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European banks



Green asset ratios
What's in store for banks?

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Contents

Green asset ratios as KPI for banks	3
Introduction	3
Bank balance sheet exposures and their GAR impacts	4
– <i>Loans & advances to non-financial corporations – 25% is out of scope</i>	5
– <i>A third of the corporate loans are exposures to more polluting sectors</i>	6
– <i>Exposures to households are less GAR relevant for German banks</i>	7
– <i>Technical screening criteria for buildings: they do matter!</i>	8
– <i>Data availability is not a mortgage loan issue alone</i>	9
– <i>Green asset ratios: do they properly reflect a bank's ESG efforts?</i>	10
<hr/>	
Appendix 1 – The EBA proposals	11
The green asset ratio	11
– <i>1. Non-financial corporations subject to NFRD disclosure obligations</i>	12
– <i>2. Financial corporates</i>	14
– <i>3. Retail exposures</i>	14
– <i>4. NFC not subject to NFRD disclosure obligations (incl. SMEs)</i>	15
– <i>5. Public housing</i>	16
– <i>6. Repossessed real estate collateral</i>	16
KPIs for off-balance sheet exposures	16
– <i>1. Green ratio financial guarantees for NFRD companies (FinGuar KPI)</i>	16
– <i>2. Green ratio for assets under management (AuM KPI)</i>	16
KPIs for fees and commissions (F&C KPI).....	16
Trading portfolio disclosures	17
The timeline proposals	17
<hr/>	
Disclaimer	18

Green asset ratios as KPI for banks

Introduction

Starting next year, banks will have to disclose to what extent their activities are environmentally sustainable according to the definitions set out in the EU taxonomy regulation. In an advice to the European Commission, the European Banking Authority (EBA) recently shed further light on what these disclosures could look like for credit institutions under their non-financial reporting obligations.¹ These disclosures should enhance the transparency and comparability of the ESG performance metrics of credit institutions. As such, they could form a valuable reference for example for central banks aiming to integrate sustainability criteria into their monetary policy framework. That said, key performance indicators that measure the taxonomy alignment of bank exposures may not always give the full picture of a bank's actual transitional efforts. They do not cover all activities yet, and will fail to make transparent some of the more important ESG efforts that do not meet the strict criteria from the taxonomy regulation.

The EBA's KPI proposals in a nutshell

As part of their non-financial disclosure requirements credit institutions will have to publish a number of key performance indicators (KPI) giving insight into the extent to which their business operations are environmentally sustainable.

The most important KPI is the **green asset ratio (GAR)**, which measures the share of the credit institution's taxonomy-aligned balance sheet exposures versus its total eligible exposures. The green asset ratio will be disclosed at EU level, but banks should also strive to offer transparency on the taxonomy alignment of their non-EU exposures. Credit institutions will disclose their aggregate GAR plus a breakdown by environmental objective (ie, climate change mitigation, climate change adaptation, etc). In addition, credit institutions should publish separate KPIs on their trading portfolio, fee and commissions income, and off-balance sheet exposures such as financial guarantees or assets under management. Further details on the EBA's KPI proposals are discussed in *Appendix 1* of this report.

The key performance indicators for credit institutions lack comparability with the indicators based on turnover, operational expenses (opex) or capital expenses (capex) for non-financial corporations under the taxonomy regulation. The EBA considers KPIs based on turnover, opex or capex not suitable for credit institutions. Banks have a large variety of counterparties and economic activities they finance, while their carbon footprint is primarily linked to the GHG emissions of their counterparties (scope 3). The direct GHG emissions (scope 1) of financial institutions or the GHG emissions linked to their energy consumption (scope 2) are limited. Instead, the alternatively proposed 'look-through' KPIs will judge banks by how they allocate their financial resources and by doing so make most transitional difference.

The sustainability assessment that credit institutions have to make will either be based upon information that is mandatorily disclosed by counterparties, or otherwise by the application of the EU taxonomy technical screening criteria. Some counterparties, such as governments or central banks, are not obliged to publish information on the taxonomy alignment of their activities. For that reason, these exposures should be excluded from the information to be disclosed by credit institutions. Sovereign and/or central bank exposures can be considered at a later stage once a methodology for deriving their taxonomy alignment is in place. Alternatively, credit institutions should give insight into the percentage of the assets that is actually covered by the key performance indicator published. The EBA estimates that roughly 20% of the aggregate financial assets of European banks would not be covered by any of the KPI proposals at this stage (Figure 1).

¹ The European Commission is anticipated to adopt a separate delegated act on the transparency requirements for large corporations under the non-financial reporting directive (NFRD) by 1 June 2021, in accordance with Article 8 of the taxonomy regulation. The three European Supervisory Authorities (ESMA, EIOPA and EBA) each provided the European Commission with an opinion. The EBA's advice covers the disclosure requirements for credit institutions and investment firms. See <https://www.eba.europa.eu/eba-advises-commission-kpis-transparency-institutions%E2%80%99-environmentally-sustainable-activities> for further detail.

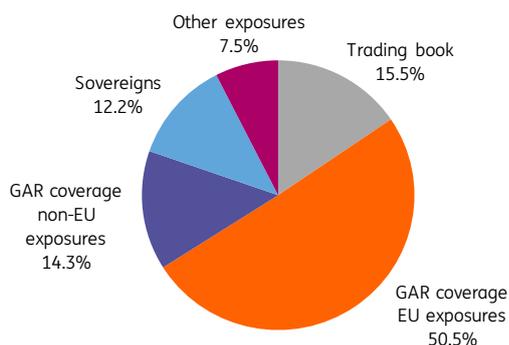
Bank balance sheet exposures and their GAR impacts

Credit institutions should calculate a **green asset ratio** (GAR) for their loans & advances, debt securities and equity holdings for the following on-balance sheet exposures:

- Non-financial corporates subject to NFRD disclosure obligations;
- Financial corporates;
- Retail exposures;
- Non-financial corporates not subject to NFRD disclosures (incl. SMEs);
- Loans and advances financing public housing;
- Repossessed real estate collateral.

