
AFME and ISDA response to the EBA Discussion Paper on prudential treatment of Environmental Risks

29 July 2022

General Comments

AFME and ISDA (hereafter “the industry”) welcome the opportunity to comment on the EBA’s Discussion Paper **on the prudential treatment of Environmental Risks** (hereafter referred to as the “DP”). The financial industry has an important role to play in supporting the European economy and society as we transition towards sustainable goals and meeting global sustainable finance commitments. Critical to the EU’s success is the commitment of banks to actively encourage clients and customers in this transition process and provide financing, which will be substantial. Prudential regulation has a key role to play in ensuring that banks manage the risks related to the transition pathway properly.

We therefore strongly support the guiding principle of the DP, to follow a risk-based approach to climate related and environmental risks in the prudential framework. We would encourage the EBA to continue to embed this principle in future regulatory initiatives they are mandated to undertake. Further, as the DP recognises, while banks can reflect the risks that could result from too slow a transition for certain entities, as well as support the financing of technology to drive towards a low carbon economy, banks should not be a proxy for governments’ action, be that through fiscal measures or direct policy towards industries that can’t or won’t transition.

Thus, we are also supportive of the EBA’s view that targeted amendments to the existing prudential requirements, where the prudential framework does not already reflect environmental risks, is more effective in addressing environmental risks than dedicated treatments such as adjustment factors. As recognised in the discussion paper there are several challenges associated with the design and implementation of these adjustment factors.

Overall, we believe that any changes introduced in the prudential framework to address environmental risks should have an international agreement first (Basel Committee standards¹). In this respect we would note that since the publication of the DP, the BCBS have finalised their principles for the effective management and supervision of climate -related financial risks. This mandates banks to identify and quantify climate-related financial risks and incorporate those assessed as material over relevant time horizons into their internal capital and liquidity adequacy assessment processes. Thus, on a case-by-case basis, where banks have not taken action or made progress to address climate risks in line with these principles, supervisors have Pillar 2 tools at their disposal. Nonetheless, we would urge caution in using Pillar 2 until there is better understanding of scenario analysis and also to ensure that overlap or double counting between supervisory requirements does not occur. Consequently, in the longer term, it would be useful for supervisors to set out the scope of application of Pillar 2 to ensure a level playing field.

Finally, there has been some consideration of large exposure rules. We would note that at this point in time a sector based large exposures regime in effect results in regulators setting risk appetite, where it is not clear that sectors are impacted in a homogenous way.

¹ <https://www.bis.org/bcbs/index.htm?m=1014>

Chapter 3 – Background and Rationale

Q1: In your view, how could exposures associated with social objectives and/or subject to social impacts, which are outside the scope of this DP, be considered in the prudential framework? Please provide available evidence and methodologies which could inform further assessment in that regard.

We share the EBA's initial assessment and find that the lack of common definitions and reliable methodologies makes it premature to include social considerations in the prudential framework. To inform a risk-based approach, market participants will first have to make progress with the efforts to identify appropriate metrics, develop common solutions, and collect quantitative evidence to assess social impacts. EBA will then have reliable methodologies and historical data to carry out a further assessment of exposures associated with social objectives or social impacts.

The European Commission will also explore the merits of developing a social taxonomy, and the Platform on Sustainable Finance offered advice on the possible approach that could be adopted to expand the existing environmental taxonomy. However, these are early examples of attempts to build a classifications system for underlying social activities and, like the challenges the EBA has identified with the existing EU Taxonomy, it is unlikely such types of classifications can be translated into prudential legislation soon. Further, as noted in the recently published PSF final report on the Social Taxonomy, a social taxonomy cannot be based on science: "While environmental objectives and criteria can be based on science, a social taxonomy has to be based on international authoritative standards of topical relevance such as the International Bill of Human Rights."² Hence, if not supported by sufficient evidence, integrating social factors into taxonomies, disclosure regimes and the prudential frameworks may lead to cases of social-washing and misallocation of capital with negative ESG outcomes.

Efforts to identify definitions, methodologies, and data would also benefit from international coordination, but social factors are highly affected by how social matters (human rights, labour law, access to education etc.) are defined and addressed across different jurisdictions, and the characteristics of vulnerable communities vary widely across geographies. Another key challenge will be distinguishing the activities with measurable (i.e., additional) social risk and impacts from all those activities with an inherent social value (e.g., job creation).

