The Sustainable Finance Research Platform is a network of five German research institutions that have been conducting intensive research on sustainable finance for many years. The aim of the platform is to provide scientific support in answering key social, political and private sector questions, to provide established and emerging knowledge and to play an advisory role in the political and public discourse. In this context, the platform also supports the work of the Sustainable Finance Advisory Board of the Federal Government by providing research-based inputs, feedback and a critical evidence-based perspective. In addition, the platform aims at establishing sustainable finance as an important theme in the German research landscape, while ensuring close links with European and international institutions and processes.

Acknowledgements: We are very grateful for comments received from Karsten Löffler (Frankfurt School of Finance and Management), from members of the German government’s sustainable finance advisory committee and participants of the “taxonomy workshop” of the advisory committee hosted by DIW Berlin on 3 September 2019. The views reflected in this document and any errors are attributable to the authors only.

Objectives of the Sustainable Finance Agenda and the Taxonomy

The EU Action Plan on Sustainable Finance\(^2\) defines three main goals, which are pursued with different measures:

1. Redirecting capital flows towards a more sustainable economy.
2. Inclusion of financial risks arising from climate change, climate regulation, waste, environmental degradation and social problems, in investment and financing decisions.
3. Greater transparency and long-term orientation of financial and non-financial economic activities and decisions.

---

1 Corresponding author. Contact: fschuetze@diw.de
In a regulatory proposal\(^3\), the European Commission suggested the creation of a common definition of "sustainable investment", through a so-called taxonomy. A Technical Expert Group (TEG)\(^4\) set up by the European Commission defined the technical criteria for such a taxonomy in their report\(^5\) published in June 2019. Such as taxonomy has the potential to make an important contribution to greater sustainability in financial markets (in terms of the action plan’s three goals) by creating a common understanding of sustainable investments and by increasing transparency regarding the (positive) climate impacts of investments.

To maximise its impact and thus to support the achievement of the three main objectives of the EU Sustainable Finance Agenda, the taxonomy needs to be usable by all financial actors, converted into financial products and serve as a reference point for other legislative acts. This means that regulatory proposals and legislative initiatives, but also market actors, existing and emerging standards, processes and products would (need to) apply the taxonomy.

References to the taxonomy can already be found in the EU Sustainable Finance Action Plan and in other reports by the Technical Expert Group (TEG):

- The **EU Green Bond Standard** (EU-GBS)\(^6\) explicitly refers to the taxonomy when assessing the suitability of projects. In addition, the GBS defines further process elements and requires, for example, external verification.
- The **low-carbon benchmarks**\(^7\) are intended to define disclosure requirements for (almost) all benchmarks in order to facilitate comparability. The proposal contains minimum standards for two different climate benchmarks ("Climate Transition" and "Paris-aligned" benchmark).
- The report on climate-related disclosure\(^8\) includes an update of the **Non-Binding Guidelines on Non-Financial Reporting**, that reflect the recommendations of the TCFD. It is intended to encourage companies to publish information in accordance with the classification of the taxonomy (e.g. as share of investment costs (CAPEX) and operating costs (OPEX)).

There are also links to other legislative initiatives and financial supervision, including the following:

- The **Non-Financial Reporting Directive** (NFRD) is under revision since the end of 2018 and underwent the European Commission's "fitness check" until June 2019. The Directive regulates the disclosure of “material” non-financial information, but it leaves large flexibility with regard to

---

\(^3\) [https://ec.europa.eu/info/law/better-regulation/initiative/1185/publication/238025/attachment/090166e5baea4e23_en](https://ec.europa.eu/info/law/better-regulation/initiative/1185/publication/238025/attachment/090166e5baea4e23_en)
the information being published and is implemented with different levels of ambition by the Member States⁹.

- The proposal for the InvestEU program¹⁰ refers to the use of taxonomy to determine to what extent the program supports climate objectives.

The taxonomy is also relevant for the activities of the European Banking Authority (EBA), the European Insurance and Occupational Pensions Authority (EIOPA) and the European Securities and Markets Authority (ESMA). The focus is on the assessment of risks in the banking and insurance sectors, the regulation of funds and the development of standards (e.g. EU GBS, see above) and labels.

Discussion of strengths and opportunities for improvement of the current regulatory proposal and the TEG report

The Sustainable Finance Research Platform provided an assessment of the first Taxonomy Report in September 2018, which raised three issues that are important for the development of the taxonomy: 1) A clear definition of the objective of the taxonomy, 2) a taxonomy that is dynamic and forward-looking, and 3) the extension of the scope of the taxonomy. These points are taken up in this present assessment and are extended by further points and recommendations.