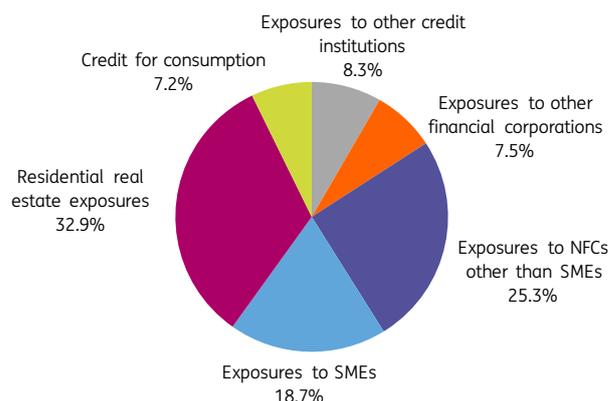
The EBA's FINREP 3Q20 statistics suggest that exposures to non-financial corporations will carry most weight in EU GAR calculations with 44%, followed by exposures to households with 40% and exposures to financial corporates with 16% (Figure 2). These shares include exposures via loans & advances, debt securities and equity holdings.

Fig 1 Coverage of KPIs (share of total financial assets)



Source: EBA (3Q20 FINREP), ING

Fig 2 GAR on EU exposures (share of counterparties)



Source: EBA (3Q20 FINREP), ING

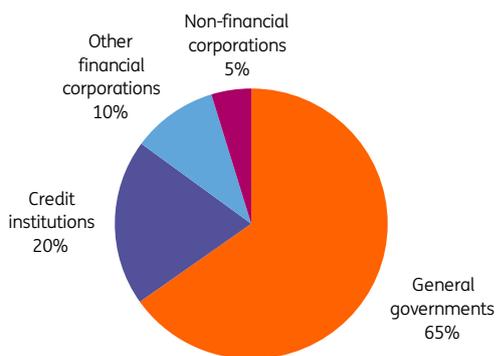
Bond holdings will have a moderate weight in their GAR calculations by banks

For banks, exposures via loans & advances will be most important for green asset ratio calculation purposes. Statistics derived from the EBA's 1H20 transparency data reveal that European bank debt exposures (non-central bank) were by the end of 1H20 for the largest part (86%) comprised of loans & advances with debt securities comprising only 14%.²

Figure 3 illustrates that the composition of the portfolio of debt securities of banks is determined mainly by the eligibility of the instruments as high quality liquid assets (HQLA) for liquidity coverage ratio (LCR) purposes and as central bank collateral. For these reasons banks primarily buy government bonds, which are GAR out of scope. Of the debt securities within the scope of the GAR, exposures to credit institutions (mostly via covered bank bonds) are the most important. Bank holdings of bonds issued by non-financial corporations are limited. Banks have the largest exposures to non-financial corporations via their lending books.

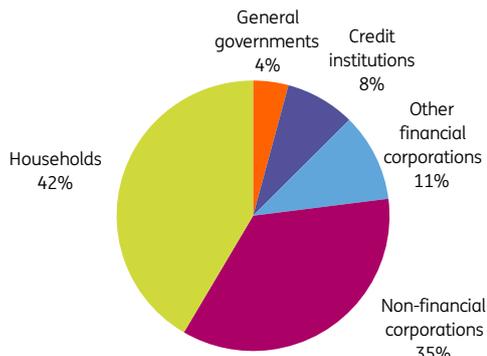
² These statistics are only based on the debt exposures (total loans & advances and debt securities not held for trading) of a selection of European banks with debt securities in the Markit iBoxx indices and cover both EU and non-EU exposures for these banks. They differ in scope from the EBA's FINREP 3Q20 statistics used as illustration in the KPI advice to the European Commission and shown in Figures 1 and 2.

Fig 3 Distribution of EU bank debt securities



Source: EBA (Transparency Data 1H 2020), ING

Fig 4 Distribution of EU bank loans and advances



Source: EBA (Transparency Data 1H 2020), ING

Loans & advances to non-financial corporations – 25% is out of scope

Loans & advances granted to non-financial corporations are generally broken down by economic activity. However, the taxonomy regulation does not cover all these activities. While the EBA proposes to exclude sovereign and central bank exposures from the green asset ratio calculations, the same does not appear to be the case for those economic activities for which no technical screening criteria are developed yet.³

The economic activities covered by the technical screening criteria

The European Commission is currently in the process of adopting a delegated act on the technical screening criteria for two of the six environmental objectives pursued by the taxonomy regulation, namely climate mitigation and climate change adaptation. The sector approach applied to this purpose is strongly aligned with the statistical classification system already broadly used within the European Union for the identification of economic activities (NACE). Figure 5 summarises the thirteen different sectors identified by the European Commission in its November draft delegated act, of which twelve represent NACE economic activities. Six NACE economic activities are not in scope of the technical screening criteria at this stage.

Fig 5 The identified sectors for climate change mitigation and adaptation

Sectors	Climate change	
	Mitigation (CCM)	Adaptation (CCA)
1 Agriculture and forestry	✓	✓
2 Environmental protection and restoration activities	✓	✓
3 Manufacturing	✓	✓
4 Energy	✓	✓
5 Water supply, sewerage, waste and remediation	✓	✓
6 Transport	✓	✓
7 Construction and real estate activities	✓	✓
8 Information and communication	✓	✓
9 Professional, scientific and technical activities	✓	✓
10 Financial and insurance activities		✓
11 Education		✓
12 Human health and social work activities		✓
13 Arts, entertainment and recreation		✓

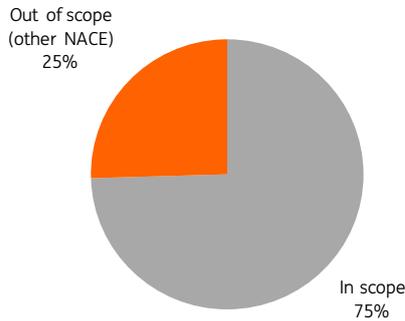
* Environmental protection and restoration activities are not a separate NACE economic activity.
 NACE economic activities left out of scope of the draft technical screening criteria: 1. Mining and quarrying, 2. Wholesale and retail trade, 3. Accommodation and food service activities, 4. Administrative and support service activities, 5. Public administration and defence, compulsory social security, and 6. Other services.
 Source: EC, ING

³ For non-financial corporations, economic activities not covered by the technical screening criteria are excluded from the second intermediate KPI calculations but not from the final green asset ratio (see Appendix 1).

