants are defined in Article 2 (a) of the Commission proposal for a Regulation on disclosures relating to sustainable investments and sustainability risks and amending Directive (EU) 2016/2341 as "an insurance undertaking which makes available an IBIP, an AIFM, an investment firm which provides portfolio management, an IORP or a provider of a pension product; (ii) a manager of a qualifying venture capital fund registered in accordance with Article 14 of Regulation (EU) No 345/2013; (iii) a manager of a qualifying social entrepreneurship fund registered in accordance with Article 15 of Regulation (EU) No 346/2013; (iv) a UCITS management company".

ⁱⁱ Financial products*, are defined in Article 2 (j) of the Commission proposal for a Regulation on disclosures relating to sustainable investments and sustainability risks and amending Directive (EU) 2016/2341 as "a portfolio management, an AIF, an IBIP, a pension product, a pension scheme or a UCITS".



3.2 COMPANY DISCLOSURE

3.2.1 Summary of requirements

The final Taxonomy Regulation introduces a new disclosure requirement for companies already required to provide a non-financial statement under the Non-Financial Reporting Directive.²⁸ National implementation varies, but NFRD covers, at a minimum, large public-interest companies with more than 500 employees, including listed companies, banks and insurance companies.

The requirements differ between financial and non-financial companies. Some financial companies will also be subject to the Financial Market Participant disclosure requirement (See: Financial market participants).

All companies subject to this requirement will include a description of how, and to what extent, their activities are associated with Taxonomy-aligned activities. For non-financial companies, the disclosure must include:

- the proportion of turnover aligned with the Taxonomy; and
- capex and, if relevant, opex aligned with the Taxonomy.

This disclosure should be made as part of the non-financial statement, which may be located in annual reporting or in a dedicated sustainability report.

The Commission developed new climate reporting guidelines for companies in 2019. A summary of the guidelines is also available. These guidelines already recommended that companies disclose their taxonomy-alignment.

By 1 June, 2021, the European Commission will adopt a delegated act specifying how these obligations should be applied in practice. The delegated act will consider the differences between non-financial and financial companies.

²⁸ This is outside the mandate of the TEG.

²⁹ Directive 2014/95/EU, amending Directive 2013/34/EU.

3.2.2 Financial metrics

The Taxonomy Regulation requires companies to provide company-level disclosures. However, these need to build from an understanding of the economic activities in which a company is involved. Companies may be involved in multiple economic activities.

Table 3: Description of financial metrics for company disclosures

Financial metric	Definition	Use
Turnover	<p>Net turnover means the amounts derived from the sale of products and the provision of services after deducting sales rebates and value added tax and other taxes directly linked to turnover.³⁰</p> <p>Overall turnover is equivalent to a firm's total revenues over some period of time.³¹</p> <p>Turnover ratios are used by financial analysts to understand a company's efficiency and profitability based on data found in financial statements.</p>	The primary way of aggregating from an economic activity to a company level. Some companies may need to aggregate from asset to economic activity level
Capex & opex	<p>A capital expenditure (capex) is a payment for goods or services recorded, or capitalised, on the balance sheet instead of expensed on the income statement.³²</p> <p>Operating expenses (opex) are shorter-term expenses required to meet the ongoing operational costs of running a business.</p>	Aside from helping investors analyse a company's investment in its existing and new fixed assets, capital expenditures can give an indication of a company's strategy for improving environmental performance and resilience.

Turnover gives a clear picture of where a company currently is relative to the Taxonomy. It allows investors to report the % of their fund invested in Taxonomy-aligned activities. Capex, in contrast, gives investors a very good sense of a company's

direction of travel. It is a key variable for assessing the credibility of a company's strategy, and it helps investors decide whether they agree with their strategic approach.

Companies that disclose their capex investments in economic activities as part of a plan to be Taxonomy-aligned provide invaluable information for constructing green portfolios, and for analysing companies' transition plans and/or environmental sustainability performance and strategies.

The TEG recommends that companies complete the Taxonomy calculation separately for each of the environmental objectives for which substantial contribution technical screening criteria have been developed. This means that it should be completed separately for climate change mitigation and adaptation from 2021 and for all six environmental objectives for 2022. This is to provide transparency around which environmental objectives are being pursued.

³⁰ Definition according to DIRECTIVE 2013/34/EU of 26 June, 2013, on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings, amending Directive 2006/43/EC of the European Parliament and of the Council and repealing Council Directives 78/660/EEC and 83/349/EEC. Please see Art.13 and Annex 5, <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32013L0034&from=EN>

³¹ The terms "turnover" and "revenue" are often used interchangeably, and in some contexts, they even mean the same thing, despite there being some technical differences. The term turnover is most commonly used in Europe and Asia, while the use of the terms revenues or sales is more common in the United States. Revenue disclosures could therefore be considered as turnover wherever appropriate.

³² Please refer to IAS 16 applied to EU accounting rules: COMMISSION REGULATION (EU) 2017/1986 – of 31 October, 2017 – amending Regulation (EC) No 1126/2008 adopting certain international accounting standards in accordance with Regulation (EC) No 1606/2002 of the European Parliament and of the Council as regards International Financial Reporting Standard 16. "An entity evaluates under this recognition principle all its property, plant and equipment costs at the time they are incurred. These costs include costs incurred initially to acquire or construct an item of property, plant and equipment and costs incurred subsequently to add to, replace part of, or service it. The cost of an item of property, plant and equipment may include costs incurred relating to leases of assets that are used to construct, add to, replace part of or service an item of property, plant and equipment, such as depreciation of right-of-use assets." For more information, see: <https://www.ifrs.org/issued-standards/list-of-standards/ias-16-property-plant-and-equipment/#>

These disclosures should be the minimum baseline. In particular:

- Although the Regulation does not require companies to disclose the proportion of Taxonomy activities that are categorised as 'transition' or 'enabling' activities, as investors are expected to disclose this breakdown in their own disclosures, the TEG recommends that company disclosure obligations under the NFRD are clarified to include disclosure on the basis of enabling and transition activities.
- Companies mandated to disclose against the Taxonomy are also required to comply with the Non-Financial Reporting Directive,³³ which includes a requirement to disclose information to the extent necessary to understand a group's development, performance, position and impact in relation to environmental matters (amongst other issues). This framework should be used to provide readers with any contextual information needed to understand a company's Taxonomy-related turnover and expenditures.
- Other voluntary disclosures can be made, including project-level disclosures (see Figure 6). Issuers of EU GBS-aligned bonds in future would be required to disclose Taxonomy alignment for the use-of-proceeds of their bond and explain their green bond strategy. Existing market practice varies on how proceeds should be applied when differentiating between capital and operational expenditures (capex and opex). The TEG recommends to include any capital expenditure and selected operating expenditures such as maintenance costs related to green assets that either increase the lifetime or the value of the assets, and research and development costs. Operating costs such as purchasing costs and leasing costs would not though normally be eligible except in specific and/or exceptional cases as may be identified in the EU Taxonomy and future related guidance.
- Companies may also wish to disclose the extent to which their activities avoid potential harm to environmental objectives across their operations, but do not meet substantial contribution criteria.

Figure 6: Example of company disclosures, from economic activity to company level



33 <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32014L0095>

3.2.3 Climate change mitigation and adaptation: differences in calculation methodologies

The calculation methodology for Taxonomy-aligned turnover, capex and opex, if relevant, varies depending on the financial vehicle (equity or debt) and the purpose of the investment regarding the environmental objective being pursued.

Differences with counting climate adaptation as Taxonomy-aligned

For climate change adaptation (adapted activities), only costs incurred can be counted (capex and if relevant, opex) at this stage of Taxonomy development, and only when as part of a plan developed in response to a risk assessment. Turnover generated from the activity should not be counted.

A company might issue a green bond or ask for a green loan in order to adapt one or more of its activities to physical climate risks. The expenditures (bond or loan) incurred will be Taxonomy-aligned if the company follows the process and criteria set by the Taxonomy on climate change adaptation. However, the turnover generated from those activities that have been made resilient will not be Taxonomy-aligned.

Only enabling activities can count their turnover as Taxonomy-aligned from an adaptation perspective at this stage of development of the Taxonomy.

This reflects a difference between these two objectives. For climate change mitigation, an economic activity can reach a level of environmental performance that is aligned with net-zero emissions by 2050. However, the TEG has not yet fully resolved its views on whether an economic activity can ever be said to be fully 'resilient' to climate change. Adapting to climate change is an ongoing process that may not be final at any stage. The TEG recommends that additional work be undertaken by the Platform on Sustainable Finance to undertake further development of criteria to establish resilience benefit, which may enable turnover from adapted activities to be counted at a future date.

Therefore, the TEG's proposals are:

Table 4: Differences in calculation approaches for company climate change mitigation and adaptation

Financial metric	Climate change mitigation	Climate change adaptation
Turnover	Can be counted where economic activity meets Taxonomy technical screening criteria for substantial contribution to climate change mitigation and relevant DNSH criteria.	Turnover can be recognised only for activities enabling adaptation. Turnover cannot be recognised for adapted activities at this stage.
Capex & opex	Can be counted where costs incurred (capex and, if relevant, opex) are part of a plan to meet Taxonomy technical screening criteria for substantial contribution to climate change mitigation and relevant DNSH criteria.	Can be counted where costs incurred (capex and, if relevant, opex) are part of a plan to meet Taxonomy technical screening criteria for substantial contribution to climate change adaptation and relevant DNSH criteria.

Financing example: A cement company is renovating and adapting two plants counting turnover and capital expenditure as Taxonomy-aligned)

A cement company wants to renovate and adapt two of its biggest plants that contribute 50% of its turnover. The renovation of cement facilities includes retrofitting to reach high energy-efficiency levels, increasing the use of blended materials to reduce the clinker-to-cement ratio to below 0.65, and the use of alternative clinkers and binders. The cement production facilities are expected to achieve thermal energy intensity of approximately 3 GJ/t clinker, and carbon intensities in line with the Taxonomy.

The company also commissions a climate risk assessment of the facilities. The assessment is based on climate data and indicates that facilities are vulnerable to flooding. The company decides to increase capacity of drainage systems to make the facilities resilient to flooding. The costs of adapting the facilities are valued at EUR 5 million per facility. The overall renovation of the facilities amounts to EUR 500 million, which represents 80% of the company's capital expenditures.

The company seeks to raise funds in the capital market and issues a green bond based on the EU green bond standard following best practice, which includes compliance with DNSH criteria for both mitigation and adaptation. The bond will be Taxonomy-aligned. Once the works related to climate change mitigation are finalised, the company could claim all turnover generated from those two facilities (50% of the company's turnover). The company will also be able to report that 80% of its capital expenditures are Taxonomy-aligned.



European companies that fall under the scope of NFRD will need to make their own assessment on whether they respect the guiding principles and meet the screening criteria.

The TEG recommends that all companies that work through a deliberate resilience-building process to assess their climate physical risks and subsequently to address the identified risks should disclose the results and details (e.g., coverage) of the assessment, and the actions taken in response.

Financing example: A corporate adapting its headquarters as a first step to make the entire operations climate resilient (Counting capital expenditure as Taxonomy-aligned)

A services-based company wants to make its entire business resilient to climate physical risk. None of its facilities are designed for the purpose of extraction, storage, transportation or manufacture of fossil fuels.

The company carries out a thorough climate risk assessment to identify potential impacts of climate change on its headquarters and the other buildings it owns. The assessment is based on climate data and indicates that flooding and extreme heat are the main risks for the headquarters, whilst some of the facilities are also vulnerable to flooding. The corporate identified several actions required to reduce the material risk identified, including passive cooling measures and increased capacity of drainage systems. The action plan included an impact assessment to ensure that the measures to be implemented were consistent with local and regional adaptation efforts, and with DNSH criteria for buildings.

The overall cost of the proposed changes is EUR 50 million, and the company seeks several debt instruments over a three-year period. The company starts its plan by adapting its HQ, the cost of which is estimated to be EUR 10 million – the object of the first loan. This first loan may be followed by other loans or, for instance, by a EUR 40 million bond in private placement.

Each one of the loans will be Taxonomy-aligned, even if one loan (e.g. the initial EUR 10 million loan) on its own does not reduce all material physical climate risks to the activity the company conducts; it is a necessary measure as part of a broader, time-bound plan to adapt the entire company's facilities. The lending bank might commercialise the loans as green and 100% Taxonomy-aligned. A group of green loans might be bundled together and sold to investors as green securities. The EUR 50 million investment may count as Taxonomy-aligned capex. That is, the company will be able to report EUR 50 million of Taxonomy aligned investments, which opens the door to EUR 50 million of Green Loans

From a turnover perspective for considering equity investment performance, the company will be 0% Taxonomy-aligned as of today, as economic activities in respect of their own performance are not yet recognised in the Taxonomy. (This is expected to change before the Taxonomy comes into force.) The company, however, shows environmental leadership by adapting its facilities and minimising their carbon emissions – a feature of undeniable value for investors that seek to integrate environmental risks into their investment decisions.

3.2.4 Due diligence: qualitative screening criteria and minimum safeguards

Companies and other issuers disclosing against the Taxonomy will need to assess their compliance with minimum safeguards, meaning the standards embedded in the OECD Guidelines on Multinational Enterprises (MNEs) and the UN Guiding Principles on Business and Human Rights, with specific reference to the ILO Core Labour Conventions.

They will also need to assess or check compliance with the technical screening criteria for avoiding significant harm to environmental objectives.

For DNSH to climate change mitigation, the criteria are a mixture of quantitative and process-based, qualitative criteria. For DNSH to adaptation, the criteria are principles-based. For DNSH to objectives 3–6, the criteria are primarily qualitative and defined by EU regulations. Some regulations include quantitative requirements.

When applying DNSH, companies and issuers are encouraged to follow the risk-based guidance from ISO 31000:2018 Risk Management Guidelines and ISO 14015:2010 Environmental management – assessment of sites and organisations (EASO). The ISO recommendations are in line with the best practices outlined in the DNSH technical screening criteria.

For DNSH criteria that reflect legal requirements under EU regulations, it would be reasonable for Taxonomy users to assume these criteria have been met in the normal, lawful conduct of business, unless evidence to the contrary is demonstrated.

