

TRV Risk
Analysis

EU Ecolabel: Calibrating green criteria for retail funds



ESMA Report on Trends, Risks and Vulnerabilities Risk Analysis

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Investor protection

EU Ecolabel: Calibrating green criteria for retail funds

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Summary

The EU Ecolabel is an EU-wide label awarded to green products and services. A version of the label for retail financial products has been considered as an option to help retail investors make informed investment decision on the sustainability features of investment products. In this article we test three key Ecolabel criteria on a sample of 3 000 sustainability-oriented UCITS equity funds with EUR 1 trillion in assets under management. Using fund portfolio holdings and proxy data, we find that only 16 funds (0.5 % of our sample) meet the proposed minimum portfolio greenness threshold of 50 % and exclusion requirements. These findings highlight the trade-off between the stringency and feasibility of the Ecolabel requirements. The article further illustrates the impact of different threshold calibrations on the number of eligible funds and potential volumes of green finance channelled through Ecolabel funds. The analysis does not prejudge any policy developments or decisions regarding an EU Ecolabel for financial products.

ESG labelling benefits depend on credibility

The rise of sustainable investing increasingly prompts investors to question the impact of their investments on the environment and the society. Environmental, social and governance (ESG) labels offer one possible response by bringing three major benefits: (a) they make it easier for investors to compare products through standardised criteria; (b) they provide some assurances on the greenness of investment products by introducing minimum requirements; and (c) they support investor due diligence work by increasing transparency.

The materialisation of these benefits hinges on the credibility of the labels. However, building credibility is not an easy task and the success of an EU Ecolabel for retail financial products would likely depend on the perceived stringency of its criteria. At the same time, strict eligibility requirements can make it unattractive for green product managers to obtain the label, which would be purely voluntary. Therefore, the choice of Ecolabel criteria and calibration of the

thresholds would have to aim to strike a balance between credibility of the label and feasibility of the requirements.

We provide an illustration of this challenge by testing three key Ecolabel criteria on a sample of 3 000 sustainability-oriented UCITS equity funds with EUR 1 trillion in total assets under management. Using fund portfolio holdings from 2021 and proxy data, we find that only 0.5 % of the funds in our sample would meet the proposed minimum portfolio greenness threshold of 50 % and a selection of environmental and social exclusion requirements. The article further illustrates the impact of different threshold calibrations on the number of eligible funds. The analysis does not prejudge any policy developments or decisions regarding the EU Ecolabel.

The EU Ecolabel

The EU Ecolabel for retail financial products would be a first attempt by the European Commission to develop an EU-wide label for green retail investment products. The project was

¹ This article was written by Julien Mazzacurati, with research assistance by Rosa Alma Chizzini and Claudia Fernandez Garcia.

originally mooted as part of the Commission's Action Plan on Sustainable Finance in 2018.² The Ecolabel would aim to increase investor protection and to channel capital towards green projects to help finance the European Green Deal.

The latest set of technical proposals by the European Commission's Joint Research Centre (JRC) (Boyano et al., 2021) has been met with industry concerns about the calibration of the thresholds³, with some asset managers and trade associations warning over the consequences of adopting overly selective criteria. A reduced investment universe can imply (with all other things being equal) increased investment concentration in a few assets and reduced diversification benefits, which can increase the volatility of a portfolio, affect returns and lead to asset overvaluation. Furthermore, part of the criteria needed to finalise an EU Ecolabel for financial products depend on the availability of the last set of parameters under the EU Taxonomy Regulation (still under development).

Ecolabel criteria

The Ecolabel is a voluntary scheme that requires compliance with six main criteria.⁴ These include a combination of minimum greenness threshold, exclusion requirements and transparency obligations. The first three criteria introduce quantitative thresholds that can be tested and are therefore the focus of this article. The Ecolabel would be meant to apply to a broad range of retail financial products, including retail equity, bond and mixed investment funds, insurance-based investment products, and fixed-term and savings deposits. The criteria vary somewhat based on the product type – with those applicable to UCITS equity funds summarised in Table 1.

Criterion 1 imposes a minimum portfolio greenness threshold of 50 %, as measured by alignment with the EU Taxonomy⁵. The reliance on the EU Taxonomy brings considerable benefits. First, it ensures that managers and providers of financial products rely on standardised definitions of environmentally sustainable activities that are aligned with those used elsewhere in EU legislation (e.g. the

European Green Bond Standard⁶). Second, it leverages on future disclosure requirements under the EU Taxonomy Regulation, which eliminates the need for additional reporting by EU firms while increasing the reliability and comparability of the information – bringing further savings in terms of access to data and IT systems needed to process them.