“Banks with more exposures to NACE activities not yet covered by the TSC could have a GAR disadvantage”

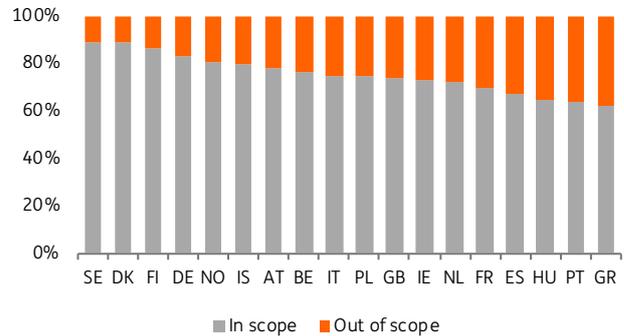
Figure 6 shows that, of the loans and advances by banks to non-financial corporations, 75% is in scope of the technical screening criteria, whereas 25% is not yet covered.

Fig 6 Loans & advances to NFC: 75% taxonomy in-scope



These statistics also include non-EU exposures
Source: EBA (Transparency Data 1H 2020), ING

Fig 7 Nordic banks are best covered by the taxonomy



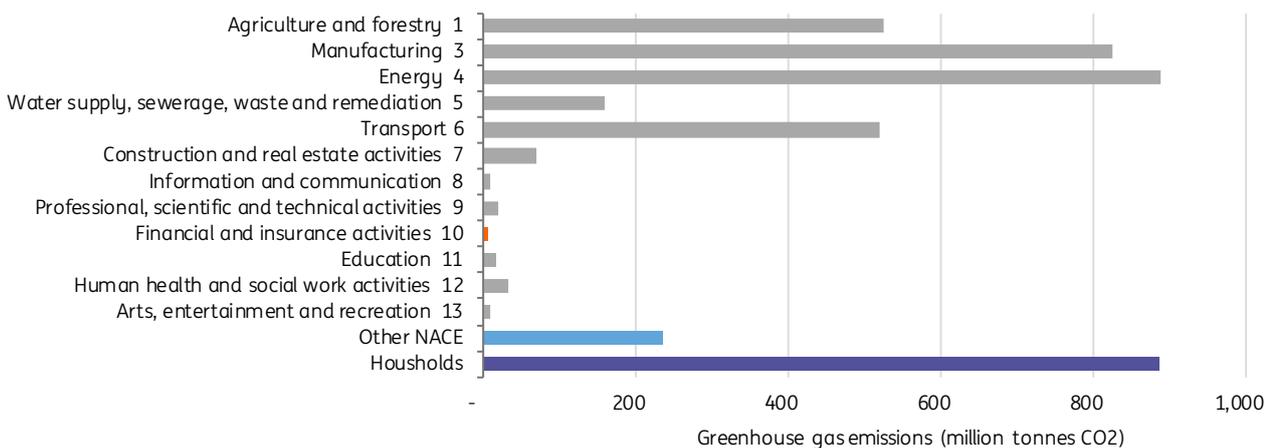
These statistics also include non-EU exposures
Source: EBA (Transparency Data 1H 2020), ING

For green asset ratio calculation purposes these exposures do form a disadvantage, in our view, as GAR calculations will compare the proportion of loans & advances financing taxonomy compliant economic activities versus the total loans & advances to the company. Only on an intermediate KPI level these loans are compared with loans & advances financing economic activities in sectors that are covered by the taxonomy. Hence, banks that are relatively more exposed to NACE activities not yet covered by the technical screening criteria could be at a disadvantage in their GAR reporting. However, the EBA does urge the European Commission to complete the taxonomy for all economic activities and environmental objectives, and at a later stage maybe extend its scope to a low or negative impact taxonomy and a social taxonomy. This should support the reliability and completeness of the disclosures on the taxonomy alignment.

A third of the corporate loans are exposures to more polluting sectors

To get an idea of how environmentally sustainable bank lending books are, Figure 8 gives an overview of the greenhouse gas emissions of the different economic activities. Corporates active in the energy or manufacturing sectors are the largest contributors to GHG emissions, followed by corporates in the agriculture and forestry and transportation segments. Households, in turn, are also major GHG emitters.

Fig 8 The financial sector itself is a limited direct contributor to greenhouse gas emissions

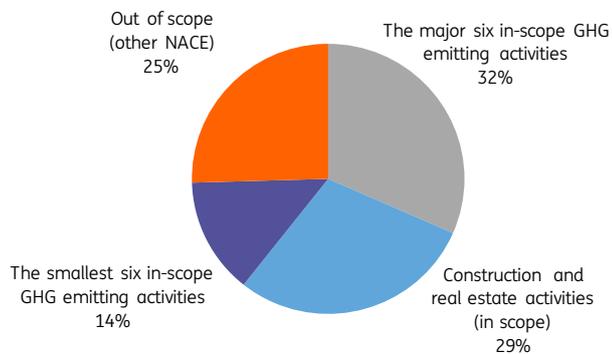


NACE=the EU statistical classification of economic activities (Nomenclature statistique des activités économiques dans la Communauté européenne)
Source: Eurostat (2019 EU28), ING

“Roughly a third of the corporate lending books of banks is exposed to more polluting sectors”