The TEG recommends that companies follow the recommendations of the OECD and UNGPs to the greatest extent possible when conducting due diligence and in their reporting. Companies may use the same due diligence process for identifying, preventing and mitigating any breach of the qualitative substantial contribution and DNSH criteria. An overview is provided below.

The minimum safeguards and qualitative screening criteria apply at the economic-activity level. In practice, compliance might be partially assessed at the company level to explain the observance of safeguards at the activity level.

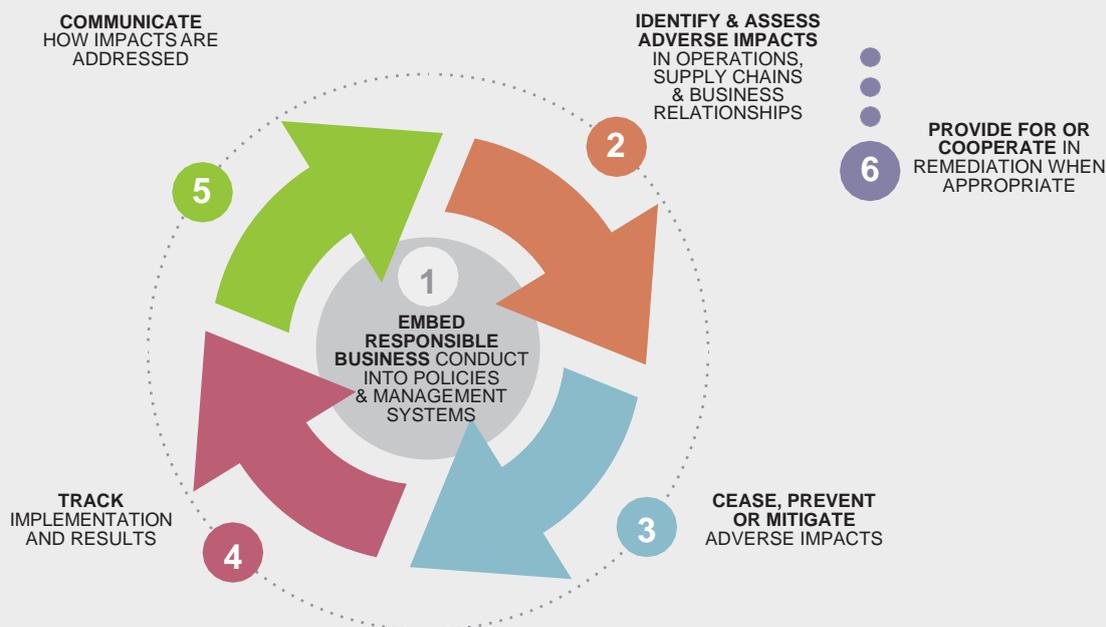
Where companies do not provide the necessary information on qualitative criteria and/or on minimum safeguards, investors may need to form an independent judgement. This is discussed further in Section 3.3: Financial market participants.

Due diligence: Key elements and characteristics

Due diligence is “the process enterprises should carry out to identify, prevent, mitigate and account for how they address these actual and potential adverse impacts in their own operations, their supply chain and other business relationships. [...] Effective due diligence should be supported by efforts to embed Responsible Business Conduct (RBC) into policies and management systems, and aims to enable enterprises to remediate adverse impacts that they cause or to which they contribute.³⁴ Due diligence addresses actual adverse impacts or potential adverse impacts (risks) related to human rights or other sustainability risks.”

Due diligence process & supporting measures³⁵

Figure 7: OECD Due Diligence Guidance for Responsible Business Conduct



Responsible business conduct in the context of the EU Taxonomy captures the expectations on environmental management described by DNSH technical criteria and on social performance embedded by the OECD MNEs Guidelines and the UNGPs.

³⁴ See OECD (2018) Due Diligence Guidance for Responsible Business Conduct <http://mneguidelines.oecd.org/OECD-Due-Diligence-Guidance-for-Responsible-Business-Conduct.pdf>
³⁵ OECD Due Diligence Guidance for Responsible Business Conduct at <http://mneguidelines.oecd.org/OECD-Due-Diligence-Guidance-for-Responsible-Business-Conduct.pdf>

The key features of due diligence:

- **Embedding responsible business conduct (RBC) into the enterprise's policies and management systems** to undertake due diligence: Devise, adopt and disseminate a combination of policies on RBC issues that articulate the enterprise's commitments to the principles and standards contained in the DNSH criteria, OECD Guidelines for MNEs and its plans for implementing due diligence, which will be relevant for the enterprise's own operations, its supply chain and other business relationships.
- **Identifying and assessing actual or potential adverse impacts** that the business enterprise may cause or contribute to through its own activities, or which may be directly linked to its operations, products or services by its business relationships.
- **Preventing or mitigating adverse impacts:** Integrating findings from impact assessments across relevant functions and company processes and taking appropriate action according to its involvement in the impact.
- More specifically, if the enterprise is causing the impact, it should take steps to cease or prevent it; if it is contributing to the impact, it should take steps to cease or prevent its contribution and use leverage to mitigate the remaining impact; if it has not contributed to the impact, but that impact is directly linked to its operations, products or services by its business relationships, it should take steps to **gain and use leverage to prevent and mitigate the impact**, to the greatest extent possible.
- **Tracking performance:** The effectiveness of measures and processes to address adverse social and environmental impacts in order to know if they are working.
- **Communicating**, publicly and to relevant stakeholders, information on due diligence policies, processes, and activities conducted to identify and address actual or potential adverse impacts, including the findings and outcomes of those activities. The EU Non-financial Reporting Directive guidelines recommend that companies rely on the framework developed by the OECD MNEs Guidelines when reporting on their impacts on, as a legal minimum, environmental, social and employee matters, respect for human rights, and anti-corruption and bribery matters.
- Specifically, companies are asked to **report publicly on:** RBC policies, information on measures taken to embed RBC into policies and management systems, the enterprise's identified areas of significant risks, the significant adverse impacts or risks identified, prioritised and assessed, as well as the prioritisation criteria, the actions taken to prevent or mitigate those risks, including, where possible, estimated timelines and benchmarks for improvement and their outcomes, measures to track implementation and results, and the enterprise's provision of or co-operation in any remediation.
- **Enabling remediation when appropriate:** When the enterprise identifies that it has caused or contributed to actual adverse impacts, it should address such impacts by providing for or cooperating in their remediation.

Due diligence is intended to be risk-based. This means that the measures that an enterprise takes to conduct due diligence should be commensurate to the severity and likelihood of the adverse impact. When the likelihood and severity of an adverse impact is high, then due diligence should be more extensive. It also means that where it is not feasible to address all identified impacts at once, an enterprise should prioritise the order in which it takes action based on the severity and likelihood of the adverse impact. Once the most significant impacts are identified and dealt with, the enterprise should move on to address less significant impacts.³⁶

The DNSH technical criteria provide specific guidance to companies on the potential adverse environmental impacts that are more likely to affect activities given their nature. In this respect, DNSH criteria facilitate and guide the process for companies. What DNSH criteria usually do not consider is the specific context in which different companies operate – e.g., location or size. These should be factored in when conducting the risk assessment.

Due diligence is appropriate to an enterprise's circumstances. The nature and extent of due diligence can be affected by factors such as the size of the enterprise, the context of its operations, its business model, its position in supply chains, and the nature of its products or services. In practice, this means that the concept of proportionality, given companies' capacities and contexts, should prevail.

36 Id.

Due diligence is dynamic, not static, and demands constant revision. Due diligence concerns internationally recognised standards of RBC. The OECD Guidelines for MNEs provide principles and standards of RBC consistent with applicable laws and internationally recognised standards.

Companies and issuers are expected to have conducted thorough due diligence on the operations related to those activities that they wish to qualify as Taxonomy-aligned.

Assessing compliance with OECD Guidelines and UNGPs in the context of the Taxonomy

The central expectation of the Guidelines and UNGPs is that enterprises stop activities that are causing or contributing to adverse impacts on human and labour rights, or foster corruption, and that they develop and implement plans that are fit for purpose to prevent and mitigate potential (future) adverse impacts. Based on an enterprise's prioritisation, it should also develop and implement plans to seek to prevent or mitigate actual or potential adverse impacts on RBC issues which are directly linked to the enterprise's Taxonomy-related operations, products or services by business relationships.

Assessing compliance across these expectations may be challenging, particularly as decisions related to prioritisation and how to respond to identified impacts will often involve some level of subjectivity. Assessing the effectiveness of due diligence processes (i.e., the results of tracking processes) may serve as a proxy for assessing compliance with the recommendations of these instruments. The OECD RBC Due Diligence Guidance provides the following indicative examples of qualitative and quantitative indicators, which, where appropriate, can be helpful in tracking effectiveness of due diligence processes:

- Percentage of impacted stakeholders engaged who feel adverse impacts have been adequately addressed.
- Percentage/number of agreed action points that have been implemented according to planned timelines.
- Percentage of impacted stakeholders who feel that channels for raising grievances are accessible, equitable and effective.
- Rate of recurring issues related to the identified adverse impact(s).

Both the OECD MNEs and the UN Guiding Principles extensively outline how the principles and conduct of due diligence can be implemented. We recommend that companies and investors that are not yet familiar with them should further inform themselves when either implementing one or more of the principles or assessing compliance.

3.2.5 Sector classification

Assessing alignment with the Taxonomy should be performed by economic activity rather than by sector or industry. The TEG recommendations are structured around the EU's NACE (Nomenclature des Activités Économiques dans la Communauté Européenne) industry classification system, and the TEG has set technical screening criteria for economic activities within priority macro-sectors. This classification system was selected for its compatibility with EU Member State and international statistical frameworks and for its broad coverage of the economy.

Companies reporting against the Taxonomy, either as a result of a legal obligation or on a voluntary basis, should include a description of how, and to what extent, their activities are associated with Taxonomy-aligned activities. The technical screening criteria set out in the Technical Annex contain sector-level headings and associated NACE codes, on which assessment can be based.

NACE codes are designed to guide and assist companies and financial market participants. However, in some cases, tests may be appropriately applied in a different NACE code to the one the TEG has identified. For example, the TEG has defined technical screening criteria for NACE 23.51 (Manufacture of Cement), but a company may attribute revenues to the end product using NACE 23.61 (Concrete Products). Further guidance on this is included in the Technical Annex.

The TEG recognises that NACE is not widely used by corporates or in the financial services industry. Alongside this report, the TEG is issuing a spreadsheet which contains mapping to additional classification systems.

3.2.6 Disclosure on economic activities not yet covered by the Taxonomy

Some economic activities do not yet have Taxonomy technical screening criteria (see Section 2.1.1 Sectors covered – and not covered yet – by the Taxonomy). For some environmental objectives, the Taxonomy may not prioritise low environmental footprint economic activities for development of technical screening criteria. This section proposes how companies may wish to address these economic activities in their disclosures. At this stage, disclosures on this basis would be voluntary. The TEG recommends that the future Platform on Sustainable Finance consider further how to enable companies performing activities not yet covered by the Taxonomy to explain their performance.

The TEG considers four cases. An individual company may need to deal with any or all of the cases below when compiling a Taxonomy disclosure.

Table 5: Disclosure approaches for companies with and without Taxonomy coverage

#	Case	TEG Recommendation
1.	The economic activity is covered by existing technical screening criteria.	Disclose turnover, capex and, if relevant, opex in line with the methodology (above).
2.	The economic activity may be able to make a substantial contribution to climate change mitigation or adaptation, but technical screening criteria have not been developed yet.	Disclose that the economic activity does not yet have technical screening criteria. Inform the Platform on Sustainable Finance. ³⁷
3.	The economic activity may be able to make a substantial contribution to the other environmental objectives, but technical screening criteria have not been developed yet. All disclosure of this kind is voluntary until the delegated acts enter into application.	Disclose that the economic activity does not yet have technical screening criteria because the Taxonomy does not yet cover the environmental objective to which it contributes (3–6). Narrative disclosure about environmental performance is still possible using NFRD guidelines. Inform the Platform on Sustainable Finance. ³⁸
4.	The economic activity does not, in the opinion of the issuer or operator, have a significant impact on the Taxonomy’s environmental objective(s), and improved performance in its own operations is unlikely to make a substantial contribution to an environmental objective. Note that this situation will not apply to climate change adaptation. ³⁹	Disclose that the economic activity is not addressed by the Taxonomy. Companies can (and should) disclose how they manage their environmental impacts. The fact that their activities do not make a substantial contribution to an environmental objective does not mean that the companies do not contribute positively to the environment by responsibly managing their environmental impacts, no matter how limited these are.

³⁷ Article 15(5): Where financial market participants consider that an economic activity which does not comply with the technical screening criteria laid down in accordance with this Regulation or for which such technical screening criteria have not been established yet should be considered environmentally sustainable, they may inform the Platform on Sustainable Finance.

³⁸ As above

³⁹ The TEG’s view is that all sectors must adapt to a changing climate, and hence the adaptation Taxonomy will be applicable to the whole economy (subject to DNSH criteria).

Companies providing a non-financial statement under NFRD should use the framework of the existing disclosure requirements when making their disclosures.

3.2.7 Disclosures by environmental objective

When a company discloses the overall % of turnover or capex which is Taxonomy-aligned, it might be obliged to choose one of the two (or, in future, multiple) environmental objectives to which an activity or asset contributes, in situations where an activity makes multiple substantial contributions, in order to avoid double counting (when aggregating environmental objectives).

Normally, the company will choose the environmental objective for which the % of turnover is higher if there is a difference, and/or the environmental objective the company wishes to put forward.

However, the company is encouraged to assess and disclose the fact that one or more activities/assets contribute to different objectives.

Companies are also encouraged to provide turnover or capex by the categories of transition and enabling activities when reporting on climate change mitigation.

3.2.8 Verification

The Taxonomy Regulation does not explicitly require any formal verification of Taxonomy-related disclosures. The disclosures must be made as part of the non-financial statement under NFRD, which does not, as a baseline, require verification (although transposition into some Member States may influence this on a case-by-case basis). However, the TEG notes that the NFRD requirements will be reviewed in 2020.