Nevertheless, credit institutions continue to consider human rights violations³ and whether there are vulnerabilities when performing the client's onboarding. In case of operational risks, social risks could be considered as captured under the current Basel taxonomy as social risks are the root cause of a fraud increase, unavailability of people, and other issues. We thus recommend that the prudential framework maintains a focus on climate and environmental issues and considers expanding its scope to social factors only when a risk-based approach justifies it.

² [Final report on the Social Taxonomy](#) (Feb 2022)

³ See due diligence guidance for EU businesses to address the risk of forced labour in their operations and supply chains: https://trade.ec.europa.eu/doclib/docs/2021/july/tradoc_159709.pdf

Chapter 4 – Principles, Premises and Challenges

Q2: Do you agree with the EBA’s assessment that liquidity and leverage ratios will not be significantly affected by environmental risks? If not, how should these parts of the framework be included in the analysis?

The industry agrees with the EBA that it would not be appropriate to address environmental risks in the leverage and liquidity ratios.

With regard to the leverage ratio, this was introduced in order to avoid excessive on and off-balance sheet leverage in the banking system and to reinforce the risk-based capital requirement with a simple non-risk-based backstop. Hence, we do not see the need for any changes in the leverage ratio calculation.

Likewise, we fully agree that environmental risks currently have no significant impact on liquidity. Nevertheless, we note the impact is to be regularly assessed within the overall environmental risk materiality assessment as foreseen by ECB Guide on climate-related and environmental risks and as part of banks’ ILAAP as required by the BCBS principles on climate related financial risks. Moreover, generally accepted practices in the market mainly rely on short-timed liquidity stresses to measure banks’ reliance (for example, a 30-day window for LCR purposes). Longer periods, such as those used to measure environmental risks would allow the banks to implement management actions that would soften the potentially negative liquidity impacts arising from those stresses and reduce the significance of the results for those metrics.

Q3: In your view, are environmental risks likely to be predominantly about reallocation of risk between sectors, or does it imply an increase in overall risk to the system as a whole? What are the implications for optimum levels of bank capital?

Overall, we consider that the capital banks currently hold is sufficient, as has been supported by the results of recent climate risk stress tests such as the CBES⁴/SSM climate risk exercise⁵. Although the methodology of such stress tests is still in its infancy, the results of the exercise may nonetheless prove useful in identifying companies that might be more exposed to environmental risks. Overall systemic risks are currently captured on an ongoing basis as improvements are made in methodology, robustness, data capabilities and disclosures. Both reallocation and macro risks are likely to emerge through the transition process and may need to be addressed differently in the capital framework, based on the development of disclosure and methodology to measure these.

In respect of reallocating risk, we agree with the risk-based approach taken in the EBA’s discussion paper and that (historical) data and evidence is not yet available to support adaptation of the Pillar 1 framework. Further work needs to be undertaken to understand if there are risks resulting from climate risk which are not addressed in the Pillar 1 or Pillar 2 framework. This should remain neutral with regard to banks’ risk preferences as making capital more expensive for certain sectors could result in regulators influencing banks on what risks they may take, which is not in the EBAs mandate.

⁴ <https://www.bankofengland.co.uk/stress-testing/2022/results-of-the-2021-climate-biennial-exploratory-scenario>

⁵ https://www.bankingsupervision.europa.eu/ecb/pub/pdf/ssm.climate_stress_test_report.20220708~2e3cc0999f.en.pdf

We would note that there is considerable work remaining in relation to macro considerations of climate risk and emphasise the current degree of methodological and data uncertainty. With regard to applying macroprudential buffers this raises the cost of capital for all lending, and so while making lending incrementally more expensive, does so in an unbiased manner. Nonetheless, in February 2022, the Financial Stability Institute ('FSI') highlighted in its Brief No. 16 ⁶'The regulatory response to climate risks: some challenges' that applying the macroprudential framework to systemic climate-related financial risks is likely to be ineffective and potentially counterproductive for financial stability. The FSI states that 'supervisors may increase the resilience of financial institutions by using the Pillar 2 framework. Indeed, through stress tests supervisors take into account adverse macroeconomic developments, such as the failure of carbon intensive industries.