Table 1

Ecolabel criteria for UCITS equity funds

Taxonomy and exclusions as key requirements

#	Name	Description
1	Investments in environmentally sustainable economic activities	Portfolio greenness based on companies' green turnover and capital expenditure (capex), as defined in the EU Taxonomy
2	Exclusions based on environmental aspects	Cut-off threshold for economic activities deemed to be detrimental or opposed to environmental policy aims
3	Exclusions based on social aspects and governance practices	Address social concerns potentially associated with investments and corporate governance practices
4	Engagement	Establishment of a clear engagement policy to further environmental objectives
5	Measure taken to enhance investor impact	Reporting mechanisms and measures taken to enhance the impact of the product
6	Information for retail investors and on the EU Ecolabel	Statements on each criterion and annual report including details of methodologies used for assessing and monitoring compliance

Note : Overview of criteria for the EU Ecolabel for retail financial products, based on the 4th Ecolabel technical proposal (Boyano et al., 2021).

Sources: European Commission, ESMA.

The currently limited availability of Taxonomy-related information constitutes a major challenge.

- **Large EU firms.** Companies in the scope of the EU Non-Financial Reporting Directive⁷ will have to disclose Taxonomy-related information from 2024. An estimated 11 000 companies are currently reporting non-financial information, but this should increase to around 49 000 companies in

² [Commission communication \(...\) 'Action Plan: Financial Sustainable Growth'](#), COM(2018)/ 97

³ Azizuddin, K., 'EU to "clarify" Ecolabel alignment with taxonomy as key milestones are missed', Responsible Investor, 23 September 2021.

⁴ The 4th technical proposal includes a seventh criterion (not immediately relevant for this article) stipulating how to properly use the Ecolabel logo.

⁵ [Regulation \(EU\) 2020/852 \(...\) on the establishment of a framework to facilitate sustainable investment.](#)

⁶ [Proposal for a Regulation \(...\) on European green bonds, COM\(2021\) 391.](#)

⁷ [Directive 2014/95/EU \(...\) as regards disclosure of non-financial and diversity information by certain large undertakings and groups.](#)

2024 once the Corporate Sustainability Reporting Directive (CSRD) applies.

- **Small and medium-size enterprises (SMEs), non-EU firms.** Once the CSRD enters into force, Taxonomy-related information will remain unavailable for many SMEs and non-EU firms.⁸

These challenges imply that product managers will either need to estimate (and justify) the alignment of companies in their portfolio with the EU Taxonomy or need to rely on proxy data produced by third-party providers. For investment funds, early estimates of the share of portfolios aligned with the EU Taxonomy suggest that the Taxonomy alignment of investment funds is very low. Based on sector-level coefficients developed by Alessi et al. (2019), the estimated alignment of EU-domiciled funds with the EU Taxonomy was 1.4 % in 2020 (ESMA, 2020). Use cases from the United Nations Principles for Responsible Investment further show that even specialist funds fail to achieve high Taxonomy-alignment ratios.⁹ Low alignment levels stem to an extent from the narrow scope of the current Taxonomy framework (Vinueza-Peter, L., 2022), suggesting that alignment could increase in the future with the inclusion of additional environmental objectives in the framework.

The second and third criteria focus on exclusions from the fund portfolio (or maximum thresholds) on ESG aspects. These exclusions apply in addition to the “Do No Significant Harm” (DNSH) principle already embedded in the Taxonomy requirements (i.e. under the first criterion).¹⁰ More specifically, in the context of UCITS equity funds, the second criterion imposes that fund portfolios do not include equities issued by companies deriving more than 5 % of their turnover from environmentally harmful activities. The third criterion requires that financial products invest in companies that comply with minimum social and governance safeguards and exclude companies deriving any revenue from socially harmful activities.

The remaining three criteria focus on the engagement policy of the financial product

(including exercise of voting rights and interactions with product managers), reporting and transparency requirements. These are not covered in this article, either due to a lack of data needed to assess the compliance of funds, or because they refer to information that must be made available by product managers to investors once the Ecolabel has been obtained.

Testing the Ecolabel for UCITS equity funds

In this section, we aim to assess compliance with the first three criteria for a large sample of sustainability-oriented UCITS equity funds. Given the data challenges highlighted above, this assessment is based on proxy data and requires several assumptions. As such, it is only intended to provide an illustration of the calculation methodologies required to comply with the quantitative criteria of the Ecolabel, and of their possible outcomes.

Following the application of the Sustainable Finance Disclosure Regulation (SFDR)¹¹, financial market participants face certain disclosure requirements for products with sustainability features marketed in the EU. More specifically, products claiming environmental or social characteristics must disclose under Article 8 of the SFDR what these characteristics are (Article 8 funds). Products with a sustainable investment objective must disclose under Article 9 of the SFDR what these objectives are and how they intend to achieve them (Article 9 funds). Our sample of funds includes exclusively Article 8 and Article 9 funds. To the extent that these sustainability-oriented funds already employ exclusions and other non-financial strategies to help them green their portfolio, they would be more likely to seek the Ecolabel than other funds.