The TEG considers it good practice for issuers to seek external assurance on their Taxonomy-related disclosures. This is consistent with the recommended approach in the Taskforce on Climate-Related Financial Disclosures (TCFD) framework. The TEG's report on the EU Green Bond recommends the set-up of an accreditation scheme for external verifiers for green bonds, which should develop further robust criteria for verifiers and is expected to provide further guidance on verification.

3.3 FINANCIAL MARKET PARTICIPANTS



3.3.1 Summary of the Taxonomy disclosure requirement

Financial market participants offering financial products in the EU, including occupational pension providers, are required to make Taxonomy disclosures. This is mandatory for certain types of product or offering, and on a comply-or-explain basis for all others.

For each relevant product, the financial market participant will be required to state:

- how and to what extent they have used the Taxonomy in determining the sustainability of the underlying investments;
- to what environmental objective(s) the investments contribute; and
- the proportion of underlying investments that are Taxonomy-aligned, expressed as a percentage of the investment, fund or portfolio. This disclosure should include details on the respective proportions of enabling and transition activities, as defined under the Regulation.

The disclosures must be made as part of existing pre-contractual and periodic reporting requirements. These products also carry sustainability disclosure obligations under the regulation on Sustainability-Related Disclosures in the Financial Sector (see call-out box).

Note that the level of Taxonomy alignment in an individual investment product is not an indicator that an environmental objective will be achieved at the EU level. Further, reporting the level of Taxonomy alignment does not demonstrate environmental additionality or address environmental opportunity cost related to other potential investments.

If the product is not required to make a full Taxonomy disclosure, it may carry a standard disclaimer.

The Taxonomy will be used in a range of financial products, both equity and debt based, and by private- and public-sector actors. The descriptions below focus on the users and use cases described in the TR.

Regulation on Sustainability-Related Disclosures in the Financial Services Sector

Disclosure against the Taxonomy forms part of a broader sustainability-related disclosure regime with which financial market participants are required to comply. These broader disclosure obligations are laid out in the Regulation on Sustainability-Related Disclosures in the Financial Services Sector (SDR). SDR requirements include pre-contractual, website and periodic reporting obligations:

- Pre-contractual: Information on how environmental and social characteristics or objectives are met (Articles 8 & 9).
- Website: Description of the environmental or social characteristics or objectives of the fund, information on the methodologies used to assess, measure and monitor the characteristics or impact of the underlying investments, data sources and screening criteria (Article 10).
- Periodic: Overall sustainability-related impact of the financial product by means of relevant sustainability indicators (Article 11).

3.3.2 Which products must complete Taxonomy disclosures?

Financial products marketed into or manufactured in the European Union, including pension products, will be required to refer to the Taxonomy. Products in scope are summarised in Table 6. Financial market participants may choose to use the Taxonomy for other product types if they wish.

Individual financial instruments – e.g., bonds – are not directly included in the Taxonomy disclosure obligation.

Table 6: Financial products with Taxonomy disclosure obligations

Market segment	In scope for Taxonomy disclosure
Pensions and Asset Management	<ul style="list-style-type: none"> • UCITS funds: <ul style="list-style-type: none"> • equity funds • exchange-traded funds (ETFs) • bond funds • Alternative Investment Funds (AIFs): <ul style="list-style-type: none"> • fund of funds • real estate funds • private equity or SME loan funds • venture capital funds • infrastructure funds • Portfolio management (under Article 4(1) of MiFID II) • Pensions: <ul style="list-style-type: none"> • pension products • pension schemes (defined with reference to IORP II) • pan-European personal pension products
Insurance	<ul style="list-style-type: none"> • Insurance-based investment products (IBIPs)
Corporate & Investment Banking	<ul style="list-style-type: none"> • Securitisation funds • Venture capital and private equity funds • Portfolio management • Index funds

The nature of the required disclosure differs depending on the type of fund, as defined in the Regulation on Sustainability-Related Disclosures in the Financial Services Sector (SDR).⁴⁰ This regulation creates three categories of fund based on the approach to environmental objectives within the investment or fund:

Table 7: Disclosure obligations based on type of sustainability claim

Article SDR	Description	Obligation
Article 9	Financial products which have sustainable investment ⁴¹ as their objective.	Must complete Taxonomy disclosures where the investment concerns activities that contribute to an environmental objective.
Article 8	Financial products which promote environmental or social characteristics of the investment, either alone or in combination with other characteristics.	Must complete Taxonomy disclosures where environmental characteristics are promoted.
Article 7	All other financial products.	Must complete Taxonomy disclosures or carry a disclaimer that “the investment(s) underlying this financial product do not take into account the EU criteria for environmentally sustainable investments”.

3.3.3 Narrative disclosures

The TR requires investors to disclose:

How and to what extent the investments underlying the financial product are invested in environmentally sustainable economic activities.

This narrative is an important companion to the quantitative (percentage) disclosure requirements.

For general disclosures (i.e., not seeking specific accreditation or labelling), there is no ‘correct’ percentage of Taxonomy-aligned securities in a fund, but investors may wish to explain elements of their strategy or approach in the narrative, especially where the percentage is low. For example:

- Products targeting companies whose ESG performance is low but improving over time may wish to describe the methods used to identify and engage companies and the expected time frame for that improvement.
- For products using a different methodology for determining environmental performance, the TEG considers that best practice to explain the strategy, its environmental objectives and main points of variance from the Taxonomy.
- The investor may also wish to explain how it considers metrics, such as Taxonomy-aligned capex, when evaluating the sustainability of underlying investments and their trajectory towards the criteria.
- Investors who appoint external fund managers may wish to disclose details of how they use the Taxonomy when engaging with these external managers.

⁴⁰ See <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R2088&from=EN>

⁴¹ Defined in Article 2(17): ‘sustainable investment’ means an investment in an economic activity that contributes to an environmental objective, as measured, for example, by key resource efficiency indicators on the use of energy, renewable energy, raw materials, water and land, on the production of waste, and greenhouse gas emissions, or on its impact on biodiversity and the circular economy, or an investment in an economic activity that contributes to a social objective, in particular an investment that contributes to tackling inequality or that fosters social cohesion, social integration and labour relations, or an investment in human capital or economically or socially disadvantaged communities, provided that such investments do not significantly harm any of those objectives and that the investee companies follow good governance practices, in particular with respect to sound management structures, employee relations, remuneration of staff and tax compliance.

3.3.4 Proportion of the underlying funds that are Taxonomy-aligned

Investors are required to disclose:

- To what environmental objective(s) the investments contribute; and
- The proportion of underlying investments that are Taxonomy-aligned, expressed as a percentage. This should specify the breakdown between activities considered to be 'enabling' and 'transition'.

The TEG recommends that investors complete this calculation separately for each of the environmental objectives for which substantial contribution technical screening criteria have been developed. This means that it should be completed separately for climate change mitigation and adaptation from 2021 and for all six environmental objectives for 2022.

Investors should bear in mind the different treatment of financial metrics for climate change mitigation and climate change adaptation.

For climate change mitigation, the following may be counted:

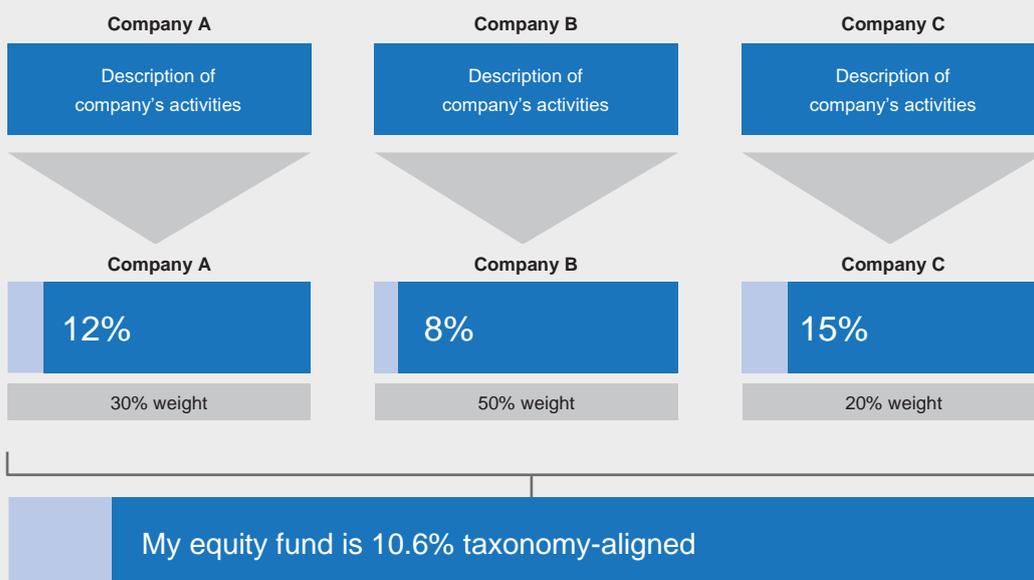
- Turnover associated with Taxonomy-aligned activities; and
- Costs incurred (capex and, if relevant, opex) as part of a plan to achieve the climate thresholds for the economic activity.

For climate change adaptation (adapted activities), only costs incurred can be counted (capex and, if relevant, opex), and only when they are part of a plan developed in response to a climate risk assessment. Turnover generated from the activity should not be counted. This reflects the TEG's earlier statements that resilience is an ongoing process and not a fixed end-state. Future development of the Taxonomy is expected to resolve how and when turnover associated with adapted activities can be considered Taxonomy-aligned. For climate change adaptation enabling activities, turnover, capex and, if relevant, opex apply.

3.3.5 Example methodology for equity investments

The following diagram provides a simplified explanation of how to apply the Taxonomy to a portfolio of company investments, considering turnover as the proxy for equity exposure to Taxonomy-aligned activities.

Figure 8: How to apply the Taxonomy to an equity portfolio



3.3.6 Comparing methodologies for equity and fixed-income disclosures

The table below describes in further detail how disclosures would differ between equities and fixed-income investments. These examples are provided to highlight the Taxonomy’s wide applicability to different asset classes. Further detail is provided in the subsequent sections.

Table 8: Comparing disclosure methodologies for equities and fixed income

EQUITIES	FIXED INCOME (Corporate) ⁴²
<ol style="list-style-type: none"> 1. % of the fund that complies with the Taxonomy; breakdown by environmental objectives; and breakdown by activities (all weighted). Investors are required to disclose the % of the fund invested in ‘transition’ and ‘enabling’ activities. 2. % of the fund that is potentially Taxonomy-align breakdown by environmental objectives and activities. Commentary following recommendations. 3. (Until the Taxonomy is finished) % of the fund that responds to environmental objectives 3–6, and a breakdown by objective, including an explanation on the methodology and criteria used following recommendations. 	<p>Same as equities. In addition, when appropriate, breakdown by:</p> <ol style="list-style-type: none"> 1. % invested in bonds compliant with EU Green Bond Standard (100% Taxonomy-aligned); 2. % of the fund invested in green bonds partially aligned (and % that is Taxonomy-aligned); 3. % of the fund invested in corporate bonds (and the % that is Taxonomy-aligned).
<p>What to disclose:</p> <p>Turnover.⁴³ Some investors, however, might decide to build a forward-looking portfolio and disclose the same information based on capex.</p>	<p>What to disclose:</p> <p>Capex, and opex if relevant. For corporate bonds, turnover could be used in selected cases, as appropriate, where capex does not properly represent the investments made by the issuer. If both metrics are used (e.g. one for green bonds, one for corporate bonds), it needs to be specified and reported separately.</p>

3.3.7 Presentation of the disclosure

For economic activities which have substantial contribution criteria defined, the TEG recommends that investors present their disclosure as follows:

1. The percentage of the fund that can be demonstrated to align with the Taxonomy (either where full disclosure has been made by the company, or where the investor has independently evaluated the Taxonomy eligibility of the company, including with the use of estimated or modelled data). Further commentary on dealing with limited data is covered later in this report.
2. The percentage of the fund that is potentially aligned. The investor has good reason to believe that the underlying activity is aligned, but full compliance has not been demonstrated. The investor should explain which technical screening criteria could not be verified and why, the nature of the due diligence they have conducted, engagement with the company (if undertaken) and results, and how estimates, where appropriate, have been calculated.

⁴² These guidelines refer to corporate fixed income with the exception of green bonds issued by a public sector actor. The TEG has identified some potential methodologies for assessing the Taxonomy-alignment of sovereign bonds, but further work is required to evaluate their applicability. Methodologies considered include:

- Alignment of national climate change mitigation targets with net zero by 2050, potentially supported via Nationally Defined Contributions (NDCs).
- The sectoral contribution of Taxonomy-aligned economic activities to national GDP.
- The sectoral contribution of Taxonomy-aligned economic activities in the form of tax receipts.

⁴³ See footnote number 29.

The TEG does not encourage financial product issuers to attempt to disclose the proportion of their investments that align with environmental objectives that do not yet have technical screening criteria. The Platform will, in time, make recommendations on criteria, which will be translated into legislation.

The TEG recognises a short-term challenge for products which seek to contribute to environmental objectives 3-6. Disclosure is voluntary for these products until the delegated acts containing the technical screening criteria enters into application. Nonetheless, they may wish to describe the percentage of the product that is responding to each of these environmental objectives.

To accompany this, the TEG recommends that they also disclose:

- the method by which this assessment is currently made, including links to alternative taxonomies if used;
- due diligence conducted on minimum safeguards and to avoid significant harm to other environmental objectives.

3.3.8 Recommended methodologies for fund constituents

Financing directly to or within funds provides another opportunity for financiers and investors to identify their alignment with environmental objectives. There is no disclosure regulation that obliges green bond or loan issuers to disclose Taxonomy alignment. However, investors will need the information when reporting on the portion of Taxonomy alignment of their funds. The following table provides some recommendations on disclosure methodologies for green bonds and green loans.