In full awareness of the limited time, resources and mandate of the TEG, we assess the TEG’s taxonomy report with regard to its strengths and opportunities for improvement and formulate conditions for an effective and goal-oriented Sustainable Finance Taxonomy within its broader context. This results in five recommendations, which are explained in more detail below. The recommendations go beyond the proposal and mandate of the TEG, as they also refer to the role of the taxonomy within the EU Action Plan and the corresponding proposals of the EU Commission:

1. A rapid expansion of the activities covered
2. A further differentiation of activities for better integration into risk management
3. A dynamic forward-looking perspective to ensure consistency with climate goals
4. Introduction of mandatory activity-based reporting
5. A broad application by all financial market actors

The recommendations are divided into short-term recommendations within the mandate of the Technical Expert Group and long-term recommendations for further development, e.g. within the mandate of the suggested Sustainable Finance Platform.

---

⁹ This is shown, a/o, in a review study about the implementation of the NFRD in different EU member states and related reporting practice, carried out by DIW Berlin on behalf of the European Commission, scheduled for publication before the end of 2019.

1. A rapid expansion of the activities covered

The draft Regulation defines six environmental objectives: 1) climate change mitigation, 2) adaptation to climate change, 3) protection of water and marine resources, 4) transition to a circular economy, 5) pollution and waste prevention, 6) protection of ecosystems. Activities assessed as "sustainable" must contribute to at least one of these objectives, must not cause significant damage in the sense of the other objectives and must comply with minimum social standards (e.g. ILO core labour standards). The TEG has developed technical screening criteria for measuring contributions to environmental objectives 1) and 2), which consist of principles, metrics and thresholds.

For all six environmental objectives, "do no significant harm criteria" were developed, based on Life Cycle Assessments (LCAs). A "Platform on Sustainable Finance" should continue the work of the TEG from 2020 and develop the technical selection criteria further (see draft regulation on the taxonomy and also chapter 17.2 in the Taxonomy Report).

| Strengths and opportunities for improvement of the current regulatory proposal and the TEG report |
|---|---|
| **Strengths:** | **Opportunities for improvement:** |
| The clear focus on climate protection and adaptation simplifies (and potentially accelerates) implementation and applicability. | The objectives of the action plan is to further "sustainable" finance and investment. Yet, in this sense the current scope is not broad enough and the volume of potential investments is limited. |
| The taxonomy is designed to be extended further. | Standards for "do no significant harm" (DNSH) are not clearly defined, e.g: Are manufacturers of electric cars also assessed with regard to their recycling strategy? |
| Further ESG criteria are already partially covered by the "do no significant harm" criteria. | Regarding its application, the relationship and compatibility with existing ESG ratings (and criteria) so far has not been addressed. |
|  |
| **Recommendations for the short-term implementation of the taxonomy:** |
| With regard to the environmental objective 1) climate protection, the extent to which Scope 1, 2 and Scope 3 emissions represent a relevant part of the value chain should be assessed for each activity. If this is the case, the metric and threshold should be further developed in this direction. For vehicles (or the economic activity of manufacturing vehicles), this would mean that not only end of pipe emissions of the vehicle or fleet (scope 3), but also the emissions from production and the materials used (scope 1 and 2) would be taken into account. |
Requirements for an effective taxonomy in the medium term:

When applying the taxonomy in practise, it may not be feasible to test the "do no significant harm" criteria for environmental objectives and for minimum social standards at the level of activities. For this purpose, the platform should provide a risk screen or map that indicates for each activity (and for groups of countries, if applicable) which of the risks are pertinent to that activity (e.g. in the form of a heat map). Only in the case of an increased risk, a detailed assessment would need to be carried out. This would contribute to achieving an optimal level of proportionality.

Certain risks are not sector-specific but company-specific (depending on technologies and business practices). In many cases, investors may use existing ESG ratings. It is therefore important to examine to what extent investors can base their assessment of "do no significant harm" criteria on existing ESG ratings (at company level).

The taxonomy is the basis for other regulation and should be developed further with the aim of supporting the implementation of other legislative processes (e.g. Green Bond Standard, Disclosure etc.). It is therefore important to define a monitoring and development process that ensures appropriate coherence between the processes. The basic principles for such a process should be part of the TEG's final report.

2. A further differentiation of activities for better integration into risk management

The selection of activities under environmental objective 1) is based on the contribution to greenhouse gas emissions of the different economic sectors (NACE classification). The result is a list of seven main sectors: agriculture and forestry (and fisheries, but so far without criteria), industry, energy production, water and waste management, transport and storage, information and communication technologies (ICT) and buildings. "ICT" is seen as a supporting sector and "buildings" is seen as a cross-cutting theme covering different sectors.