Given the retail investment angle of the Ecolabel, our sample further focuses on funds regulated under the UCITS Directive¹² since these primarily target retail investors – although the Ecolabel might include specific thresholds for retail funds regulated under the AIFMD¹³. Furthermore, in

⁸ However, SMEs and non-EU firms may choose to voluntarily disclose their alignment with the EU Taxonomy (e.g. when they seek funding from EU investors).

⁹ See United Nations Principles for Responsible Investing, [EU Taxonomy alignment case studies](#), September 2020.

¹⁰ The ‘Do no significant harm’ principle, or DNSH, establishes that Taxonomy-aligned activities should not harm any of the six environmental objectives set out in the EU Taxonomy Regulation.

¹¹ [Regulation \(EU\) 2019/2088 \(...\) on sustainability-related disclosures in the financial services sector.](#)

¹² [Directive 2009/65/EC \(...\) on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities \(UCITS\).](#)

¹³ [Directive 2011/61/EU \(...\) on Alternative Investment Fund Managers.](#)

this article we only test equity funds, although bond and mixed funds may also obtain the Ecolabel: the vast majority of assets managed by ESG funds are indeed held in equity funds (ESMA, 2022), while including bond instruments would greatly complicate the matching procedure outlined below.¹⁴

All investment fund data were extracted from Morningstar. These include portfolio holdings as of mid-2021 and fund-level information (including ESG-related data such as environmental metrics and product involvement) as of December 2021. The identification of funds disclosing under the SFDR also relies on Morningstar, which checks for the existence of Article 8 or Article 9 statements in pre-contractual documentation of funds.

Our sample includes a total of 3 041 sustainability oriented UCITS equity funds (out of 35 000 UCITS funds in Europe¹⁵ including 14 000 equity funds), split between 2 612 Article 8 products and 429 Article 9 products. Overall, our dataset includes 275 850 holdings for a total market value of just over EUR 1 trillion¹⁶. While the average portfolio size of Article 8 and 9 products is similar (EUR 350 million v EUR 345 million), Article 9 products tend to hold a larger number of securities (114 assets v 87).

Criterion 1: Portfolio greenness ratio

To estimate portfolio alignment with the EU Taxonomy, we compute a *portfolio greenness ratio* for each fund based on the following formula:

$$\text{Portfolio greenness ratio}_j = \frac{\sum \text{value of assets}_i * \text{greenness}_i}{\text{total portfolio value}_j}$$

where *value of assets_i* is the market value of equity securities issued by firm *i* held by fund *j*; *greenness_i* is the share of green revenues in the annual turnover of firm *i*; and

total portfolio value is the sum of assets under management of fund *j*.

Compared to the formula in the JRC technical proposals, we are missing a forward-looking component (green capex) due to data limitations. However, Boyano et al. (2021) highlight that there is a high correlation between turnover and capex segmentation (>80 %) with capex “not a deciding factor”. Therefore, the absence of green capex is not expected to significantly impact the outcome.

To compute the ratio, we rely on a two-step procedure. First, we obtain Taxonomy alignment estimates at security level by matching the ISINs of portfolio equity holdings with Green Revenues data from FTSE-Russell as of December 2021¹⁷. We are able to match 95 % of the 12 000 unique ISINs included in the dataset.

FTSE-Russell screens a large number of listed firms to estimate the share of green activities in company revenues. Revenues are broken down into ‘micro-sectors’, most of which can be mapped with the eligible activities under the EU Taxonomy. A study from the data provider highlights some differences between the classification system used in the Green Revenues data and the EU Taxonomy, leading to possible differences in alignment estimates (FTSE-Russell, 2020). Moreover, Green Revenues data do not include the DNSH criteria, which may lead to overestimating alignment with the EU Taxonomy. However, in the absence of a reliable benchmark to assess the DNSH criteria, the exact impact remains unclear.¹⁸ Furthermore, Taxonomy alignment estimates are expected to increase in the future as the scope of the EU Taxonomy expands to cover additional environmental objectives and the weight of green activities in the economy increases.

Next, we retrieve the level-4 NACE code¹⁹ of the securities not matched during the first step and further enrich the dataset with sector-level Taxonomy-aligned coefficients developed in Alessi et al. (2021). For each of the 615 NACE sectors, these coefficients provide an estimate of the Taxonomy alignment in 2020 based on the

¹⁴ Many non-financial corporate issuers rely on a financial subsidiary to issue bonds. Our matching procedure is based on the ISIN of equity issuers (which are usually the headquarters). Therefore, including bonds would require a comprehensive picture of issuers’ ownership structure.