Table 9: Disclosures for fund constituents

Green Bonds	<ol style="list-style-type: none"> 1. Green bonds that comply with the EU Green Bond Standard should be aligned with the EU Taxonomy. Users should note that the EU GBS allows some flexibility, subject to external verification by an accredited verifier, in cases where the Taxonomy technical screening criteria may not apply directly.⁴⁴ 2. Other green or sustainable bonds report on the use of proceeds: ex-ante and ex-post investment reporting. The issuer first explains why and how the investments will be aligned with the Taxonomy and, after the investment has been made (and periodically), how exactly the proceeds have been, or are being, allocated, and the extent to which they are aligned with the Taxonomy (% of expenditures allocated to Taxonomy-aligned projects). When issuers do not report in line with the Taxonomy, investors will have to assess the extent to which the use of proceeds meet the technical criteria and minimum safeguards. For more information, please see the EU Green Bond Standard report and user guide.
Green loans	<p>The TEG recommends that loan financiers follow similar procedures to those of green bonds. The Loan Market Association, for example, has established the Green Loan Principles (GLP),⁴⁵ which aims to create a framework of market standards and guidelines that can support green loan market development. The GLP are built on the Green Bond Principles.</p> <p>While they are voluntary, the TEG recommends that financiers follow them, as they exhibit best practice and facilitate application of the Taxonomy:</p> <ol style="list-style-type: none"> 1. Use of proceeds: like with green bonds, the use of proceeds is the utilisation of the loan proceeds in green projects. In order to be Taxonomy-aligned, the selection of green projects should be done using the EU Taxonomy. 2. Process evaluation: the borrowers of the green loans should clearly inform the lenders about the environmental sustainability objectives (in this case, the EU Taxonomy will inform of eligibility criteria), the evaluation process and the assessments to identify and manage potentially significant environmental risks (DNSH for Taxonomy on scope projects). 3. Management of proceeds 4. Reporting: a specific reporting process should outline qualitative and quantitative information about the use of proceeds. The key disclosure will be the % of expenditures in Taxonomy-aligned activities – in other words, the % of a loan allocated to Taxonomy-aligned projects. 5. External review and verification are recommended.

3.3.9 Where should disclosures be made?

The Taxonomy Regulation requires financial market participants to provide their disclosures as part of existing pre-contractual and periodic disclosure obligations, and subsequently on their websites, as part of the broader requirement arising from Article 10 of the SDR.

Some common examples have been extracted in the table below. Please see the political agreement (or subsequent official publications) for the full and definitive list.

Table 10: Where should disclosures be made?

Market segment	Examples	Pre-contractual	Periodic reporting
Pensions and Asset Management	Occupational pension providers (IORPs)	Information to prospective members (Article 41, IORP II Directive)	Annual report (Article 29, IORP II)
	UCITS management companies	Prospectus (Article 69, UCITS Directive)	Annual report (Article 69, UCITS Directive)
	Alternative Investment Fund Managers (AIFMs)	Disclosure to investors (Article 23(1), AIFMD)	Annual report (Article 22, AIFMD)
	Investment firms providing portfolio management or investment advice (MiFID II)	Information to clients (Article 24(4) of MiFID II)	Periodic report (Article 25(6) of MiFID II)
Insurance	Insurance undertakings	Information for policy holders (Article 185(2), Solvency II) or, where relevant, for customers (Article 29(1), Insurance Distribution Directive)	Annually in writing (in accordance with Article 185(6) of Solvency II)
Corporate & Investment Banking	Credit institutions providing portfolio management or investment advice (MiFID II)	Information to clients (Article 24(4) of MiFID II)	Periodic report (Article 25(6) of MiFID II)

The TEG recommends that Taxonomy disclosure requirements are tailored to reflect the differences in pre-contractual and periodic reporting.

Pre-contractual disclosures should focus on ex-ante information, including, but not limited to:

- the environmental objectives of the fund,⁴⁶ including any Taxonomy-related targets (e.g., 20% of the fund invested in companies with >50% Taxonomy-aligned turnover, or with substantial Taxonomy-related capex);
- how the Taxonomy will be used to achieve these objectives (e.g., portfolio construction or as the basis of engagement with companies).

Periodic reporting should focus on ex-post information, including, but not limited to:

- how the strategies have been implemented in practice; and
- a point-in-time calculation of the Taxonomy percentage.

44 See TEG report of June 2019 on EU Green Bond Standard (Annex 1, Section 4.1: Green Projects) https://ec.europa.eu/info/files/190618-sustainable-finance-teg-report-green-bond-standard_en

Proceeds from EU Green Bonds, or an amount equal to such proceeds, shall be allocated only to finance or refinance Green Projects ('Green Projects') defined, subject to confirmation by an accredited Verifier (see section 4.4), as (a) contributing substantially to at least one of the Environmental Objectives as defined in the EU Taxonomy Regulation ('the Environmental Objectives'), namely (i) climate change mitigation, (ii) climate change adaptation, (iii) sustainable use and protection of water and marine resources, (iv) transition to a circular economy, waste prevention and recycling; (v) pollution prevention and control and (vi) protection of healthy ecosystems, while (b) not significantly harming any of the other objectives and (c) complying with the minimum social safeguards represented by the principles and rights set out in the eight fundamental conventions identified in the International Labour Organization's declaration on Fundamental Rights and Principles at Work.

When the EU Taxonomy will be in force and where Technical Screening Criteria (i.e., principles, metrics, thresholds) have been developed in the Taxonomy for specific environmental objectives and sectors, Green Projects shall align with these criteria allowing, however, for specific cases where these may not be directly applicable as a result of factors such as the innovative nature, the complexity, and/or the location of the Green Project(s). An accredited Verifier shall either confirm alignment with the Technical Screening Criteria, or alternatively in cases where no technical screening criteria have been developed or in the above-mentioned specific cases, that the projects nonetheless meet the requirements under the EU Taxonomy framework – i.e., that they (a) contribute substantially to at least one of the Environmental Objectives, (b) do not significantly harm any of the other objectives and (c) comply with the minimum social safeguards.

45 For more information, see https://www.lma.eu.com/application/files/9115/4452/5458/741_LM_Green_Loan_Principles_Booklet_V8.pdf

46 Disclosure of sustainability objectives is already required under the Regulation on Sustainability Disclosures in the Financial Sector.

3.3.10 Verification

The Taxonomy Regulation does not require that investors seek external verification or assurance of their disclosures. The Commission will conduct a review of this by 2022. Investors should be mindful of existing obligations for the accuracy and presentation of pre-contractual and periodic reporting.

3.3.11 Dealing with limited data

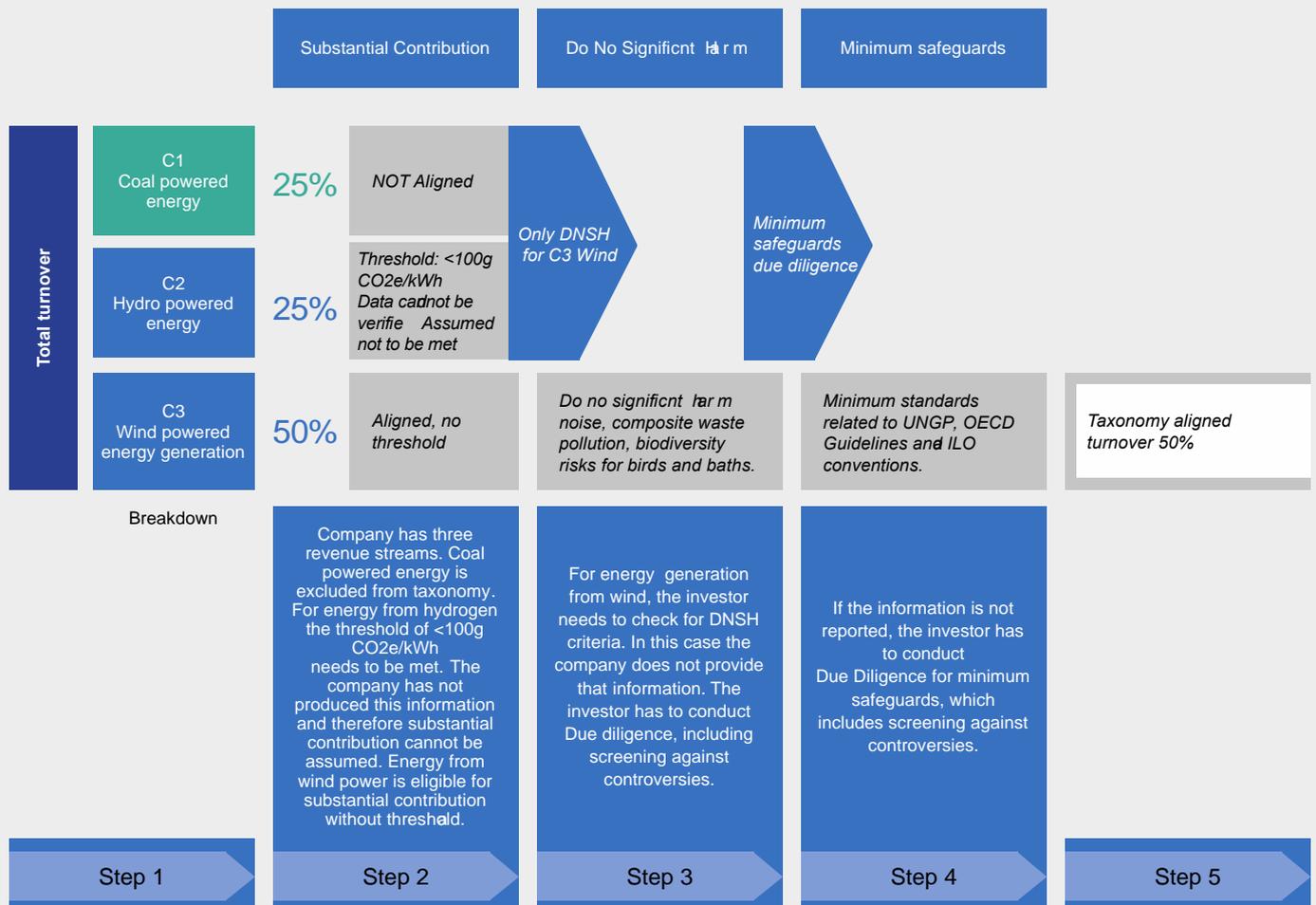
In cases where full disclosure is not made, the TEG acknowledges the hurdles involved in assessing compliance. This will particularly affect EU companies and bond issuers that do not fall under the scope of the NFRD, and non-EU companies. The TEG recommends that investors follow a five-step approach.

Five-step process

In some cases, implementation of the Taxonomy will require that financial actors (that might delegate it to their data providers or other third parties) conduct a five-step check process. An example of how this applies to investments in companies follows:

1. Identify the activities conducted by the company or issuer or those covered by the financial product (e.g., projects, use of proceeds) that could be aligned, and for which environmental objective(s).
2. For each potentially aligned activity, verify whether the company or issuer meets the relevant screening criteria – e.g., electricity generation <100 g CO₂e/kWh.
3. Verify that the DNSH criteria are being met by the issuer. Investors using the Taxonomy would most likely use a due diligence-type process for reviewing the performance of underlying investees and would rely on the legal disclosures of eligibility from those investees.
4. Conduct due diligence to avoid any violation of the social minimum safeguards stipulated in the Taxonomy Regulation Article 13.
5. Calculate alignment of investments with the Taxonomy and prepare disclosures at the investment product level.

Figure 9: Process for applying the Taxonomy



Due diligence: DNSH and minimum safeguards

Assessing compliance with DNSH criteria and minimum safeguards in the absence of information

European companies bound by NFRD are deemed to assess compliance with DNSH criteria and minimum safeguards when reporting on the % of turnover and capex compliant with the EU Taxonomy. For all other companies, it is a voluntary process. Consequently, investors might have to step in and assess compliance themselves when seeking to invest or report on Taxonomy-aligned activities conducted by those companies.

The best way for investors to ensure compliance with DNSH qualitative criteria and to avoid adverse impacts related to human and labour rights, and corruption, in their Taxonomy-aligned investments is to carry out thorough due diligence.

Key features specifically for investors and other financial actors to consider when conducting DNSH and social safeguards due diligence in the context of the EU Taxonomy

1. Amount and credibility of available information. Investors might find it difficult to assess compliance when the information provided by companies is limited or incomplete, even after having requested it. The credibility or objectivity of such information might also pose a challenge. It is recommended that financial actors carrying out due diligence should rely on existing credible information sources, such as reports from international organisations, credible civil society and media, as well as established market data providers. Investors can also consult reports from national authorities or statements from National Contact Points (NCPs).⁴⁷
2. The principle of proportionality applies to investors and to the entity assessed. “The nature and extent of due diligence, such as the specific steps to be taken, should be appropriate to a particular situation and will be affected by factors such as the size of the enterprise, context of its operations, the specific recommendations in the OECD Guidelines, and the severity of its adverse impacts”. The size and nature of the financial institution will also affect the nature and extent of due diligence. For example, if an asset owner appoints an asset manager, the former should ensure that the latter has implemented the policies and procedures necessary to conduct due diligence.
3. The nature of the financial product. Due diligence might also be influenced by the nature and structure of a portfolio or product, as well as by the characteristics of a transaction and the nature of their clients (for corporate lending and securities underwriting) or of the issuer (for investors) – e.g., government or private entities. There are ex-ante and ex-post investment measures that might slightly change depending on the type of financial product, and the relationship with the underlying investee (see Table 11).