Within these sectors, three types of activities are differentiated: "green activities" are activities that are compatible with an ambitious climate target (e.g. generation of electricity from renewable energies, or afforestation). "Greening of" activities are currently not compatible with climate targets but are critical economic activities that will be subject to necessary transformations (e.g. steel production). The criteria for these activities will be reviewed on a regular basis to ensure compatibility with climate targets. "Greening by" activities can support the low-carbon transformations (e.g. the management of real estate, investing in renewable energy in buildings, or manufacturing of wind turbines). The share of revenue or expenditure associated with a green activity is measured.
Strengths and opportunities for improvement of the current regulatory proposal and the TEG report

**Strengths:**
A purely binary approach (at the company level) is prevented through the evaluation based on activities. This allows companies to be evaluated on the basis of the current proportion of their green activities.

This enables comparability at company level and, for example, at fund level (% of green activities or investments).

**Opportunities for improvement:**
A lack of differentiation or foresight can result in a company suddenly no longer having taxonomy-compliant activities (if they fall below the minimum threshold) and are therefore no longer recognised as green by investors. If the taxonomy is applied widely, this could (in the short term) lead to sudden changes in financing conditions.

Non-Green activities may be regarded as "brown" even though they may be neutral or could be stimulated by a dynamic target.

**Recommendations for the short-term implementation of the taxonomy:**
A timeframe for the further differentiation of economic activities and a clear mandate for the Sustainable Finance Platform should be defined in the final report of the TEG.

**Requirements for an effective taxonomy in the medium term:**
There are two ways to avoid that activities that have not been defined as green/greening of/greening by are automatically considered brown. Either through a forward-looking perspective (see next discussion point) or by introducing a third category (e.g. "brown" activities) to classify activities where a transformation is technically, economically or socially infeasible. Considering the adaptability of sectors and companies would thus be a central question for the distinction between "greening of" and "brown" activities.

A brown taxonomy would allow for an analysis of risk differences between green and brown activities and thus the integration of transition risks into risk assessment (objective 2 of the EU action plan). So far, objectives 1) and 2) of the action plan have been discussed independently.

3. A dynamic forward-looking perspective to ensure consistency with climate goals

In light of the objectives of the EU sustainable finance agenda, the taxonomy is not yet consistent with the EU’s 2030 and 2050 climate targets and the Sustainable Development Goals (SDGs). The current proposal contains thresholds for CO2 emissions from the production of electricity, raw materials and other products, as well as from the use of energy in buildings. In part, the proposal also includes target values for future CO2 emissions (e.g. 50g CO2/km by 2025 and zero g CO2/km from 2026 for cars). However, other areas classified as "greening of" activities do not include a proposal to adjust the threshold. For example, the threshold for steel production is based on the EU ETS benchmark. In the buildings sector, individual measures are also included, without linking this to an overall strategy to increase efficiency. The
path (linear or non-linear, frequency of threshold adjustment, and level of ambition) and the review mechanism remain undefined.

<table>
<thead>
<tr>
<th><strong>Strengths and opportunities for improvement of the current regulatory proposal and the TEG report</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strengths:</strong></td>
</tr>
<tr>
<td>The proposal leaves little room for interpretation and thus simplifies measurability.</td>
</tr>
<tr>
<td>It is less complex and less dependent on the assessment of the credibility of a corporate strategy with regard to its implementation (e.g. the implementation of the self-imposed emission reduction target).</td>
</tr>
<tr>
<td><strong>Opportunities for improvement:</strong></td>
</tr>
<tr>
<td>An adjustment of the threshold will be necessary in the future (e.g. for activities that are currently based on EU-ETS benchmarks, such as steel production). This leads to uncertainties, especially for &quot;greening of&quot; activities, which are reinforced by the political nature of such a process and thus potentially lead to additional delays.</td>
</tr>
<tr>
<td>Companies are encouraged to focus on fixed thresholds (of a single metric) instead of developing and implementing long-term development perspectives for technologies, products, practices and user preferences.</td>
</tr>
<tr>
<td>There is no incentive for efficiency and innovation to go (far) beyond the threshold.</td>
</tr>
</tbody>
</table>

**Recommendations for the short-term implementation of the taxonomy:**

The long-term objective of "net zero emissions by 2050" should be explicitly included as an objective for all activities. The formulation of the pathway can be passed on to the platform.

To ensure a dynamic development of the threshold for the "greening of" activities, it is necessary to develop a clear and transparent timetable (when and on what basis thresholds will be adjusted) as well as a regular review process. This is important to reduce uncertainty and to ensure investment security and should be included in the final report.

**Requirements for an effective taxonomy in the medium term:**

It is important to show how the taxonomy can be developed towards a scenario-based framework, which enables a dynamic evaluation of activities and strategies of a company. This includes, in particular, the development of reference scenarios, methods for evaluating companies in comparison to these scenarios, and a mandatory and explicit reference to them in reporting and decision-making processes.