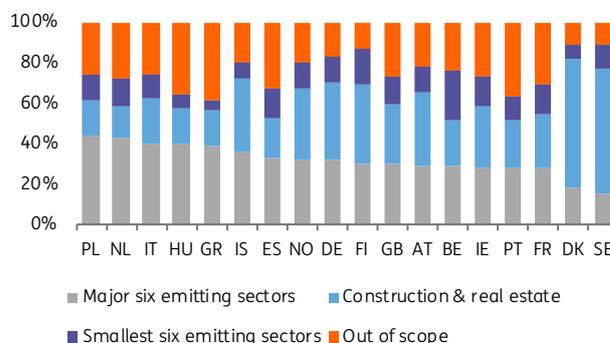
Of the European bank loans to non-financial corporations, roughly a third represent exposures to the most polluting economic activities, of which the manufacturing sector is the most important. Hence, one can imagine that banks with larger exposures to these sectors, such as Polish, Dutch or Italian banks, may end up reporting poorer green asset ratios (see Figures 6 and 7).

Fig 9 One third of the NFC loans is to the six most GHG emitting sectors



These statistics also include non-EU exposures
Source: EBA (Transparency Data 1H 2020), ING

Fig 10 Swedish banks are least exposed to the six major GHG emitting sectors



These statistics also include non-EU exposures
Source: EBA (Transparency Data 1H 2020), ING

This is not necessarily the case though as these loan exposures could very well partially represent exposures to companies that are environmentally sustainable according to the definitions applied by the EU taxonomy regulation.

Furthermore, the technical screening criteria for the different activities defining the non-financial corporate exposures may not be the criteria that have to be applied for GAR calculation purposes. For example, where SME exposures are secured by commercial property claims, the technical screening criteria for green buildings have to be applied.

That said, we do believe that these sector exposures give an indication of where banks may have more work to do, or less work to do, in terms of supporting their non-financial corporate counterparties in transitioning to a green economy.

Credit institutions are increasingly aware of the challenges at hand. This is underscored by the recent announcements by banks such as Erste Bank and BBVA to fully phase out their financing of thermal coal mining and power generation sectors in this decade, while supporting clients in reducing their links with the thermal coal sector.

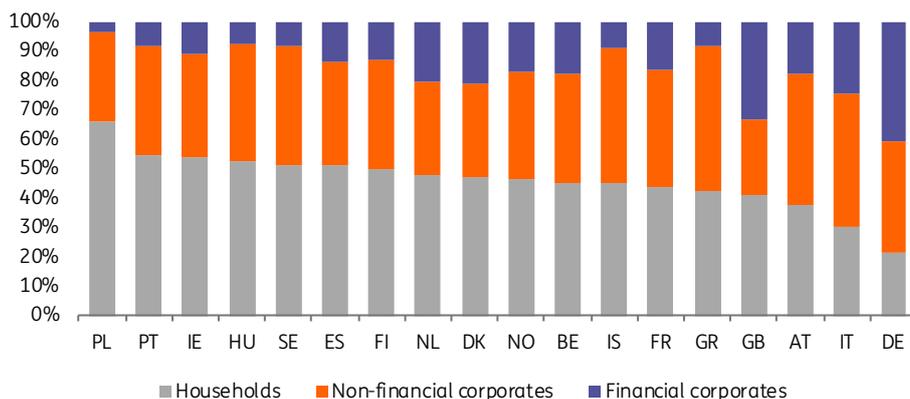
Exposures to households are less GAR relevant for German banks

For loans granted to households, green asset ratios only have to be calculated for residential mortgage loans or new car loans. This should cover the majority of the loans to households as most of these loans represent residential mortgage loans, while a substantial proportion of the other consumer loans is typically granted to purchase cars.

“Exposures to households have less GAR relevance for German and Italian banks”

Households are also considerable contributors to GHG emissions. For that reason, high exposures to households could prove to be a GAR disadvantage for banks, particularly against the backdrop of the strict draft technical screening criteria proposals of the European Commission for buildings. Figure 11 shows that household exposures likely have least GAR relevance for German and Italian banks, as these banks are more heavily exposure to financial and non-financial corporations.

Fig 11 Household exposures have least GAR importance for German & Italian banks



These statistics also include non-EU exposures and debt securities exposures
 Source: EBA (Transparency Data 1H 2020), ING

Technical screening criteria for buildings: they do matter!

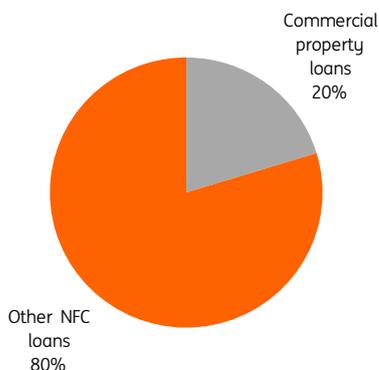
In our special report [Sustainable Bonds – Bothered By Buildings?](#) we discussed in more detail the technical screening criteria for buildings, mostly with reference to the market for green bank bonds. For GAR calculation purposes these criteria will by far be the most important for banks. We estimate that these buildings criteria alone could impact the GAR by almost 45% as they affect the GAR aggregate in multiple ways:

- Household residential real estate assets;
- SME commercial real estate assets;
- Corporate sector exposures to construction and real estate activities;
- Loans and advances financing public housing;
- Repossessed real estate collateral.

“The technical screening criteria for buildings will be highly relevant for GARs”

Figures 12 and 13 confirm that commercial property loans represent 20% of the total loan exposures to non-financial corporates, while they make up even 64% of the loans granted to households by European banks. Besides, Figure 9 earlier in this report showed that exposures to **construction and real estate activities** are the most important corporate sector loan book exposures for banks, with a share of 29%.