⁴⁷ See <https://mneguidelines.oecd.org/ncps/>

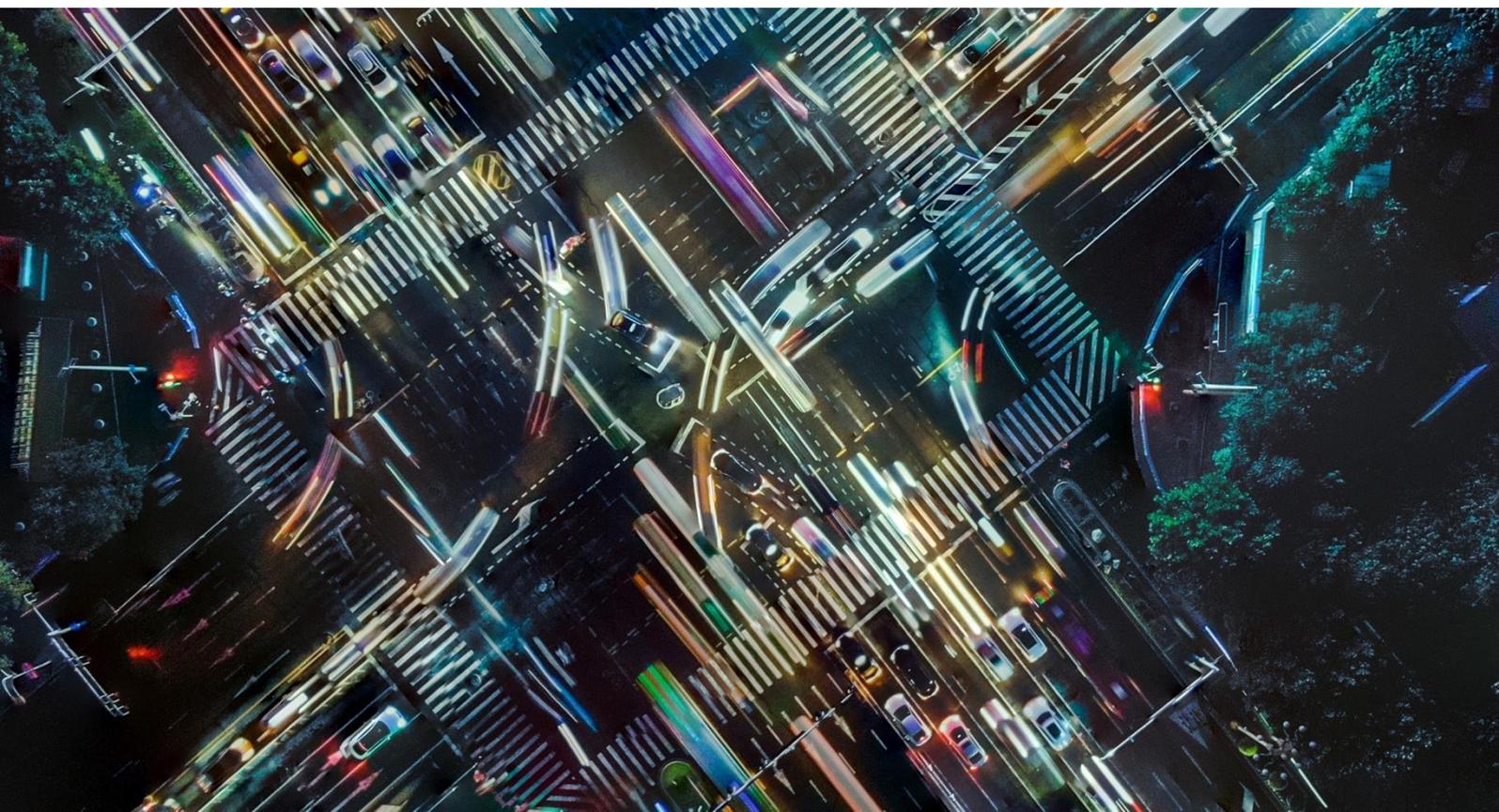


Table 11: Due diligence considerations for different investment types based on OECD Responsible Business conduct for institutional investors.

	Listed Equity		Fixed Income	Private equity, real estate, infrastructure ⁴⁸	
	Active	Passive	Corporate, Green/ Sustainable OR Government	Fund	Direct
Before investment	Conduct research to assess compliance with RBC (DNSH and minimum safeguards in the context of the Taxonomy), which includes identifying RBC risk, prioritising by severity. It might entail exchanging with companies.	Consider discussing taxonomy-alignment information needs and RBC risk expectations with index provider.	Conduct research to assess compliance and identify RBC risk. For green or sustainable bonds, ex-ante investment report on use of proceeds, including alignment to the Taxonomy. Recommend to follow EU GBS.	Limited Partner (LP): include RBC alignment and risk in due diligence on fund manager before making commitment to the fund. General Partner (GP): conduct research on individual companies before investment to identify RBC alignment and potential risk.	Conduct research to assess compliance and identify RBC risk.
After investment	Using a risk-based approach, screen the whole public markets portfolio (listed equities and bonds, active and passive) at regular intervals to identify RBC issues that have emerged. Identify and further assess high RBC risk companies within the portfolio through further engagement.	Using a risk-based approach, screen the market portfolio included in the index or investment product (listed equities and bonds, active and passive) at regular intervals to identify RBC issues that have emerged, and prioritise for follow-up.	Using a risk-based approach, screen the markets portfolio included in the index or investment product (listed equities and bonds, active and passive) at regular intervals to identify general RBC issues that have emerged and prioritise for follow up. For green or sustainable bonds, ex-post investment report, including alignment to the Taxonomy. Recommend to follow EU GBS.	LP: include RBC risk in ongoing monitoring of GP. GP: include RBC risk in ongoing monitoring of portfolio companies.	Include RBC risk in ongoing monitoring of investment.

4. Due diligence is primarily preventative. The purpose of due diligence is first and foremost to avoid causing or contributing to adverse impacts on people, the environment and society, and to prevent adverse impacts directly linked to operations, products or services through business relationships. When involvement in adverse impacts cannot be avoided, due diligence should enable enterprises to mitigate them, prevent their recurrence and, where relevant, remediate them. For more information on prevention and remediation, please see the OECD Due Diligence Guidelines for Responsible Business Conduct.⁴⁹

⁴⁸ Limited Partner: the asset owner or ultimate investor in a private equity, real estate or infrastructure fund. General Partner: the entity that manages the fund, and which selects companies or assets for investment and monitors the investments on an ongoing basis.

⁴⁹ OECD Guidelines for Responsible Business Conduct: <https://www.oecd.org/investment/due-diligence-guidance-for-responsible-business-conduct.htm>

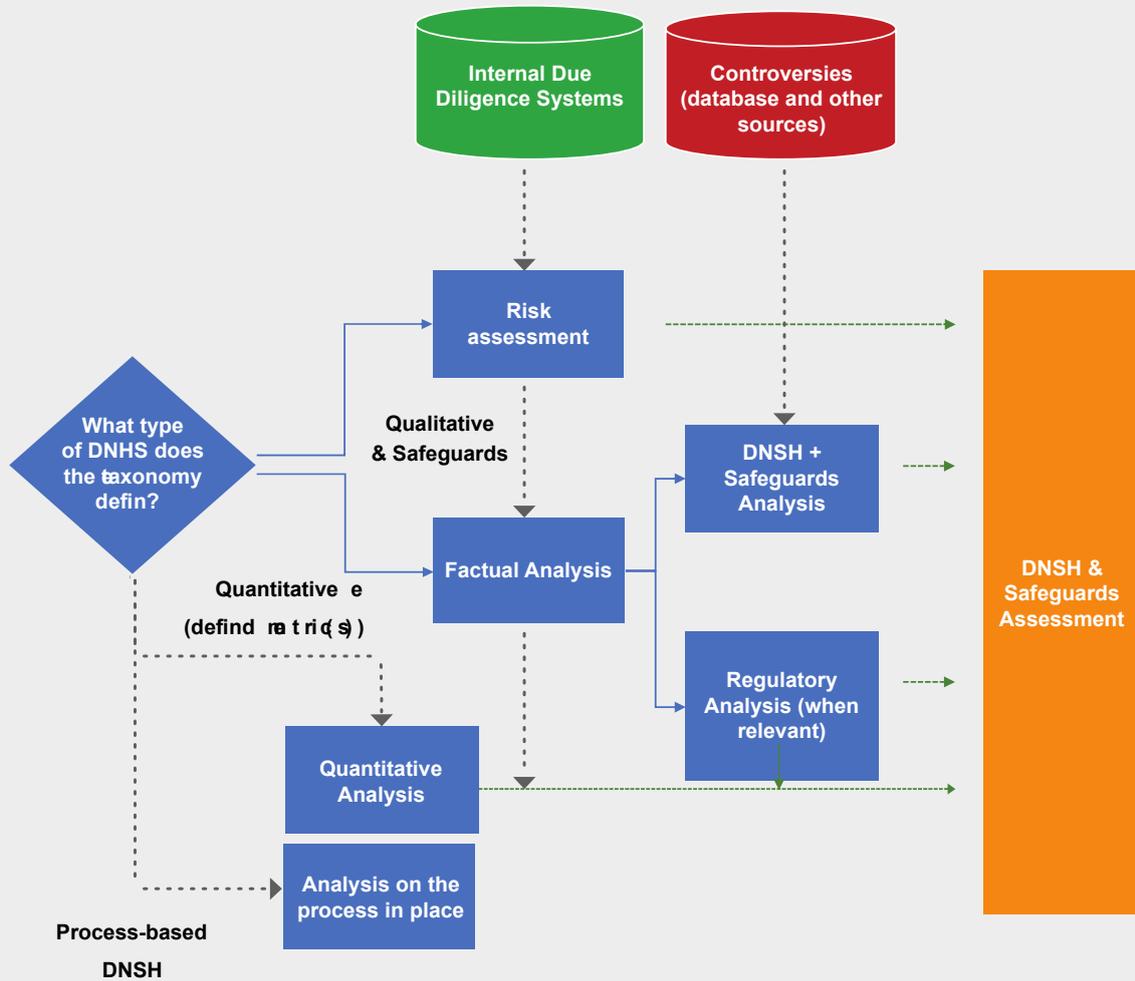
For example, in the context of corporate lending and securities underwriting, a preventative approach to adverse impacts may mean having strong ex-ante due diligence processes in place to avoid providing financing or securities underwriting services to client activities that cause, contribute to, or are linked to significant adverse RBC impacts.

5. DNSH covers qualitative, quantitative and process-based criteria. For an activity to qualify, it needs to meet any quantitative criteria included in the DNSH part of the EU Taxonomy. Process-based criteria require the investor or financial actor to verify that the company has set up the required process. For example, an investor assessing compliance with adaptation DNSH to mitigation activities should ask or verify if the company has:

- conducted a risk assessment; and
- developed a plan to respond to the risk assessment – published or not.

Qualitative criteria, though, like minimum safeguards, are harder to assess and require a judgement call from investors. It is recommended that investors then conduct thorough due diligence as described in this section to assess compliance with the DNSH criteria stipulated in the Taxonomy.

Figure 10: Guidance on applying the due diligence process to assess Taxonomy alignment



The TEG recommends that investors follow the due diligence recommendations of the OECD Guidelines for MNEs⁵⁰ to ensure compliance with qualitative DNSH and minimum safeguards. Investors that want to exhibit best practice, and not only for their Taxonomy-related investments, are encouraged to fully implement the recommendations for institutional investors extensively described in “Responsible business conduct for institutional investors: Key considerations for due diligence under the OECD Guidelines for Multinational Enterprises”, and, more broadly, by referring to the work done on RBC in the financial sector.

OECD Responsible Business Conduct for Institutional Investors⁵¹

Due diligence for institutional investors with regards to their overall responsible business conduct (RBC) may involve several practical steps as well as supporting measures to ensure it is effective:

- embedding RBC into relevant policies and management systems for investors;
- identifying actual and potential adverse impacts within investment portfolios and potential investments;
- as appropriate, using leverage to influence investee companies causing an adverse impact, to prevent or mitigate that impact;
- accounting for how adverse impacts are addressed, by (a) tracking performance of the investor’s own performance in managing RBC risks and impacts in its portfolio, and (b) communicating results, as appropriate;
- having processes in place to enable remediation in instances where an investor has caused or contributed to an adverse impact.

3.3.12 Sector classification

Eligibility under the Taxonomy should be assessed according to economic activity rather than sector or industry. The TEG recommendations are structured around the EU’s NACE (Nomenclature des Activités Économiques dans la Communauté Européenne) industry classification system, and the TEG has set technical screening criteria for economic activities within priority macro-sectors. This classification system was selected for its compatibility with EU Member State and international statistical frameworks and for its broad coverage of the economy.

Where a financial market participant needs to identify Taxonomy-aligned turnover, capex or opex, the technical screening criteria set out in the Technical Annex contain sector-level headings and associated NACE codes, on which assessment can be based.

NACE codes are designed to guide and assist companies and financial market participants. However, in some cases, the tests may be appropriately applied in a different NACE code to the one the TEG has identified. For example, the TEG has defined technical screening criteria for NACE 23.51 (Manufacture of Cement), but a company may attribute revenues to the end product using NACE 23.61 (Concrete Products). Further guidance on this is included in the Technical Annex.

The TEG recognises that NACE is not widely used by corporates or in the financial services industry. Alongside this report, the TEG is issuing a spreadsheet which contains mapping to some additional classification systems.