¹⁵ See EFAMA, [Trends in the European Investment Fund Industry in the fourth quarter of 2021](#), March 2022.

¹⁶ Negative values (net short positions) have been excluded.

¹⁷ See FTSE Russell, [Green Revenues data model – Measuring green revenue generation](#).

¹⁸ Information gathered through market intelligence further reveals that Taxonomy-alignment estimates vary widely across data providers, reflecting the different methodologies and data used. For estimates of the DNSH impact on Taxonomy using controversy screening, see FTSE-Russell, [“Do No Significant Harm” and “Minimum safeguards” in Practice](#), December 2021.

¹⁹ NACE Rev.2 is the statistical classification of economic activities in the EU.

technical screening criteria set out in the EU Taxonomy.²⁰ This second step allows us to obtain estimates for another 2 % of ISINs in the dataset.

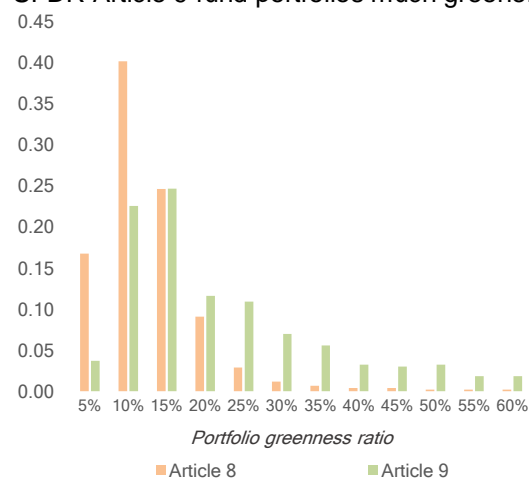
Sector-level estimates such as the Taxonomy-aligned coefficients are less accurate than security-level estimates since, they do not capture the full scope of business activities within a corporate group. They rely on a single category being attributed to each company, based on self-declaration. Nonetheless, they play an important role in filling some of the data gaps to obtain a more complete view of portfolio alignment with the EU Taxonomy. In that sense, the approach is not entirely dissimilar to what fund managers may have to do in the future to assess the Taxonomy alignment of the portfolios they manage, considering that not all of the companies they invest in will disclose Taxonomy-related information. ESMA estimated the share of equity instruments outstanding (in value terms) issued by non-financial undertakings which will have to disclose Taxonomy-related information under NFRD at only 26 % of EU fund portfolios (ESMA, 2020) – even though this should substantially increase once the CSRD applies.

After completing these two steps, the portfolio greenness ratio covers on average 98% of fund equity holdings. In other words, using proxy data only, we are able to obtain a representative estimate of the alignment of fund portfolios with the EU Taxonomy, with just 2 % of portfolio securities not covered. The reliability of these estimates will further improve over time as a growing number of EU firms start disclosing Taxonomy-related information.

We find that the average portfolio greenness ratio of sustainability-oriented funds is 11 %. As expected,²¹ Article 9 product portfolios are much greener with an average ratio of 19.2 %, compared to 9.7 % for Article 8 products. Most Article 8 fund portfolio ratios are concentrated in lower values, with 57 % of portfolios under 10 % greenness (Chart 1). Compared to other studies, these results appear to be on the higher end²²,

with the differences mainly due to methodology and data sources.

Chart 1
Distribution of portfolio greenness ratio
SFDR Article 9 fund portfolios much greener



Note: Distribution (vertical axis) of SFDR Article 8 and 9 funds as a function of portfolio greenness ratio (horizontal axis) in 5 percentage-point increments. Sources: FTSE-Russell, Morningstar, ESMA.

Criterion 1 results

Only 26 sustainability-oriented funds have a portfolio greenness ratio above the proposed Ecolabel threshold of 50 % (i.e. less than 1 % of the sample). This includes 10 Article 8 products and 16 Article 9 products, corresponding respectively to 0.4 % and 3.7 % of the sample of Article 8 and Article 9 funds.

Compared with the national green fund labels that already exist in a few EU countries, the proposed 50 % threshold is high: for these labels, the minimum greenness threshold ranges between 10 % and 37.5%.²³ Relaxing the Ecolabel Criterion 1 requirement substantially increases eligibility, with 69 funds above the 40 % threshold, and 136 funds above the 30 % threshold (i.e. respectively 2.3 % and 4.5 % of the sample) (Chart 2). The ratio of Article 8 to Article 9 funds remains broadly stable across different threshold calibrations (around 40/60)²⁴.