Fig 12 Property loans represent 20% of loans to NFC



These statistics also include non-EU exposures
 Source: EBA (Transparency Data 1H 2020), ING

Fig 13 Property loans represent 64% of household loans



These statistics also include non-EU exposures
 Source: EBA (Transparency Data 1H 2020), ING

In our *‘Bothered by buildings’* report we also highlighted the issues with the use of EPC labels as screening criterion for buildings, particularly if the label cut-off is as strict as class A for buildings built before 31 December 2020 as per the European Commission’s proposals of last year.

“EPC methodology disclosures would merely be a plaster on the wounds for banks subject to strict A label criteria”

The EBA's green asset ratio proposals fully build upon the technical screening criteria suggestions of the European Commission. However, the EBA does acknowledge the challenges related to the availability of EPC

data for banks and therefore encourages the European Commission to support central publicly available databases for EPC labels for buildings. Besides, the EBA proposes a transition period of three years to give banks time to collect the relevant information on their mortgage lending books, while allowing banks to use proxies in the meantime.

While this may tackle the data availability problems for banks, it does not address the country comparability issues related to the use of EPC labels. As a solution to this matter, the EBA suggests that banks should disclose clear information on the meaning of each label in terms of energy efficiency and consumption in the EU jurisdictions where they operate. This is merely a plaster on the wound for banks located in countries with strict energy consumption criteria for class A EPC labels. Methodology disclosures or not, these banks would still likely score less well in terms of their GAR than banks from countries where the energy consumption criteria for class A EPC labels are more lenient.

Data availability is not a mortgage loan issue alone

Data availability is not an issue impacting a bank's mortgage loan taxonomy disclosures alone. In a report published in January 2021 the European Banking Federation (EBF) and the United Nations Environment Programme Finance Initiative (UNEP FI) highlighted several other challenges in relation to the EU taxonomy reporting requirements.⁴ These include, among other things, the difficulties faced by banks in terms of data availability from SMEs, which often lack resources and expertise, but also the regulatory pressure and incentives to produce the data. Besides, it is time consuming and costly for SMEs to provide the required transparency on their taxonomy alignment, while data currently available from independent sources is not sufficient. As such, it will likely remain a tough process for banks to collect this information, either through their regular credit review and monitoring of borrowers, or via independent EU bodies.

Also, with reference to non-EU based assets it could prove difficult for banks to offer the wished for transparency on taxonomy alignment. After all, non-EU companies have no legal incentive to provide the data. Besides, non-EU based investors in principle have no direct interest in information on the taxonomy alignment of companies. As such, it is questionable whether the demand for such information from EU investors would offer non-EU companies sufficient motivation to disclose the information. For that reason, the EBF and UNEP FI are urging legislators to seek global alignment of taxonomies, facilitate international data collection and provide cross-border comparability mechanisms.

Carrying out the required 'do no significant harm' (DNSH) and 'minimum social safeguards' (MSS) assessments for taxonomy alignment is also difficult for banks due to the lack of data availability. The EBF and UNEP FI highlight that banks already struggle to find evidence that companies follow the OECD guidelines on multinational enterprises of relevance to the MSS assessment. They also question the abilities of banks to obtain data from clients for the performance of the DNSH assessment where these statistics are not available via non-financial data providers.

Offering meaningful disclosures on the taxonomy alignment could be a process spanning several years. This is an aspect market participants should bear in mind when analysing the ESG performance of banks based upon their initial KPI disclosures.

⁴ <https://www.unepfi.org/wordpress/wp-content/uploads/2021/01/Testing-the-application-of-the-EU-Taxonomy-to-core-banking-products-Final-v2.pdf>

Green asset ratios: do they properly reflect a bank's ESG efforts?

“Green asset ratios offer an incomplete picture of a bank's transitional efforts”

Another problem with the green asset ratio, in our view, is that there is a whole grey area between assets representing high GHG emissions versus those that are as

environmentally sustainable as required by the EU taxonomy regulation. While the green asset ratio does provide insight into the share of bank balance sheet assets that are taxonomy aligned, it would not give any insights into assets that have become more energy efficient, but not yet as efficient as required by the taxonomy regulation.

For example, where a bank would finance the transition of a building from the G EPC label category to the C label category, it would probably contribute to bigger energy efficiency gains than when funding the transition of an already relatively efficient building with a C label to the A label category. The former would not be reflected in the GAR stock or flow information where the latter would. Other examples can be found in the sustainable product offerings of banks. Green products, such as green mortgage loans, would indeed probably classify for the green asset ratio based upon their taxonomy alignment. The story changes, however, when looking at ESG and KPI-linked revolving credit facilities offered to corporates that commit to improving their sustainability profile via improved ESG ratings and/or via reducing their carbon footprint. Despite their supportive environmental impact, these facilities are unlikely to show up in the bank's GAR.

Maybe the development of a low or negative (brown) taxonomy would make such efforts more visible. If banks had to publish stock and flow information on both brown asset ratios (BAR) and green asset ratios, their accomplishments in supporting counterparties in becoming environmentally more sustainable, albeit not yet taxonomy aligned, could become more transparent. However, even this would still carry a risk for the identification of transition assets that are not yet green but are also not brown.

Appendix 1 – The EBA proposals

The EBA proposes **four types of KPIs for credit institutions**:

- The **green asset ratio (GAR)** for on-balance sheet exposures
 - Non-financial corporates subject to NFRD disclosure obligations
 - Financial corporates
 - Retail exposures
 - Non-financial corporates not subject to NFRD disclosures (incl. SMEs)
 - Loans and advances financing public housing
 - Repossessed real estate collateral
- KPI on the **trading portfolio**
- KPI on **fees and commissions income** (services provided other than lending)
- KPIs on **off-balance sheet exposures**
 - Green ratio *financial guarantees* corporates subject to NFRD disclosure
 - Green ratio *assets under management*

The scope of disclosures includes:

- Financial activities: investments and lending
- Commercial activities: services provided other than lending

The green asset ratio

The green asset ratio (GAR) will be the main KPI for banks

The green asset ratio should, in the EBA's view, be the main KPI for credit institutions to show the alignment of their balance sheets with the taxonomy.