⁵⁰ See <https://www.oecd.org/corporate/mne/>

⁵¹ See <https://mneguidelines.oecd.org/RBC-for-Institutional-Investors.pdf>

3.3.13 Step-by-step example of how to assess a company or investment portfolio

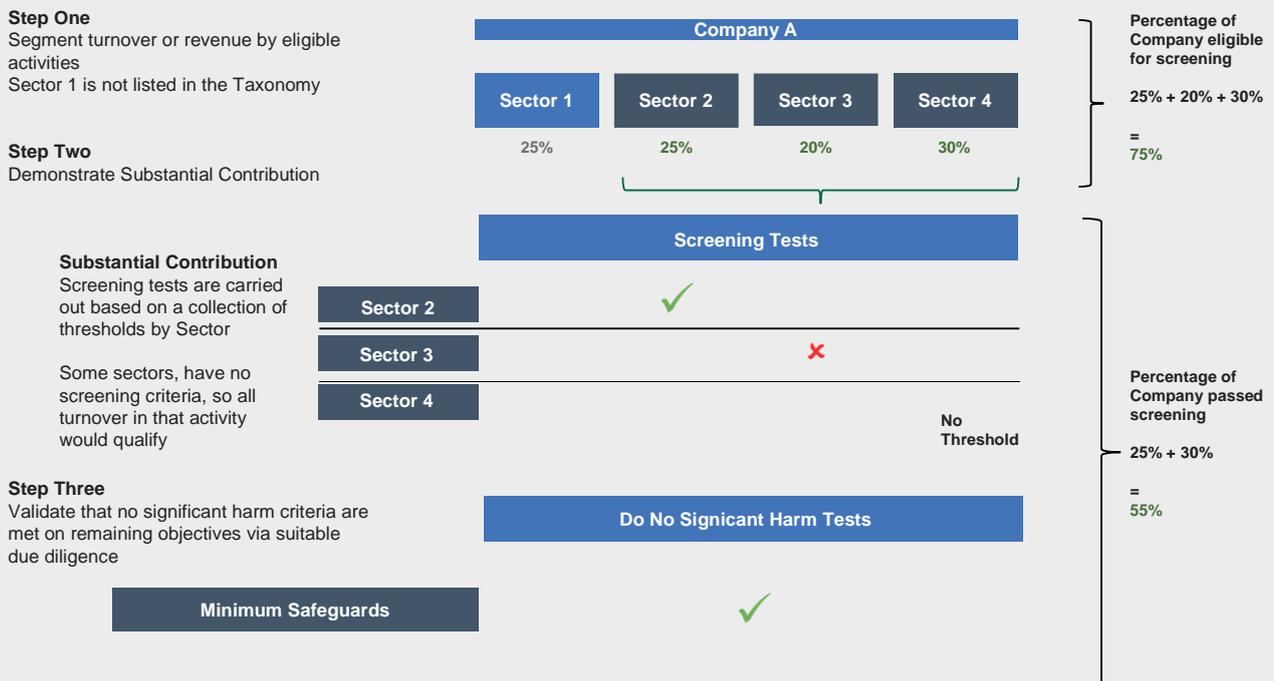
Eligibility under the Taxonomy should be assessed on an activity basis rather than by entity. A key part of a Taxonomy assessment includes defining what part of a corporate’s activity can be assessed as sustainable. This is relevant for investors in non-EU assets, or for those European companies that do not fall under the scope of NFRD.

Assessing a company’s Taxonomy alignment

According to the five-step process above:

- 1 Step one, the company’s activities need to be broken down by turnover (or revenue, when appropriate), or capex and, if relevant, opex. Typically, a company will report its turnover across a number of sub-sectors, as per the example below of Company A (See Figure 11). Company A has its activities split across sectors 1, 2, 3 and 4. Based on the TEG’s Taxonomy recommendations, only activities in sectors 2, 3 and 4 have technical screening criteria. These activities represent 75% of the company’s turnover.
- 2 The second step requires Company A to validate whether or not each economic activity meets the relevant substantial contribution criteria. In the worked example below, Company A demonstrates substantial contribution to its activities in sector 2. It does not meet the criteria in sector 3 and its activities in sector 4 have no threshold requirements and thus will pass. This means that all turnover associated with sectors 2 and 4 results in 55% of the company’s turnover being Taxonomy-aligned.
- 3 The third step requires the Company to validate that it does no significant harm to the other environmental objectives – these are a set of due diligence qualitative and quantitative tests. If Company A can demonstrate that it does no significant harm and, via step four, meets the minimum safeguards required, then all 55% of the turnover can be applied as Taxonomy-aligned.

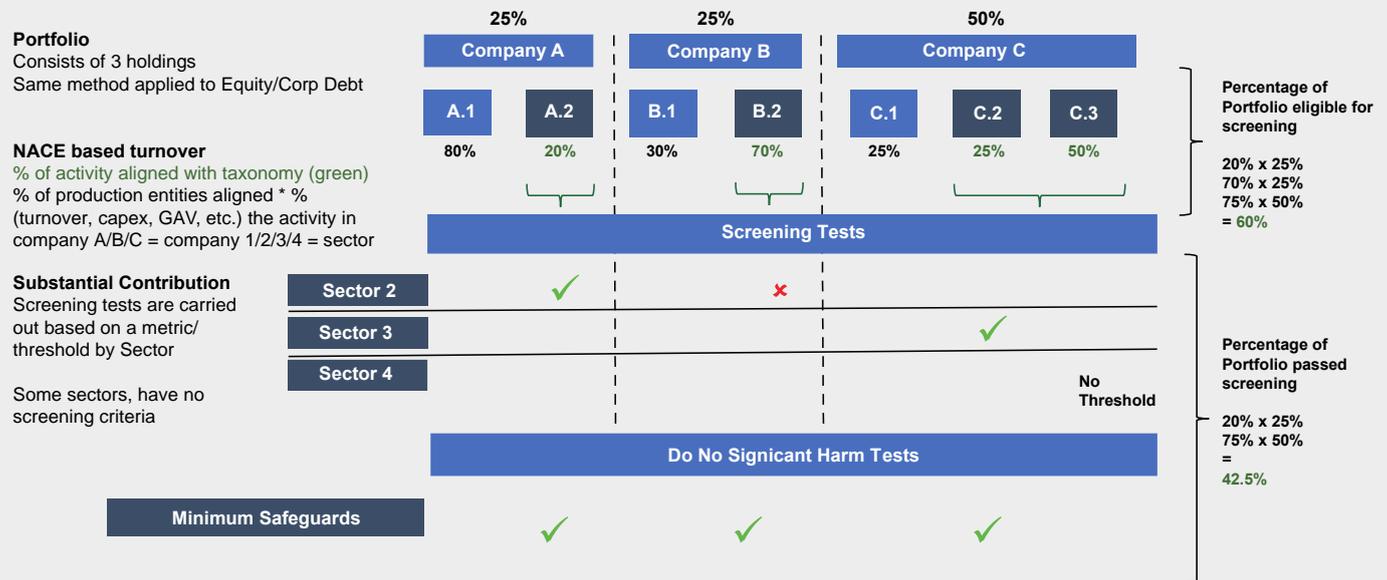
Figure 11: Assessing an individual company for Taxonomy alignment



Assessing a portfolio's Taxonomy alignment

Once relevant activities are identified in a company's portfolio, the overall portfolio's Taxonomy alignment can be calculated, as shown in the example in Figure 12: Assessing a portfolio for Taxonomy alignment – 1

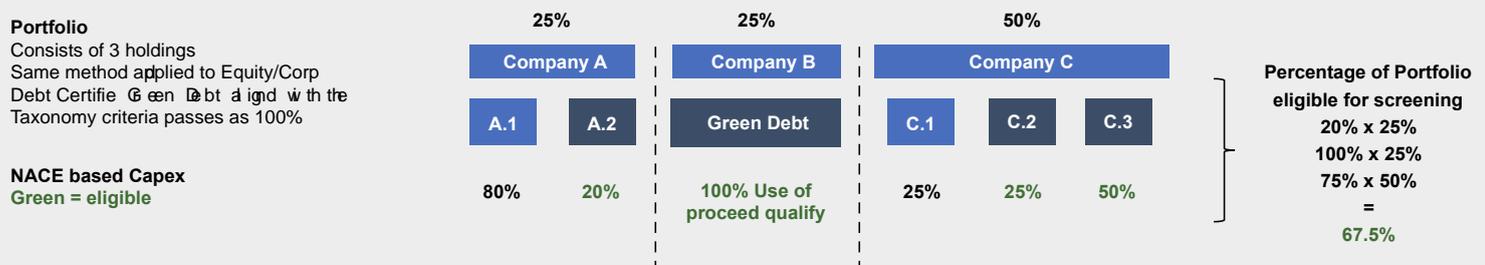
Figure 12: Assessing a portfolio for Taxonomy alignment – 1



The three-stock portfolio invests in companies A, B and C with weightings of 25:25:50, respectively. The activities of these companies are covered by sectors 1, 2, 3 and 4, with associated turnover attributed. However, only activities within sectors 2, 3 and 4 qualify for Taxonomy assessment.

If companies A, B and C have not yet disclosed their turnover that is Taxonomy-aligned, then activities in qualifying sectors would need to be assessed against the Taxonomy technical screening criteria. If they meet the substantial contribution criteria and demonstrate no significant harm to the other environment objectives, and respect minimum safeguards, then the turnover in each complying sector would qualify as Taxonomy-aligned. If they do not demonstrate substantial contribution or there is insufficient data to verify whether or not they meet the required standards, then they need to be excluded, as per Company B. If the asset held in the portfolio is 100% Taxonomy-aligned, then the full weighting of the green debt would qualify but needs to be reported separately to turnover-based Taxonomy alignment or within a capex-based report, as per Figure 13. If the financial market participant invests in equity and debt from the same company, or in corporate and green bonds, care must be taken to explain and distinguish any potential double counting.

Figure 13: Assessing a portfolio for Taxonomy alignment – 2



4 Looking forward

4.1 TOWARDS A FULLY REALISED TAXONOMY

The TEG considers that a fully realised Taxonomy should incorporate the following additional dimensions (i.e., in addition to the aspects already developed in detail):

- Social objectives, in addition to environmental objectives, to identify substantial contributions in addition to minimum safeguards;
- Technical screening criteria for significant levels of harm to environmental objectives. These are the so-called 'polluting' or 'brown' Taxonomy criteria. TEG considers that a different word to 'brown' is needed to describe activities that are significantly harmful to environmental objectives. If Taxonomies are to be harmonised internationally, the terms used will need to be appropriate to different cultural contexts.

The Taxonomy Regulation includes future reviews by the European Commission on the potential inclusion of social criteria and so-called 'brown' criteria in the Taxonomy.

On the inclusion of 'brown' criteria for economic activity performance in relation to environmental objectives, the TEG presents its considerations in the following section.

4.1.1 Explaining performance improvements in environmentally harmful activities

Incorporating 'brown' criteria into the Taxonomy will greatly assist companies and other issuers in explaining incremental improvements in their activities and receiving some positive recognition in the market.

In the absence of clear performance standards, market practice has been to recognise incremental improvements in environmental performance of existing activities as 'green' or 'environmentally friendly'. The TEG's view is that this is not a robust approach for demonstrating that even modest climate change mitigation and adaptation objectives have been met. For an economic activity to be Taxonomy-aligned, it should demonstrate consistency with environmental objectives, which are the basis of the TEG's technical screening criteria.

Incremental improvements can be positive and may be captured in other sustainability reporting requirements, but they are not considered aligned for the Taxonomy. Identifying an environmentally harmful economic activity as partially green carries significant risks, such as leading the market to believe that any performance improvement is good enough even if the underlying activity and its potential performance is ultimately inconsistent with environmental goals over the medium to long term.

Despite the risks, providing incentives for investments that reduce environmental harm is still important for achieving environmental goals and is an important objective for the Taxonomy design. This is where so-called 'brown' Taxonomy criteria can play an important role.

By establishing 'brown' criteria, the Taxonomy would effectively create three performance levels within the Taxonomy structure: substantial contribution (green), significant harm (brown, or perhaps red) and a middle category of neither substantial contribution nor significant harm.

The benefit of ‘brown’ Taxonomy thresholds is that they can be used to clearly signal when improvements to existing assets make a substantial difference to the environmental performance of an activity or asset relative to environmental objectives. For example, a company could explain that finance or investment decisions enabled it to move an activity from a significantly harmful level of performance to an acceptable level of harm, at least for a time, relative to environmental goals.

This approach of describing improvements would also encourage companies or other issuers to disclose their strategy and financing plans and gradually move their activity performance from ‘brown’ to no SC/DNSH to ‘green’. The ability to communicate in these terms would clarify the intent of those with transition plans for their sector or individual companies.

For activities that rely on technologies that are highly unlikely to reach substantial contribution thresholds, the lack of ability to reach a green level of performance could be clearly explained, and there would still be some positive recognition in the market for reducing the environmental harm performed by an activity in the short term. Note that criteria for significantly harmful performance would converge and align with substantial contribution thresholds over time.

Developing this part of the Taxonomy, and more clearly creating the three levels of Taxonomy performance, would eliminate the need for additional shades of green in the Taxonomy, even for the most ardent supporter of incentives for incremental reductions in environmental impacts.

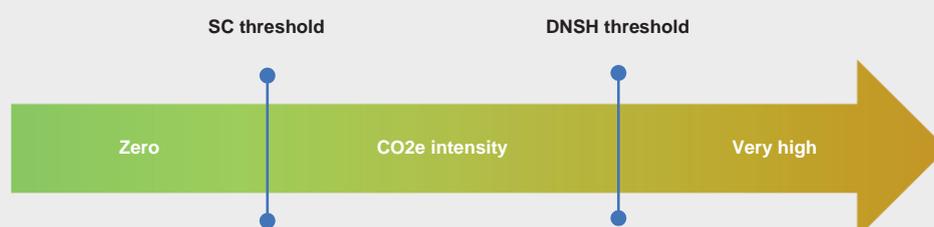
It is important to note that not all investors and financiers will seek substantial contribution across all investments in their portfolios, but most will want to reduce and eliminate significant harm to environmental objectives from their portfolios or activities over time.

Finally, the development of ‘brown criteria’ will assist in the identification of further activities that do not have a significant environmental impact (and therefore no ‘brown criteria’), which will assist investors in understanding their environmental performance.

TEG recommendations: criteria on DNSH to climate change mitigation

In the current TEG recommendations, several ‘Do No Significant Harm’ (DNSH) to climate change mitigation criteria are quantitative, performance-based metrics. The use of this form of criteria reflects the fact that in some sectors, process-based, risk management methodologies will not substantially influence whether an economy activity is in fact significantly harming an environmental objective. For example, in the energy sector, no risk management process can limit emissions to a suitable level if a facility is using unabated fossil fuel-based technology and its general or optimal performance is inconsistent with environmental objectives. As a result, the energy, manufacturing and transport sectors have quantitative performance-based metrics for DNSH (see Figure 14 for an example of SC and DNSH criteria). Sectors in which the underlying activity can provide a substantial benefit to the environment through standard operation are suitable for process or risk management-based criteria. In the TEG’s Taxonomy recommendations, these include agriculture/forestry, waste/sewage/water, and information technology.