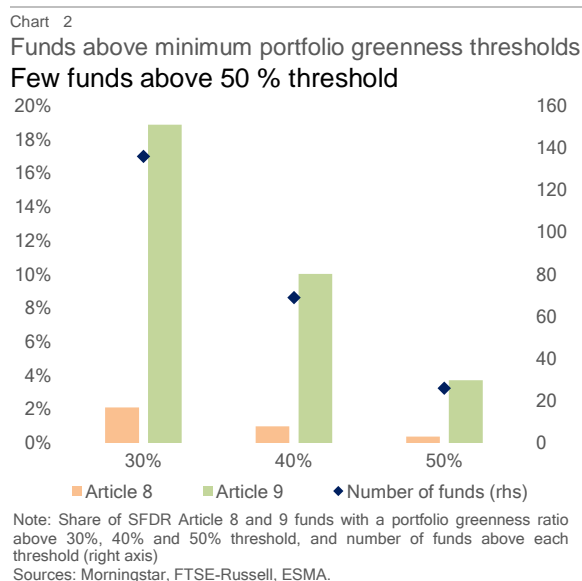
²⁰ For each environmental objective in the EU Taxonomy (e.g. climate change mitigation), technical screening criteria have been established to screen economic activities that are making a substantial contribution to the objective. The Taxonomy-aligned coefficients developed in Alessi et al. (2019) are available on the [JRC website](#).

²¹ The July 2021 [SFDR Q&A](#) clarified that the promotion of sustainability characteristics for Article 8 products must be understood in a broad sense, compared to stricter requirements for Article 9 products.

²² For example, a study by Clarity AI (2022) finds a 15 % alignment for Article 9 products and a 3.9 % alignment for Article 8 products.

²³ See Novethic, [Panorama des labels Européens de finance durable](#), June 2020.

²⁴ All results are robust to various quality checks, including minimum portfolio size, minimum number of holdings and outlier removals (based on standard deviation from average holding value). Moreover, at least 89 % of portfolios above the 30 % greenness threshold are covered by Taxonomy alignment estimates.



Funds with higher portfolio greenness ratios seem to fare better in terms of the greenhouse gas (GHG) emissions of financed companies – especially after normalising by portfolio size (Table 3). From an investor perspective, one euro invested in a portfolio with a greenness ratio above 50 % would finance companies with 34 % lower emissions than the companies financed by other sustainability-oriented funds (keeping everything else constant). This suggests that attention is being paid to at least some environmental characteristics of companies in the investment process of eligible funds.

On the other hand, funds with a higher portfolio greenness ratio tend to have higher carbon intensity and carbon risk exposure, which is mainly due to the sector of the firms they invest in. Indeed, using the ‘climate policy relevant sector’ classification from Battiston et al. (2017), a high correlation can be observed between the portfolio greenness ratio and the share of utilities in the portfolio (63 %). This compares to, for example, a 19 % correlation between portfolio greenness ratio and the share of energy-intensive firms (i.e. the industrial sector). A study by Clarity AI (2022) confirms that funds mostly investing in utilities tend to have a higher alignment, reflecting the importance of renewable energy generation and electricity transmission and distribution to climate change mitigation. On the other hand, utilities in Europe tend to have much higher Scope 1 and Scope 2 emissions intensity relative to issuers from other sectors (Mazzacurati et al., 2021).

Table 3
Environmental performance of eligible portfolios
Eligible portfolios perform much better

Metric	Portfolio greenness thresholds			
	Below 30 %	> 30 %	> 40 %	> 50 %
Scope 1 GHG emissions	2.731	2.416	2.394	2.407
Scope 2 GHG emissions	1.007	0.756	0.694	0.574
GHG emissions / portfolio size	10 698	9 295	8 184	7 032
GHG emissions intensity	142	239	253	286
Carbon risk exposure score	15.7	18.9	20.0	20.6

Note : Environmental performance of SFDR Article 8 and Article 9 funds based on five metrics, value-weighted averages. Scope 1 and Scope 2 greenhouse gas emissions are the average direct and indirect emissions of equity holdings, in million tonnes of CO2-equivalent. ‘GHG emissions / portfolio size’ = sum of Scope 1 and Scope 2 emissions (in tonnes of CO2-equivalent) divided by equity holdings (in million euros). ‘GHG emissions intensity’ = average emissions intensity of equity holdings measured as the sum of Scope 1 and 2 emissions divided by company turnover. “Carbon risk exposure score” = average exposure to carbon risk from a company’s own operations and products and services.
Sources: Morningstar, Sustainalytics, ESMA.

Criteria 2 and 3: Environmental and social exclusions

Next, we test whether funds in the sample would meet some of the ESG exclusions set out under Ecolabel Criteria 2 and 3. These exclusions cover a wide range of topics spanning multiple sectors (Table 4).