To this end, it is important to develop sector scenarios (especially for "greening of" activities) that are oriented towards the long-term goal of "net zero by 2050", and to use existing climate scenarios with sufficient sector disaggregation. This will be an important task of the Sustainable Finance Platform.
Furthermore, forward-looking metrics should be included in company reporting, which should be reflected in reporting and disclosure standards. The recommendations of the TCFD can provide a useful starting point for this.

### 4. Introduction of mandatory activity-based reporting

The implementation of the taxonomy in the financial sector requires companies (and governments) to measure and disclose the proportion of their green activities. Wide application and thus comparability are only possible if all companies (and states or government more broadly) report. The current taxonomy report on the taxonomy does not make any recommendations in this respect.

<table>
<thead>
<tr>
<th>Strengths and opportunities for improvement of the current regulatory proposal and the TEG report</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strengths:</strong></td>
</tr>
<tr>
<td>The taxonomy can improve the integration of sustainability criteria (or currently climate criteria) into a company's strategy and thus increase its relevance to the real economy.</td>
</tr>
<tr>
<td>The taxonomy offers an incentive for companies to gradually increase the share of green activities.</td>
</tr>
<tr>
<td>Classification at activity level requires companies to collect and report data uniformly at this level as well, which is not the case so far.</td>
</tr>
</tbody>
</table>

**Recommendations for the short-term implementation of the taxonomy:**

The TEG should define more clearly whether "green" shares of revenue, costs or investments should be measured and reported, which has different implications.

The TEG should formulate standardized and mandatory reporting as a necessary condition for the applicability and can then pass on the responsibility to the EU Commission and the SF Platform.

**Requirements for an effective taxonomy in the medium term:**

Since information is not (yet) provided at the activity level, the taxonomy cannot be fully implemented without improved corporate disclosure. Therefore, activity-based reporting would have to be reflected in disclosure policies and obligations (e.g. as part of the review of the Non-Financial Reporting...
Directive). For SMEs, exceptions or lower requirements in terms of proportionality can be granted (similar to the CSR-RUG), based on clear risk-based proportionality rules. In addition, it must be clarified whether the proportion of green activities should be based on current production/turnover or on investments. This becomes particularly important as soon as other regulations relate to the taxonomy and provide additional incentives.

Since government bonds account for a large share of the bond market, states should also report the taxonomy-compliant share of their expenditures and investments in addition to companies. Such a requirement could be introduced, for example, as part of the annual reporting of the national budget to the EU. Furthermore, the taxonomy could also be applied to the EU budget itself (e.g. with the aim of x% of the EU budget being spent according to the taxonomy, in the sense of a further development of the existing "climate finance tracking" approach with regard to the 20% target for climate protection in the EU budget).

The taxonomy should also be used in lending processes. This includes corporate loans but also mortgage loans etc., which make up a large part of the financing of companies and households (for the purchase of residential property). This means that reporting should also be required from borrowers.

5. A broad application by all financial market actors

The TEG’s current proposal stipulates that issuers/providers of sustainable financial products should disclose the extent to which their portfolio complies with taxonomy requirements. This means that providers of conventional products are not affected by the disclosure and that comparability between sustainable and conventional financial products remains difficult. In addition, the draft regulation currently refers only to investment business, but not to credit and insurance business (beyond their investment funds). So far, however, there is considerable uncertainty as to how information at the level of economic activities should be aggregated at the portfolio level. This means that there is no reference to existing sustainable or responsible investment strategies (exclusion criteria, best-in-class, etc.) at the portfolio level. This raises the question of how far the taxonomy can establish this connection or in how far it is the task of the market players.

<table>
<thead>
<tr>
<th>Strengths and opportunities for improvement of the current regulatory proposal and the TEG report</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strengths:</strong> Provider of sustainable financial products can be compared based on a quantitative analysis (x% of the portfolio). However, this requires a standardized and mandatory reporting framework.</td>
</tr>
</tbody>
</table>
It is unclear how investors and asset managers should act within the framework of portfolio management based on information at the activity level of individual companies (problem of data aggregation and weighting)

**Recommendations for the short-term implementation of the taxonomy:**

With regard to the implementation, it should be more clearly defined how investors and asset managers are to aggregate and weight activities at the level of individual companies or for their portfolio.

**Requirements for an effective taxonomy in the medium term:**

The taxonomy can only be effective if it is applied as widely as possible in the market. It is therefore important that all relevant financial market players (sustainable & conventional) report on all business areas (investment, lending, insurance) across all asset classes (government bonds, bank bonds, loans, etc.).

This goal could for example be achieved through a test phase. In the first phase (approx. 1-2 years), reporting can be introduced on a test basis (mandatory but without sanctions) and subsequently improved and tightened (similar to Article 173 in France).

---

The Sustainable Finance Research Platform is supported by:

![Supporting Organizations](image)