Figure: 14 Example of quantitative SC and DNSH criteria⁵²



The DNSH to climate change mitigation criteria were developed with the intention of accompanying substantial contribution criteria for other environmental objectives – particularly, climate change adaptation. It may also be possible to use these quantitative, performance-based criteria in the energy, manufacturing and transport sectors as the thresholds for future ‘brown’ technical screening criteria. The TEG recommends that further work is conducted to validate the approach before the DNSH criteria are used as de facto brown thresholds.

⁵² Note that both the SC and DNSH thresholds would be expected to reduce over time. This example for CO2e intensity shows three categories for economic activities.

4.2 COMMON DESIGN PRINCIPLES FOR INTERNATIONAL TAXONOMY HARMONISATION

The EU Member States are the first countries in the world to create a cross-market legal obligation, but the EU Taxonomy should be seen as part of a global movement towards environmental performance reporting standardisation, building from widespread use of taxonomies in the public and private sectors.⁵³ China has been using taxonomies as regulatory guidance for green bond issuance⁵⁴ and for green credit guidelines for banks. Canada,⁵⁵ Malaysia,⁵⁶ and the UAE⁵⁷ have all started to explore taxonomies, with a number of other markets at early stages of development. These taxonomies will not be identical to the EU Taxonomy and may vary depending on the specificities of the local market.

At the international level, the EU has convened an International Platform on Sustainable Finance,⁵⁸ which will encourage dialogue and, where appropriate, coordination on development of taxonomies. The Network for Greening the Financial System's first comprehensive report recommended that members support the development of taxonomies.⁵⁹ The ISO is developing a taxonomy for evaluating environmental performance of green debt instruments.⁶⁰

A common design approach between international taxonomies would enable mutual recognition of Taxonomy frameworks and support market understanding of the environmental performance of economic activities and investments across markets. Below, the TEG sets out four minimum design principles for Taxonomy development to support future harmonisation:

Table 12: Design principles for taxonomy design

1. Specific environmental goal(s)

Taxonomies should specify clear environmental goals and explain their alignment with international environmental agreements (where relevant).

For example, climate change mitigation goals should be consistent with the Paris Climate Agreement goal of well below 2 degrees and approaching 1.5 degrees. The EU's contribution to the Paris Agreement is net-zero emissions by 2050, and this is the basis of the climate mitigation part of the EU Taxonomy.

Taxonomies that target other emissions levels or time frames will have different interpretations of what could be considered green. While each jurisdiction has the right to do this, market understanding of goals that are not aligned with the Paris Agreement and other internationally agreed environmental objectives is likely to become confused. The TEG recommends that other taxonomies specify both the climate / environmental policy objectives and targets (e.g. GHG emissions) and associated time frames (for example, net-zero emissions by 2050). Transparent environmental goals will help users of different taxonomies to calibrate the likely environmental performance of covered economic activities.

The goal(s) should be clearly reflected in the performance thresholds (see point 4).

2. A list of economic activities

A clear sector and economic activity classification scheme is necessary as the basis for a taxonomy. The EU uses NACE, but other classification schemes can be used. International translation between sector classification systems should be developed to facilitate their use by all parties.

3. Performance metrics

In order to assess whether the environmental performance of an activity is consistent with environmental goals, clear and common measurement metrics are needed. These metrics should incorporate life-cycle impacts.

4. Performance thresholds for each economic activity

Performance thresholds (which here are understood to be either of a quantitative or qualitative nature) are necessary for each economic activity included in the Taxonomy and for each metric. Without them, there is no way to tell if an activity is consistent with environmental objectives and if therefore 'green'.

Performance thresholds should differentiate between activities which reduce harm (for example, incremental emissions reductions) and those which are consistent with the goals of the Taxonomy. Describing activities which incrementally reduce harm as 'green' risks misleading markets.

53 E.g., MDB-IDFC Common Principles for Climate Finance Tracking, Climate Bonds Initiative Taxonomy.

54 Green Industries Guidance Catalogue 2019 (website currently under maintenance) and Green Credit Guideline issued by China Banking Regulatory Commission (now China Banking and Insurance Regulatory Commission), 2012/11/29 http://www.gov.cn/govweb/gongbao/content/2012/content_2163593.htm

55 <https://www.scc.ca/en/standards/notices-of-intent/csa/sustainable-finance-defining-green-taxonomy-for-canada>

56 <http://www.bnm.gov.my/index.php?ch=57&pg=137&ac=892&bb=file>

57 <https://www.adgm.com/-/media/project/adgm/adgm-fsra/abu-dhabi-sustainable-finance-guiding-principles.pdf?la=en&hash=AA71706CC81EACB129315AA3CEC474D5>

58 This is different from the Platform on Sustainable Finance created under the Taxonomy Regulation. https://ec.europa.eu/info/business-economy-euro/banking-and-finance/green-finance_en#ipsf

59 See <https://www.ngfs.net/en/executive-summary-call-action>

60 See <https://www.iso.org/standard/75559.html>

4.3 RECOMMENDATIONS FOR THE PLATFORM ON SUSTAINABLE FINANCE

4.3.1 Role of the Platform

As set out in the Taxonomy Regulation, the European Commission is working to establish a Platform on Sustainable Finance to provide technical assistance and recommendations on technical screening criteria, most notably for extending the Taxonomy to environmental objectives 3–6.

4.3.2 Call for feedback

During the summer consultation, 577 individual stakeholders responded to the topic “Future developments of the Taxonomy”. Of these respondents, over 60% were individuals responding in a private capacity, with the remainder representing business (general), business (finance), civil society and public authorities. No responses were received from academia.

The questions covered three topics:

- 1 What economic activities that can make a substantial contribution to the climate change mitigation objective should be considered next for the Taxonomy?
- 2 Should any of the economic activities included in the technical report be reconsidered as regards their inclusion in the Taxonomy?
- 3 For what economic activities should an illustrative template for substantial contribution to climate change adaptation be developed next?

The questions were designed to provide guidance on which areas of the Taxonomy should be prioritised for development. Technical feedback on existing screening criteria or TEG analysis was sought through other questions.

When considering additional activities that can substantially contribute to climate change mitigation, the majority of stakeholders indicated that the Taxonomy should include further economic activities from within selected NACE macro-sectors, rather than expanding the sector coverage.

The most common request was an extension of the activities within NACE H (Transportation and Storage) to include assessment of maritime transport and aviation, which the TEG agrees should be prioritised. Stakeholders also requested the extension of the scope of forestry activities. The TEG has included one additional activity, conservation forestry, in response to stakeholder feedback.

Stakeholders also provided commentary on topics for which the TEG had already undertaken technical work. These could be grouped broadly as follows:

- Topics on which the TEG had already undertaken a full or partial technical assessment. This category included nuclear energy, natural gas, incineration of waste, and livestock production. In these cases, where relevant technical insights could be identified on a sectoral level, these have been included in the sectoral analysis.
- Request for assessment of topics already included in the Taxonomy – for example, carbon capture and storage (CCS). This may reflect the fact that CCS is captured in NACE E (Water Supply; Sewerage; Waste Management and Remediation Activities) and stakeholders may have expected to see it in energy production.

4.3.3 Ongoing development of technical screening criteria

Some technical screening criteria proposed by the TEG in this report will require periodic revision, and others may require further development beyond the terms of the extension of the TEG. The Platform would advise on the progressive development and update of the Taxonomy, including identifying additional activities for future inclusion and aiding the Commission in contextualising and interpreting stakeholder feedback. In addition, the platform is envisaged to provide ongoing advice on the impacts of the Taxonomy criteria and monitoring capital flows towards sustainable finance objectives.

The TEG made detailed recommendations on the functioning and tasks of this group in the June report. These are not replicated here.

Below, we comment on areas where the Platform may wish to expand or deepen the analysis conducted by the TEG, beyond the areas already committed to in the TR. Some additional recommendations relate to the interaction of the Platform with company and investor stakeholders, including SMEs:

- The platform should work towards producing technical screening criteria that determine whether economic activities provide broader climate resilience benefits to enable counting of all revenue and expenditure for adapted activities making a substantial systemic contribution to climate change adaptation goals. This will require:
 - Expansion of the Taxonomy to other sectors.
 - Complete DNSH assessments for economic activities that can substantially contribute to climate change adaptation, where not already considered by the TEG.
- Technical screening criteria in the Taxonomy will require regular review to ensure consistency with the EU's climate change and environmental objectives. The planned criteria review cycle should be transparent to the market and advised well in advance, to ensure a predictable review cycle for Taxonomy criteria.
- Company disclosure obligations under the NFRD should be clarified to include the distinction and disclosure of alignment with both enabling and transition activities (in relation to the climate change mitigation objective).
- The NFRD should also include obligations for companies to disclose their Taxonomy alignment by environmental objective, consistent with investor disclosure obligations.
- For ease of translation to alternative sector classification systems, translations to widely used classification systems are provided in the annexes to this report. In order to facilitate use by all interested parties, the TEG recommends that tables matching proprietary classifications with NACE codes should be published on relevant Platform for Sustainable Finance website(s) and should be updated regularly.
- Ensure that future Taxonomy criteria review and design is a dynamic, flexible and inclusive process.
- Further develop the digital Taxonomy tools to enable integration of Taxonomy criteria and performance data into industry data systems and reporting.
- Provide support to implement and navigate the Taxonomy for investors and companies (particularly SMEs) and public-sector stakeholders – e.g., illustrative templates for all sectors, and capacity building. This can be achieved by enabling existing investor platforms and initiatives to educate and support their own members.
- Actively pursue international harmonisation of taxonomies, considering the common design principles for taxonomy harmonisation in this report, in particular, through the EC-led international platform on sustainable finance and the International Organization for Standardization (ISO).
- Monitor implementation of the Taxonomy and establish practical feedback pathways for users to ensure that the Taxonomy is achieving its stated aims.
- Establish a robust framework for verification of Taxonomy-related disclosures, in close cooperation with the centralised accreditation scheme for external verifiers that will support the Green Bond Standard.

5 Summary tables of the Taxonomy

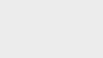
5.1 SUBSTANTIAL CONTRIBUTION TO CLIMATE CHANGE MITIGATION

A table is provided for economic activities that make a substantial contribution to climate change mitigation, which includes an indication of whether the technical screening criteria relate to the performance of the economic activity itself or whether the activity is an enabling activity. Economic activities that are considered transitional are indicated as such. This represents the TEG's best judgement but we note that this categorisation may be open to interpretation in some cases. There is also a table for activities that make a substantial contribution to climate change adaptation.

Technical screening criteria are provided for economic activities within the following sectors:

Classification		Environmental Contributions							
NACE Macro-sector	NACE Activity	1. Climate change mitigation (Substantial Contribution)			2. Climate change adaptation (DNSH)	3. Water (DNSH)	4. Circular economy (DNSH)	5. Pollution (DNSH)	6. Ecosystems (DNSH)
		Own performance	Enabling activities	Transitional activities					
	Afforestation	✓			✓	✓		✓	✓
	Rehabilitation, Reforestation	✓			✓	✓		✓	✓
	Reforestation	✓			✓	✓		✓	✓
	Existing forest management	✓			✓	✓		✓	✓
	Conservation forest	✓			✓	✓		✓	✓
	Growing of perennial crops	✓		✓	✓	✓	✓	✓	✓
	Growing of non-perennial crops	✓		✓	✓	✓	✓	✓	✓
	Livestock production	✓		✓	✓	✓	✓	✓	✓
	Manufacture of low carbon technologies		✓		✓	✓	✓	✓	✓
	Manufacture of Cement	✓		✓	✓	✓	✓	✓	✓
	Manufacture of Aluminium	✓		✓	✓	✓	✓	✓	✓
	Manufacture of Iron and Steel	✓		✓	✓	✓	✓	✓	✓
	Manufacture of Hydrogen	✓			✓	✓	✓	✓	✓
	Manufacture of other inorganic basic chemicals - Manufacture of carbon black	✓		✓	✓	✓	✓	✓	✓
	Manufacture of other inorganic basic chemicals - Manufacture of disodium carbonate (soda ash)	✓		✓	✓	✓	✓	✓	✓

	Manufacture of other inorganic basic chemicals - Manufacture of chlorine	✓		✓	✓	✓	✓	✓	✓
	Manufacture of other organic basic chemicals	✓		✓	✓	✓	✓	✓	✓
	Manufacture of fertilizers and nitrogen compounds	✓		✓	✓	✓	✓	✓	✓
	Manufacture of plastics in primary form	✓		✓	✓	✓	✓	✓	✓
	Production of Electricity from Solar PV	✓			✓		✓		✓
	Production of Electricity from Concentrated Solar Power	✓			✓	✓	✓		✓
	Production of Electricity from Wind Power	✓			✓	✓	✓		✓
	Production of Electricity from Ocean Energy	✓			✓		✓	✓	✓
	Production of Electricity from Hydropower	✓		✓	✓	✓		✓	✓
	Production of Electricity from Geothermal	✓		✓	✓	✓		✓	✓
	Production of Electricity from Gas (not exclusive to natural gas)	✓		✓	✓	✓		✓	✓
	Production of Electricity from Bioenergy (Biomass, Biogas and Biofuels)	✓		✓	✓	✓	✓	✓	✓
	Transmission and Distribution of Electricity	✓	✓		✓	✓	✓	✓	✓
	Storage of Electricity		✓		✓		✓		✓
	Storage of Thermal Energy		✓		✓		✓		✓
	Storage of Hydrogen		✓		✓		✓		✓
	Manufacture of Biogas or Biofuels	✓		✓	✓	✓	✓	✓	✓
	Retrofit of Gas Transmission and Distribution Networks	✓			✓	✓	✓	✓	✓
	District Heating/ Cooling Distribution	✓			✓	✓		✓	✓
	Installation and operation of Electric Heat Pumps	✓			✓	✓			