The **green asset ratio (GAR)** =

$$\frac{\text{Taxonomy-aligned exposures for loans \& advances, debt securities and equity holdings}}{\text{Total eligible exposures}}$$

This includes only the gross carrying amount of loans and advances, debt securities and equity instruments not held for trading, recognised

- at amortised cost (loans & advances and debt securities only) and at fair value through other comprehensive income;
- at fair value through profit and loss.

Fig 14 Green asset ratio calculations for on balance sheet exposures

Reporting breakdown/ Types of exposures	CCM*	CCA*	Other*	Transitional (CCM)	Adaptation (CCA)	Enabling (CCM/CCA)	Specialised Stock lending	Flow	Targets & FWL*
1. Non-financial corporations subject to NFRD disclosures	✓	✓	✓	✓	✓	✓		✓	✓
Green asset ratio loans and advances (GAR L&A)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Green asset ratio for debt securities (GAR DS)	✓	✓	✓	✓		✓	✓	✓	✓
Green asset ratio for equity holdings (GAR EH)	✓	✓	✓	✓		✓	✓	✓	✓
2. Financial corporates (credit institutions and other)	✓	✓	✓	✓	✓	✓		✓	✓
Exposures to other credit institutions									
Exposures to other investment firms									
Exposures to asset managers									
Exposures to insurance companies									
3. Retail exposures									
Residential real estate lending	✓			✓			✓	✓	✓
Credits for consumption (car loans)	✓			✓			✓	✓	✓
4. Non-financial corporations not subject to NFRD disclosures									
Commercial real estate lending and loans for renovations;	✓						✓	✓	✓
Debt securities, other loans & advances to SMEs and equity	✓	✓	✓	✓	✓	✓	✓	✓	✓
5. Public housing	✓						✓	✓	✓
6. Repossessed real estate collateral	✓			✓			✓	✓	✓

*CCM=climate change mitigation objective, CCA=climate change adaptation objective, Other=other environmental objectives, FWL=forward looking information
Source: EBA, ING

Credit institutions have to disclose information on the total green asset ratio (GAR) of the institution, which is the cumulative value of the individual KPIs discussed by adding the numerators (on taxonomy aligned exposures) and the denominators (on eligible exposures) of each KPI.

The KPIs to be added include the green asset ratios on

- Non-financial corporations subject to NFRD disclosure obligations,
- Financial corporates,
- Residential real estate exposure,
- Retail car loans,
- Commercial real estate exposures,
- Debt securities and other loans & advances to non-NFRD companies,
- Loans to local governments for housing financing, and
- Repossessed real estate collateral (commercial and residential) held for sale.

KPI disclosure requirements

In most cases, the KPIs should be disclosed by environmental objective (ie, climate change mitigation, climate change adaptation, etc), and provide a separate breakdown for transitional/adaptation activities or enabling activities and for specialised lending.

Information should also be provided on a stock and flow basis:

- Stock – based on the total gross carrying amount at the disclosure reference date
- Flow – based on the gross carrying amount of new financing during the year prior to the disclosure reference date

In addition to the KPIs being disclosed, credit institutions should also disclose forward-looking information based on scenario analysis and their business strategies, and information on short-, medium- and long-term targets.

1. Non-financial corporations subject to NFRD disclosure obligations

The calculation of the green asset ratio (GAR) for NFRD non-financial corporates is based upon a **three-step approach**, comprising two intermediate KPIs before deriving the GAR:

- **First intermediate KPI (b/a)** Proportion of loans & advances, debt securities, equity instruments financing economic activities in sectors **covered by the taxonomy (b)** compared to **the total** loans & advances, debt securities and equity instruments of the NFRD NFC **(a)**;
- **Second intermediate KPI (c/b)** Proportion of loans & advances, debt securities, equity instruments financing **taxonomy compliant** economic activities **(c)** compared to the loans & advances, debt securities, equity instruments financing economic activities in sectors **covered by the taxonomy (b)** (for the objectives of climate change mitigation, climate change adaptation, or any of the other four environmental objectives of the taxonomy);



Green asset ratio (GAR)

- **Green asset ratio (c/a)** Proportion of loans & advances, debt securities, equity instruments financing **taxonomy compliant** economic activities (transitional/enabling) **(c)** compared to **the total** loans & advances, debt securities and equity instruments of the NFRD NFC **(a)**.

Green asset ratio loans and advances (GAR L&A);

For the purpose of the three-step approach for the GAR L&A, a, b and c are:

a = total loans and advances

b = loans and advances financing economic activities in sectors covered by the taxonomy

c = loans and advances financing taxonomy compliant economic activities

The GAR for NFRD NFC is based upon two intermediate KPIs

The counterparty will provide the information on the taxonomy alignment for specialised loans

NFRD disclosures are the basis for the taxonomy alignment assessment of general loans

Bonds meeting the future EU GBS, will be recognized in the GAR as 100% taxonomy aligned

The taxonomy alignment of bonds with unknown use of proceeds is derived from the issuer's NFRD disclosures

Where, $c = i + ii$

- i) loans and advances with **a known use of proceeds**:
 - Specialised **lending** – project finance loans: the gross carrying amount of the project finance exposures for the proportion that the project funded meets the criteria from the taxonomy regulation.
The assessment is based on information provided by the project's counterparty, while the credit institution should provide transparency on the kind of economic activity being funded. To avoid double counting, the specialised lending exposures will be allocated to the most relevant environmental objective.
- ii) loans and advances with **an unknown use of proceeds**:
 - **General loans**: the sum of the gross carrying amount weighted by the proportion of taxonomy aligned activities for each counterparty (percentage of the counterparty's turnover that is taxonomy aligned as disclosed by the counterparty in accordance with its NFRD disclosure obligations).