Here again, data availability will be a major challenge for financial product managers. For some of these exclusions (in particular the environmental ones), relevant data may be obtained directly from third-party providers. For others, product managers may need to rely on external assessments regarding compliance with international agreements and minimum social safeguards, such as those carried out by ESG rating providers. A third strand of exclusions might require product managers to collect information directly from the companies, for example with respect to internal social or governance arrangements and policies.

Table 4

Ecolabel exclusions under criteria 2 and 3 Taxonomy and exclusions as key requirements

Environmental exclusions

Financial products shall not contain equities deriving more than 5% of their turnover from:

- Use of pesticides
- Production, distribution and use of agricultural products and livestock detrimental to high-nature-value lands
- Agriculture**
 - Crop cultivation not minimising pesticides and fertilisers
 - Livestock production without emission mitigation and reduction techniques
- Forestry**
 - Timber production without valid licences
 - Fossil fuel production, exploration, extraction, refining and production of derivative products
- Energy sector**
 - Supply and use of fossil fuels for electricity generation and/or heat, heating and cooling
 - Fossil fuel transportation, distribution and storage
 - Activities relating to the nuclear fuel cycle
- Waste management**
 - Absence of material segregation of non-hazardous waste
- Manufacturing**
 - Production, trade, distribution and use of persistent organic pollutants and other hazardous pollutants
 - Mining, processing, production, trade and use of asbestos and asbestos-based products
- Transportation**
 - Production, distribution and sale of new vehicles with combustion engines

Social exclusions

Companies must

- Comply with internationally proclaimed human rights
- Ensure that they are not complicit in human rights abuses
- Uphold freedom of association and right to collective bargaining
- Ensure elimination of forced and compulsory labour
- Uphold abolition of child labour
- Ensure elimination of employment / occupation discrimination
- Abide by local legislation on corruption, bribery, extortion and work against corruption

Companies are excluded if they derive

- Turnover from tobacco production or any tobacco-related activity
- More than 5% turnover from retail trade of tobacco products
- Turnover from production or trade of controversial weapons
- More than 5% turnover from the production or trade of conventional weapons or military products used for combat
- Activities violating the rights of minority' and indigenous communities

Governance exclusions

Companies are excluded if they do not have in place

- Corporate policies and operational procedures on social aspects
- Up-to-date management system to identify, evaluate, prevent, mitigate and remediate social impacts

Note : Summary of environmental exclusions (criterion 2) and social and governance exclusions (criterion 3) in the Ecolabel for retail financial products. Several exclusions have exceptions or are more detailed. Based on the JRC 4th Technical Proposal (March 2021). The exclusions underlined are those tested in this section.

Sources: European Commission, ESMA.

We checked for four types of exclusions (underlined in Table 4) using product involvement data from Sustainalytics measuring a portfolio's percentage exposure to a range of products, services and business activities²⁵:

²⁵ Sustainalytics captures direct involvement from producing, manufacturing or operating a product as well as indirect involvement from distributing or selling related products and services. For the specification of the revenue thresholds, see [Morningstar Portfolio Product Methodology](#) and [Morningstar Portfolio Carbon Risk Score](#).

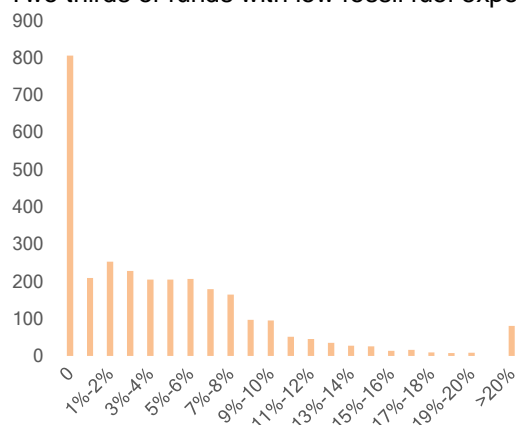
- **Fossil fuel.** Companies deriving at least 5 % of their revenues from thermal coal extraction or power generation, oil and gas production or power generation, or at least 50 % of their revenues from oil and gas products and services.
- **Pesticides.** Companies involved in the manufacturing of pesticides or deriving revenues from the distribution or retail sale of pesticides.
- **Controversial weapons.** Companies involved in the core system (including components and services) of controversial weapons (e.g. anti-personnel mines, biological or nuclear weapons).
- **Tobacco.** Companies involved in the manufacturing of tobacco products, supply of tobacco-related products and services or deriving revenues from the distribution or retail sale of tobacco products and services.