	Cogeneration of Heat/cool and Power from Concentrated Solar Power	✓			✓	✓	✓		✓
	Cogeneration of Heat/Cool and Power from Geothermal Energy	✓		✓	✓	✓		✓	✓
	Cogeneration of Heat/Cool and Power from Gas (not exclusive to natural gas)	✓		✓	✓	✓		✓	✓
	Cogeneration of Heat/Cool and Power from Bioenergy (Biomass, Biogas, Biofuels)	✓		✓	✓	✓	✓	✓	✓
	Production of Heat/cool from Concentrated Solar Power	✓			✓	✓	✓		✓
	Production of Heat/cool from Geothermal	✓		✓	✓	✓		✓	✓
	Production of Heat/Cool from Gas (not exclusive to natural gas)	✓		✓	✓	✓		✓	✓
	Production of Heat/cool from Bioenergy (Biomass, Biogas, Biofuels)	✓		✓	✓	✓	✓	✓	✓
	Production of Heat/cool using Waste Heat	✓			✓		✓	✓	✓
	Water collection, treatment and supply	✓			✓	✓			✓
	Centralized wastewater treatment	✓			✓			✓	✓
	Anaerobic Digestion of Sewage sludge	✓			✓			✓	
	Separate collection and transport of non-hazardous waste in source segregated fractions	✓			✓		✓	✓	
	Anaerobic digestion of bio-waste	✓			✓			✓	
	Composting of bio-waste	✓			✓			✓	
	Material recovery from non-hazardous waste	✓			✓				
	Landfill gas capture and utilization	✓			✓			✓	
	Direct Air Capture of CO2		✓		✓	✓		✓	✓
	Capture of anthropogenic emissions		✓		✓	✓	✓	✓	✓
	Transport of CO2		✓		✓	✓		✓	✓

	Permanent Sequestration of captured CO2	✓			✓	✓		✓	✓
	Passenger Rail Transport (Inter-urban)	✓		✓	✓		✓	✓	
	Freight Rail Transport	✓		✓	✓		✓	✓	
	Public transport	✓		✓	✓		✓	✓	
	Infrastructure for low carbon transport (land transport)		✓		✓	✓	✓	✓	✓
	Passenger cars and commercial vehicles	✓		✓	✓		✓	✓	
	Freight transport services by road	✓		✓	✓		✓	✓	
	Interurban scheduled road transport	✓		✓	✓		✓	✓	
	Inland passenger water transport	✓		✓	✓	✓	✓	✓	✓
	Inland freight water transport	✓		✓	✓	✓	✓	✓	✓
	Infrastructure for low carbon transport (water transport)		✓		✓	✓	✓	✓	✓
	Construction of new buildings	✓			✓	✓	✓	✓	✓
	Building renovation	✓		✓	✓	✓	✓	✓	✓
	Individual renovation measures, installation of renewables on-site and professional, scientific and technical activities	✓			✓			✓	
	Acquisition and ownership of buildings	✓		✓	✓			✓	✓
	Data processing, hosting and related activities	✓		✓	✓		✓	✓	
	Data-driven climate change monitoring solutions		✓		✓				

5.2 SUBSTANTIAL CONTRIBUTION TO CLIMATE CHANGE ADAPTATION

Classification		Environmental Contributions					
NACE Macrosector	NACE Activity	1. Climate change mitigation (DNSH)	2. Climate change adaptation (Substantial Contribution)	3. Water (DNSH)	4. Circular economy (DNSH)	5. Pollution (DNSH)	6. Ecosystems (DNSH)
	Afforestation	✓	✓	✓		✓	✓
	Rehabilitation, Reforestation	✓	✓	✓		✓	✓
	Reforestation	✓	✓	✓		✓	✓
	Existing forest management	✓	✓	✓		✓	✓
	Conservation forest	✓	✓	✓		✓	✓
	Growing of perennial crops	✓	✓	✓	✓	✓	✓
	Growing of non-perennial crops	✓	✓	✓	✓	✓	✓
	Livestock production	✓	✓	✓	✓	✓	✓
	Manufacture of low carbon technologies	✓	✓	✓	✓	✓	✓
	Manufacture of Cement	✓	✓	✓	✓	✓	✓
	Manufacture of Aluminium	✓	✓	✓	✓	✓	✓
	Manufacture of Iron and Steel	✓	✓	✓	✓	✓	✓
	Manufacture of Hydrogen	✓	✓	✓	✓	✓	✓
	Manufacture of other inorganic basic chemicals - Manufacture of carbon black	✓	✓	✓	✓	✓	✓
	Manufacture of other inorganic basic chemicals - Manufacture of disodium carbonate (soda ash)	✓	✓	✓	✓	✓	✓
	Manufacture of other inorganic basic chemicals - Manufacture of chlorine	✓	✓	✓	✓	✓	✓
	Manufacture of other organic basic chemicals	✓	✓	✓	✓	✓	✓
	Manufacture of fertilizers and nitrogen compounds	✓	✓	✓	✓	✓	✓

	Manufacture of plastics in primary form	✓	✓	✓	✓	✓	✓
	Production of Electricity from Solar PV		✓		✓		✓
	Production of Electricity from Concentrated Solar Power	✓	✓	✓	✓		✓
	Production of Electricity from Wind Power		✓	✓	✓		✓
	Production of Electricity from Ocean Energy		✓		✓	✓	✓
	Production of Electricity from Hydropower	✓	✓	✓		✓	✓
	Production of Electricity from Geothermal	✓	✓	✓		✓	✓
	Production of Electricity from Gas (not exclusive to natural gas)	✓	✓	✓		✓	✓
	Production of Electricity from Bioenergy (Biomass, Biogas and Biofuels)	✓	✓	✓	✓	✓	✓
	Transmission and Distribution of Electricity	✓	✓	✓	✓	✓	✓
	Storage of Electricity		✓		✓		✓
	Storage of Thermal Energy		✓		✓		✓
	Storage of Hydrogen		✓		✓		✓
	Manufacture of Biogas or Biofuels	✓	✓	✓	✓	✓	✓
	Retrofit of Gas Transmission and Distribution Networks	✓	✓	✓	✓	✓	✓
	District Heating/ Cooling Distribution	✓	✓	✓		✓	✓
	Installation and operation of Electric Heat Pumps		✓	✓			

	Cogeneration of Heat/cool and Power from Concentrated Solar Power		✓	✓	✓		✓
	Cogeneration of Heat/Cool and Power from Geothermal Energy	✓	✓	✓		✓	✓
	Cogeneration of Heat/Cool and Power from Gas (not exclusive to natural gas)	✓	✓	✓	✓	✓	✓
	Cogeneration of Heat/Cool and Power from Bioenergy (Biomass, Biogas, Biofuels)	✓	✓	✓	✓	✓	✓
	Production of Heat/cool from Concentrated Solar Power		✓	✓	✓		✓
	Production of Heat/cool from Geothermal	✓	✓	✓		✓	✓
	Production of Heat/Cool from Gas Combustion	✓	✓	✓		✓	✓
	Production of Heat/cool from Bioenergy (Biomass, Biogas, Biofuels)	✓	✓	✓	✓	✓	✓
	Production of Heat/cool using Waste Heat		✓		✓	✓	✓
	Water collection, treatment and supply		✓	✓			✓
	Centralized wastewater treatment		✓			✓	✓
	Anaerobic digestion of sewage sludge	✓	✓			✓	
	Separate collection and transport of non-hazardous waste in source segregated fractions		✓		✓	✓	
	Anaerobic digestion of bio-waste	✓	✓			✓	
	Composting of bio-waste		✓			✓	
	Material recovery from non-hazardous waste	✓	✓				

	Landfill gas capture and utilization	✓	✓			✓	
	Direct Air Capture of CO2		✓	✓		✓	✓
	Capture of anthropogenic emissions	✓	✓	✓	✓	✓	✓
	Transport of CO2	✓	✓	✓		✓	✓
	Permanent Sequestration of captured CO2	✓	✓	✓		✓	✓
	Passenger Rail Transport (Interurban)	✓	✓		✓	✓	
	Freight Rail Transport	✓	✓		✓	✓	
	Public transport	✓	✓		✓	✓	
	Infrastructure for low carbon transport (land transport)	✓	✓	✓	✓	✓	✓
	Passenger cars and commercial vehicles	✓	✓		✓	✓	
	Freight transport services by road	✓	✓		✓	✓	
	Interurban scheduled road transport	✓	✓		✓	✓	
	Inland passenger water transport	✓	✓	✓	✓	✓	✓
	Inland freight water transport	✓	✓	✓	✓	✓	✓
	Infrastructure for low carbon transport (water transport)	✓	✓	✓	✓	✓	✓
	Construction of new buildings	✓	✓	✓	✓	✓	✓
	Building renovation	✓	✓	✓	✓	✓	✓
	Non-life insurance		✓				
	Engineering activities and related technical consultancy dedicated to adaptation to climate change		✓				

6 Acknowledgements

Members of the Technical Expert Group are listed below. Taxonomy Working Group members are in bold.

Organisation	Name
AIG Europe	Dawn SLEVIN ⁷
Allianz Global Investors	Steffen HOERTER
Bloomberg	Nadia HUMPHREYS ⁸
BNP Paribas asset management	Helena VIÑES FIESTAS
Borsa Italiana	Sara LOVISOLO
Carbone 4	Jean-Yves WILMOTTE
Cassa Depositi e Prestiti S.p.A.	Pierfrancesco LATINI
CDP (Carbon Disclosure Project)	Nico FETTES
Climate Bond Initiative	Sean KIDNEY
EIT Climate KIC	Sandrine DIXSON-DECLEVE
EACB	Tanguy CLAQUIN
EFFAS	José Luis BLASCO
EnBW AG	Thomas KUSTERER
Eurelectric	Jesús MARTÍNEZ PÉREZ
Finance Watch	Thierry PHILIPPONNAT ⁹
Green and Sustainable Finance Cluster Germany	Karsten LOEFFLER
GRI (Global Reporting Initiative)	Eszter VITORINO
ICMA	Nicolas PFAFF
KfW Bankengruppe	Karl Ludwig BROCKMANN
Luxembourg Stock Exchange	Paula REDONDO PEREIRA ¹¹
Mirova	Manuel COESLIER
MSCI	Veronique MENO
Nordea	Aila AHO
PRI	Nathan FABIAN (Rapporteur - Taxonomy)
RICS ¹²	Ursula HARTENBERGER ¹³
SCOR	Michèle LACROIX
SEB	Marie BAUMGARTS
Swiss Re Ltd	Claudia BOLLI
Thomson Reuters	Elena PHILIPOVA
Unilever	Michel PINTO
WiseEuropa	Maciej BUKOWSKI
WWF	Jochen KRIMPHOFF
	Andreas HOEPNER ¹⁴
	Brenda KRAMER ¹⁵
	Paolo MASONI ¹⁶

⁰⁵ Until 31 December 2019.

⁰⁸ Replacing Curtis Ravenel

⁰⁹ Replacing Ludovic Suttor Sorel, Nina Lazic and Mireille Martini

¹⁰ Until Summer 2019.

¹¹ Replacing Jane Wilkinson & Flavia Micilotta

¹² Represented by Fabrizio

¹³ Replacing Zsolt Toth

¹⁴ Appointed in a personal capacity

¹⁵ Appointed as a representative of a common interest shared by stakeholders

¹⁶ Appointed in a personal capacity

Directly invited members

European Banking Authority	Pilar Gutiérrez, Piers Haben, Mira Lamriben, Slavka Eley
European Central Bank	Ana Sofia Melo , Fabio Tamburrini
European Insurance and Occupational Pensions Authority	Lázaro Cuesta Barberá , Marie Scholer
European Investment Bank	Eila Kreivi, Aldo Romani, Nancy Saich , Peter Anderson , Dominika Rosolowska, Jean-Luc Filippini, Cinzia Losenno
European Securities Market Authority	ESMA Roxana de Carvalho and Louise Waller
European Environment Agency	Andreas Barkman , Stefan Speck

Directly invited observers

European Bank for Reconstruction and Development	Carel Cronenberg
Organisation for Economic Cooperation and Development	Simon Buckle, Mireille MARTINI
Network for Greening the Financial System/Banque de France	Lisa Biermann
United Nations Environmental Programme Finance Initiative	Elodie Feller

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Members of staff acting in TEG roles

Climate Bonds Initiative	Anna Creed
EIT Climate-KIC	Felicity Creighton Spors
PRI	Alyssa Heath

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Ani Kavookjian	Bloomberg
Revan Arkan	Bloomberg
Luca Di Marco	Cassa Depositi e Prestiti
Diletta Giuliani	Climate Bonds Initiative
Katie House	Climate Bonds Initiative
Ujala Qadir	Climate Bonds Initiative
Lionel Mok	Climate Bonds Initiative
Penny Apostolaki	Climate Bonds Initiative
Daniel Zimmer	Climate-KIC
Craig Davies	EBRD
Ioanna Kourti	EBRD
Bogachan Benli	EIB
Juan Bofill	EIB
Marcial Bustinduy	EIB
Adrian Enache	EIB
Andres Gavira	EIB
Stephane Petti	EIB
Christian Schempp	EIB
Julio Schreier	EIB
John Sinner	EIB
Marcos Tejerina	EIB
Marc Tonteling	EIB
Jonas Wolff	EIB
Andreas Unterstaller	European Environment Agency
Doris Marquardt	European Environment Agency
Gorm Dige	European Environment Agency
Nikolaj Bock	European Environment Agency
Lale Karayaka	European Environment Agency
Magdalena Jozwicka	European Environment Agency
Wouter Vanneuville	European Environment Agency
Ioannis Bakas	European Environment Agency
Stefan Speck	European Environment Agency
Ian Marnane	European Environment Agency
Sebastian Rink	Frankfurt School of Finance & Management
Doris Kramer	KfW Bankengruppe (KfW)
Josef Haider	KfW Bankengruppe (KfW)
Chloe Desjonqueres	OECD
Michael Mullan	OECD
Alyssa Heath	Principles for Responsible Investment (PRI)
Danielle Chesebrough	Principles for Responsible Investment (PRI)
Gemma James	Principles for Responsible Investment (PRI)
Matilda Persson	Principles for Responsible Investment (PRI)
Betina Vaz Boni	Principles for Responsible Investment (PRI)
James Kavanagh	Royal Institution of Chartered Surveyors (RICS)
Fabrizio Varriale	Royal Institution of Chartered Surveyors (RICS)
Jonathan Gheysens	UN REDD
Zofia Wetmanksa	WiseEuropa

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