Green asset ratio for debt securities (GAR DS)

For the purpose of the three-step approach for the GAR DS, a, b and c are:

a = total debt securities

b = debt securities issued financing economic activities in sectors covered by the taxonomy

c = debt securities issued financing taxonomy compliant economic activities

Where, $c = i + ii$

- i) debt securities with **a known use of proceeds**:
 - Green **bonds**:
 - For bonds issued in accordance with the **future EU green bond standard (GBS)**, the total gross carrying amount of the exposures to these green bonds is considered;
 - **Current green bonds** with a use of proceeds towards taxonomy eligible activities have to be assessed based upon their alignment with the taxonomy regulation (based upon ad hoc information provided by the issuer), and should be allocated to the most relevant environmental objective.
 - Debt securities invested in **project finance exposures**:
 - For these securities, the gross carrying amount will be considered to the extent (percentage) that the project funded meets the requirements from the taxonomy regulation. To avoid double counting, these amounts should be allocated to the most relevant environmental objective.
- ii) debt securities with **an unknown use of proceeds**:
 - The sum of the gross carrying amount of the total debt securities weighted by the proportion of taxonomy aligned activities for each counterparty (% of the counterparty's turnover that is taxonomy aligned as disclosed by the counterparty in accordance with its NFRD disclosure obligations).

Green asset ratio for equity holdings (GAR EH)

For the purpose of the three-step approach for the GAR EH, a, b and c are:

a = total equity holdings

b = equity holdings financing economic activities in sectors covered by the taxonomy

c = equity holdings financing taxonomy compliant economic activities

Where c is based upon the percentage of turnover of the non-financial corporation to which the equity instruments belongs that is taxonomy aligned.

The GAR for financial corporates will be calculated based upon the NFRD disclosures of the counterparties

2. Financial corporates

The **denominator** of the GAR for financial corporates will be the total gross carrying amount of loans and advances, debt securities and equity holdings of financial corporates. The **numerator** of the GAR should be calculated based on the taxonomy regulation Article 8 NFRD disclosures of the counterparties. The amount of loans and advances, debt securities and equity holdings of financial corporates in the numerator of the ratio will be the sum of their gross carrying amount, weighted by the proportion of taxonomy-aligned activities for each counterparty:

Exposures to other credit institutions

Gross carrying amount * Total GAR counterparty * % total assets covered by Total GAR
Interbank (on demand) exposures are excluded from the calculation.

Exposures to investment firms

a) Investment firms dealing on own account:

Gross carrying amount * (taxonomy aligned investments/total assets invested)

b) Investment firms with other services/activities than dealing on own account:

Gross carrying amount * ((fees, commissions, other monetary benefits taxonomy aligned services) / (total fees, commissions or other monetary benefits all services))

Exposures to asset managers

Gross carrying amount * asset manager's ratio of taxonomy aligned eligible investments

Exposures to insurance companies

Gross carrying amount * the insurance company's proportion of the counterparty total assets invested in taxonomy compliant economic activities, and where relevant, the insurance company's premium income from taxonomy compliant economic activities.

3. Retail exposures

Residential real estate lending

Proportion of residential mortgage loans to households aligned with the taxonomy (climate change mitigation objective), compared to total residential mortgage loans.

The **numerator** includes:

- Loans to acquire **buildings built before 31 December 2020**, meeting the technical screening criteria based on the EPC of the building as specified in the European Commission's delegated act (current proposal is an EPC label of at least A).
- Loans to acquire **buildings built after 31 December 2020**, where the EPC rating matches a primary energy demand that is at least 20% lower than the primary energy demand resulting from the relevant NZEB requirements.
- Loans granted for **renovation** purposes leading to a reduction in primary energy demand of at least 30%. If these are non-collateralised loans, the gross carrying amount of all uncollateralised loans for the purpose of building renovations should also be added to the denominator.

For the GAR on retail exposures the technical screening criteria will have to be applied

A transition period of three years is proposed for disclosures on real estate loans, during which proxies should be used

To give banks time to collect the relevant information on their existing mortgage lending books, the EBA proposes **a transition period of three years until June 2024** for the disclosure of information on residential real estate loans. This is in line with the transitional period provided in the EBA Guidelines on Loan Origination and Monitoring. For new lending, banks should already start collecting the relevant information. During the transitional period, banks should apply proxies for the calculation and disclosure of the GAR for residential real estate lending based on the application of taxonomy aligned coefficients by NACE sector, estimated by an independent EU body (such as for example the JRC-UZH taxonomy-alignment tool for the climate change mitigation objective).

Credit for consumption (car loans)

The KPI is for **new car loans** (granted from the disclosure requirements' application date) based upon the vehicle's energy performance certificate in line with the technical screening criteria for 'transport for motorbikes, passenger cars and light commercial vehicles':

- Threshold until 13 December 2025: Vehicle has specific CO₂ emissions < 50gCO₂/km
- Threshold from 1 January 2026: Vehicle has zero emissions

4. NFC not subject to NFRD disclosure obligations (incl. SMEs)

Non-financial corporations that are not subject to NFRD disclosure obligations include SMEs and corporates with between 250 and 500 employees. The EBA strongly supports the European Commission's proposals to extend the scope of the application of the NFRD to include corporates with 250 to 500 employees. In that case the KPIs for non-financial corporations subject to NFRD disclosure obligations would become applicable. Until that time, the EBA proposes to treat these exposures similarly to SME exposures.

Meanwhile the EBA suggests applying the same **transition period until June 2024** for the disclosure of information on the stock of exposures to SMEs and other non-financial corporations not subject to NFRD disclosure obligations. For new lending, banks should already start requesting the relevant information in the loan origination process and no transition period is proposed. Banks may focus on the main economic activities of these corporates (main sources of turnover), rather than assessing all their activities.

Commercial property or building renovation loans and advances to SMEs

Proportion of loans to SMEs collateralised by commercial immovable property, and house renovation loans, aligned with the taxonomy, compared to total loans to SMEs collateralised by commercial immovable property. The methodology (ie EPC label A and NZEB-20% requirements (buildings) and 30% PED improvement (renovations)) and transitional period proposals are the same as for residential property loans.