Some differences in scope imply that these data do not perfectly correspond to the exclusion requirements set out in the Ecolabel. Moreover, the 5 % limit on fossil fuel, pesticides and tobacco-related exposures applies to individual companies, whereas our data are at portfolio level. Nonetheless, in the absence of more granular information, these data can be used to assess a fund's involvement in these areas. A fund with portfolio exposure to fossil fuels above 5 % means that the fund is investing in at least one company deriving more than 5 % of its turnover from fossil-fuel activities, implying that the fund does not fulfil the criterion 2 requirement.²⁶

Focusing on fossil fuel exposure, a significant number of sustainability-oriented funds appear to have at least some exposure to fossil fuel activities, with just 806 funds (27 % of the sample) that have no exposure at all (Chart 3). This finding is true for both Article 8 and Article 9 funds.

²⁶ For example, if a fund with 5 % portfolio exposure to fossil fuel has invested 50 % in company A and 50 % in company B, this either implies that (i) A and B derive 5 % of their revenues from fossil-fuel activities, or that (ii) A or B derive more than 5 % of their revenues from these activities. This approach possibly overestimates the number of eligible funds, since it assumes that none of the companies in which eligible funds invest breach the maximum threshold.

Chart 3
Number of funds by portfolio exposure to fossil fuel
Two thirds of funds with low fossil fuel exposure

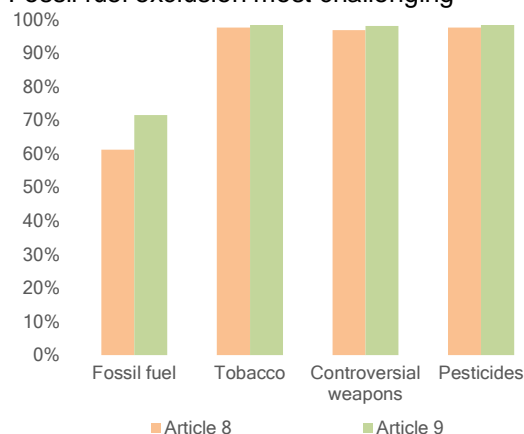


Note: Number of SFDR Article 8 and 9 funds by portfolio exposure to companies with fossil fuel-related activities, in 1 percentage point increments. Sources: Morningstar, Sustainalytics, ESMA.

Criteria 2 and 3 results

Out of the four types of exclusion tested, we find that the most demanding requirement to meet for sustainability-oriented funds is, by a wide margin, the 5 % limit on fossil fuel activities. Indeed, there are 1 906 funds (i.e. 63 % of our sample) complying with the fossil fuel exposure limit – with just minor differences between Article 8 and Article 9 products. Exclusions relating to pesticides, tobacco and controversial weapons seem to be much less problematic, with between 78 % and 85 % of funds meeting the corresponding requirements (Chart 4). When combining the four exclusion requirements together, 1 472 funds (48 % of the sample) are eligible.

Chart 4
Share of funds complying with Ecolabel exclusions
Fossil fuel exclusion most challenging



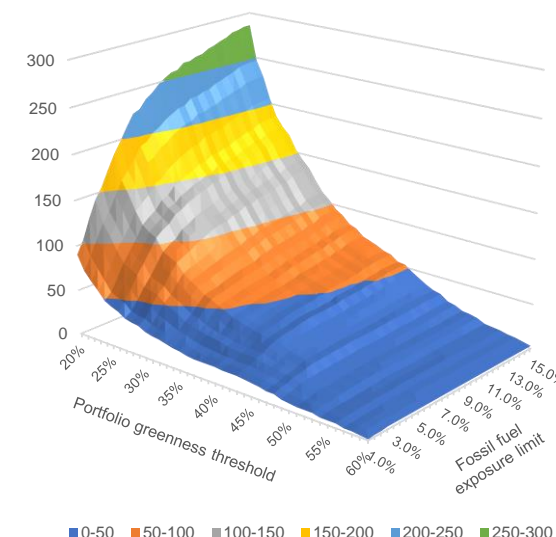
Note: Share of SFDR Article 8 and 9 funds complying with selected Ecolabel exclusions under Criteria 2 and 3. Sources: Morningstar, Sustainalytics, ESMA.

When combining exclusions with the minimum portfolio greenness requirement, 16 funds fulfil criteria 1 to 3, with the fossil fuel limit disqualifying 9 out of the 26 funds above the 50 % greenness threshold (and another fund disqualified due to tobacco). While funds with the greenest portfolio might have been expected to have lower fossil fuel exposure, this does not appear to be the case. One possible explanation relates to the sectors in which green funds invest. For example, many utilities combine renewable energies with more polluting sources of energy to meet customer needs and compensate high supply variability from renewable energy production (Verdolini et al., 2016).

Threshold calibration

These findings highlight the importance of carefully calibrating the Ecolabel criteria to achieve the desired balance between credibility and take-up by product managers. Chart 5 illustrates the impact of calibration changes on the number of eligible funds.