Debt securities, other loans and advances to SMEs and equity instruments

The GAR calculation is based upon a similar three step approach as for exposures to NFRD non-financial corporates. For the purpose of calculating the intermediate KPIs and GAR, a, b and c are:

- a = total debt securities, other loans & advances and equity instruments
- b = debt securities, other loans & advances and equity instruments financing economic activities in sectors covered by the taxonomy
- c = debt securities, other loans & advances and equity instruments financing taxonomy compliant economic activities

- First intermediate KPI = b/a
- Second intermediate KPI=c/b
- Green asset ratio (GAR) = c/a

Credit institutions should classify these exposures by NACE sector and identify the exposures to the sectors covered by the taxonomy regulation. Information on the taxonomy alignment of exposures should be collected on a best effort and bilateral basis, through the regular credit review and monitoring of borrowers. Only if the SME is not able to provide the relevant data, credit institutions can make use of coefficients and proxies that independent EU bodies may provide. The GAR can then be estimated in a similar way as for non-financial corporates subject to NFRD disclosures. Debt securities and loans should be allocated only to the most relevant environmental objective.

The GAR for non-NFRD NFC is based upon...

...the application of the technical screening criteria for commercial property loans...

....and by collecting information on the taxonomy alignment of exposures on a bilateral basis classified by NACE sector

5. Public housing

Proportion of loans to municipalities financing public housing aligned with the taxonomy, compared to total loans to municipalities financing public housing. The taxonomy alignment is assessed in the same way as for residential real estate loans (ie, EPC label A (building built before 31 December 2020), NZEB-20% (building built after 31 December 2020)). The proxies to be applied in the transitional period are also the same.

6. Repossessed real estate collateral

Proportion of commercial and residential repossessed collateral aligned with the taxonomy, compared to the total commercial and residential repossessed real estate collateral. Taxonomy alignment is assessed in the same way as detailed for residential real estate lending (ie, EPC label and NZEB-20% requirements).

KPIs for off-balance sheet exposures

1. Green ratio financial guarantees for NFRD companies (FinGuar KPI)

For the purpose of the three-step approach for the FinGuar KPI, a, b and c are:

- a = total financial guarantees backing debt instruments of NFRD corporates;
- b = financial guarantees backing debt instruments of NFRD corporates financing economic activities in sectors covered by the taxonomy;
- c = financial guarantees backing debt instruments of NFRD corporates financing taxonomy compliant economic activities.

- First intermediate KPI = b/a
- Second intermediate KPI = c/b
- Green asset ratio (GAR) = c/a

The methodology for the KPI for financial guarantees is the same as for the KPIs for loans & advances or debt securities of NFRD corporates, but then applied to the underlying loans & advances or debt securities that the credit institution is backing.

2. Green ratio for assets under management (AuM KPI)

For the purpose of the three-step approach for the AuM KPI, a, b and c are:

- a = total assets under management from NFRD corporates;
- b = assets under management from NFRD corporates, financing economic activities in sectors covered by the taxonomy;
- c = assets under management from NFRD corporates financing taxonomy compliant economic activities.

- First intermediate KPI = b/a
- Second intermediate KPI = c/b
- Green asset ratio (GAR) = c/a

The methodology for the KPI for assets under management (from NFRD corporates) is the same as for the KPIs for debt securities and equity of NFRD corporates, but then applied to the underlying equity and debt instruments.

KPIs for fees and commissions (F&C KPI)

This KPIs should show the proportion of the institution's fee and commission income derived from products or services, such as for example M&A or capital market advisory services for corporate clients, that are associated with economic activities that qualify as environmentally sustainable. The KPI should supplement to green asset ratio (GAR).

The **F&C KPI** is the proportion of the credit institution's fee and commission income from NFRD corporates, derived from products or services other than lending and asset management associated with taxonomy aligned economic activities, compared to the total fees and commissions from NFRD corporates from products and services other than lending and asset management. The numerator will be estimated by weighting the

fee and commission income from each counterparty with the proportion of the disclosed taxonomy aligned turnover of the corporate. For financial corporations, the ratio applied for the counterparty is the same as for the GAR of these corporates.

Separate disclosures should be made on the trading portfolio investment policies of the bank

Trading portfolio disclosures

Credit institutions should provide separate disclosures explaining their trading portfolio investment policy, its overall composition, and on any trend in terms of predominant sectors and their level of alignment with the taxonomy. They should also explain potential limits in terms of environmental risks, targets in terms of the level of alignment of the taxonomy, and how they manage the environmental risks that may impact the value of the portfolio.

In cases where the **trading portfolio has a more predominant role** in the business model of the credit institution, and its size is above a combined threshold, the credit institution should provide more granular, quantitative disclosures and a separate and specific KPI for their trading book. These should show to what extent the institution is trading with environmentally sustainable assets and to what extent it is contributing to promoting the trading of this type of assets.

The **trading KPI** is the ratio of the absolute purchases plus absolute sales of taxonomy-aligned securities compared to the total absolute purchases plus total absolute sales of eligible securities. Eligible securities include equity instruments and debt instruments issued by NFRD corporates, with the numerator of the KPI estimated by weighting the gross carrying amount of the instrument bought/sold from each counterparty with the proportion of taxonomy aligned turnover for the NFRD corporate. For financial corporations, the ratio applied is the same as for the GAR for these counterparties.

The timeline proposals

Banks will have to disclose their taxonomy alignment under the NFRD for the climate change mitigation and climate change adaptation objectives per 1 January 2022, and for the other objectives per 1 January 2023. The EBA recommends that the first disclosures for financial year 2021 should not apply retroactively. For disclosures applicable from 1 January 2022, the first disclosure should cover 2021 only, while for disclosures applicable from 1 January 2023, the first disclosure should cover 2022. The EBA proposes a transition period until December 2022 for the GAR on the stock of loans where the counterparty is subject to the NFRD, and until June 2024 otherwise. Proxy information in terms of estimates and ranges can be disclosed during this period.

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