Chart 5
Distribution of funds by Ecolabel threshold calibration
Balancing greenness with fossil fuel exclusions



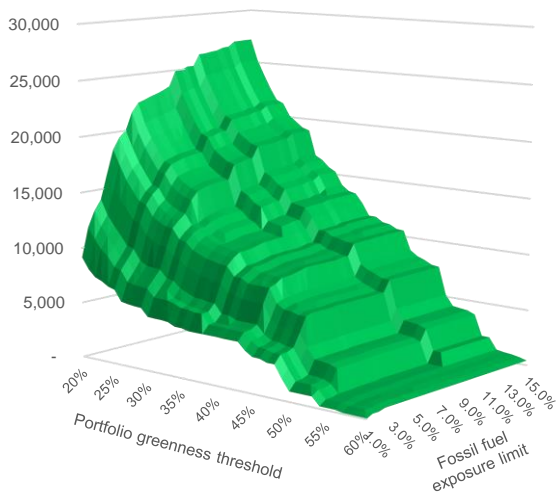
Note : Number of SFDR Article 8 and 9 funds (vertical axis and legend) eligible to the Ecolabel based on different calibrations of the minimum portfolio greenness threshold (1 percentage point increments) and fossil fuel exposure limit (0.5 percentage point increments). Sources: Morningstar, Sustainalytics, ESMA.

With all other things equal, a higher portfolio greenness threshold reduces the marginal impact of a tighter fossil fuel exposure limit. Similarly, looser fossil fuel restrictions increase the marginal impact of a higher greenness threshold. These observations highlight the existence of interactions between different Ecolabel

environmental criteria, and thus the need to take an integrated approach when calibrating the quantitative thresholds.

Beyond the number of eligible funds, calibration changes would impact the financing of green activities by Ecolabel funds. Chart 6 illustrates this by plotting the aggregate value of green assets (i.e. the numerator of the portfolio greenness ratio) held by funds eligible to the Ecolabel. Under the proposed 50 % greenness threshold and a fossil fuel exposure limit of 5 %, the total value of green assets financed by funds eligible to the Ecolabel would amount to just EUR 3 billion. Under a minimum greenness threshold of 20 % and fossil fuel exposure limit of 15 %, this value increases to EUR 27 billion – at the expense of more money financing fossil fuel activities (EUR 33 billion v EUR 8 billion with a 5 % portfolio limit). In this respect, the Ecolabel criteria 4 and 5 on engagement policy and investor impact can usefully complement quantitative criteria by ensuring that any financing of fossil fuel activities comes with strings attached, pushing investee companies to decarbonise.

Chart 6
Financing of green activities by eligible funds
Looser requirements increase potential volumes



Note : Total financing of Taxonomy-aligned activities in EUR million (vertical axis) by SFDR Article 8 and 9 funds eligible to the Ecolabel, based on different calibrations of the minimum portfolio greenness threshold (1 percentage point increments) and fossil fuel exposure limit (0.5 percentage point increments).
Sources: Morningstar, Sustainalytics, ESMA.

While the Ecolabel thresholds would not impact the current volume of financing of green or brown activities, such calibration choices matter when it comes to channelling future money to finance the transition to a low-carbon economy. Looser

requirements should lead to a higher offering of Ecolabel products, which may draw in a larger number of investors and volumes of financing, provided that such actions do not damage the credibility of the Ecolabel.

Conclusions

The EU Ecolabel for retail financial products could bring benefits to investors by introducing minimum sustainability criteria based on standardised definitions and increasing transparency. However, its success would depend on its perceived credibility and the level of take-up by product managers.

This article tests three key Ecolabel criteria on a large sample of sustainability-oriented UCITS equity funds. Using portfolio holdings and a combination of security-level and sector-level estimates, we find that less than 1 % of the sample have a portfolio greenness ratio above the proposed 50 % threshold. We then check for four different types of exclusions and show that the fossil fuel exposure limit in particular further reduces the share of eligible funds to 0.5 %.

Due to data limitations, these estimates rely on proxy data and a number of assumptions. While this implies a degree of uncertainty and possible overestimation, product managers will face similar obstacles until granular information becomes available. The future disclosure requirements under the EU Taxonomy and sustainability reporting standards under development will greatly help in this respect.

Finally, the article illustrates the impact of different threshold calibrations for minimum portfolio greenness and fossil fuel exposure limit on the number of eligible funds and volumes of green finance. Looser requirements increase the potential volumes of green finance channelled through eligible funds but could damage the credibility of the Ecolabel. These conclusions do not prejudice current or future policy developments concerning the EU Ecolabel.

As the scope of the EU Taxonomy expands and a growing number of companies start transitioning, the share of aligned activities will increase over time. This will make tighter requirements easier to meet in the future while mirroring changes in investor preference for greener investments.

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