Other stakeholders, such as credit rating agencies, are in the process of updating their assessments to quantify climate risks affecting individual counterparties or assets. This will complement banks' own assessments of their clients' risk exposure. Hence while potentially helpful, it is not obvious that a climate macroprudential framework is essential to ensure that the financial system is able to absorb systemic shocks generated by climate-related events. Separately it notes 'macroprudential measures aimed at reducing exposures to carbon intensive firms and sectors may not always be conducive to reducing aggregate climate-related financial risks. In particular, a significant increase in capital requirements for brown exposures, by curtailing the availability of credit to carbon intensive industries would increase the vulnerability of those sectors and hinder affected firms from adjusting their business models'.

The potential interplay between macroeconomic cycles and climate risk factors has yet to be clearly established and so the use of macroprudential tools in this area would not be appropriate at this stage. For the time being, significant climate related risks are in the process of being incorporated into banks' stress testing and Pillar 2 requirements and it will be important to ensure that over time overlap, or double counting does not occur – as well recognised by the EBA.

In the meantime, we share BCBS's and EU regulators and supervisors' view that climate factors are not a new category of risk per se: they are 'risk drivers' of the existing prudential risk categories, with a potential positive or a negative impact. Given the nascent nature of the collective understanding how the climate risk drivers will impact the existing prudential risks, it seems premature to define a regulatory capital treatment.

At a wider level, while banks can clearly form a very effective part of the solution to achieve the objective of net-zero greenhouse gas (GHG) emissions in the EU economy by 2050 they should not be the primary enforcers of the EU climate policy. There is a political responsibility in defining the relevant industrial and tax policies that could ensure an orderly transition and limit transition and physical risk levels, for both climate and financial stability purposes. This was expressed well by the Bank of England in its statement (Climate-related financial risk management and the role of capital requirements, Bank of England, PRA, 28 October 2021⁷): 'regulatory capital cannot substitute for government climate policy'.

Banks and regulators continue to invest significant resource to understand the transmission channels between climate risk drivers and prudential risk categories (for example through

⁶ <https://www.bis.org/fsi/fsibriefs16.pdf>

⁷ <https://www.bankofengland.co.uk/-/media/boe/files/prudential-regulation/publication/2021/october/climate-change-adaptation-report-2021.pdf>

exploratory supervisory scenario analysis and stress testing exercises – ACPR 2020⁸ and SSM 2022⁹). With respect to the current climate stress tests undertaken by the ECB, more work is needed on scenarios and methodologies to ensure environmental risks are properly and homogeneously quantified. Comparability and homogeneity in scenarios used for that purpose would be critical to assure a coherent application and a level-playing field. Hence, a progressive and iterative development of methodologies and data availability would enable banks to strengthen their risk management frameworks (for example through the building of risk and IT infrastructure and the development of climate specific scenarios) and effectively continue to include climate drivers in their Pillar 2 frameworks if appropriate.

Q4: Should the ‘double materiality’ concept be incorporated within the prudential framework? If so, how could it be addressed?

While we support the underlying intention of double materiality as a policy ambition, we do not support including the concept of double materiality within the prudential framework, given lack of methodology and disclosure and a definitive link to the impact on financial stability. As we have stated in previous consultation exercises the concept remains very challenging to incorporate as banks can only rely on available information. Large companies will start to report on ‘double materiality’ the earliest in 2024 while SMEs won’t have disclosure requirements at least until 2026. Even once double materiality assessments are a regulatory requirement under the CSRD they are likely to be based on a mix of qualitative and quantitative information at first. So how they are used in an environmental risk capacity will need to be carefully thought through so that too much emphasis isn’t placed on an evolving practice. Besides this, further clarification on the scope and definition of ‘double materiality’ is needed.

Furthermore, implementing a double materiality approach at this stage is likely to lead to an unlevel playing field for EU banks given there is no international consensus to follow such an approach.

If the EU does pursue incorporating this concept it should do so when the data and methodology is available and consider phasing in. It will be important to avoid potential double counting where some aspects are already accounted for in the creditworthiness assessment.

Q5: How can availability of meaningful and comparable data be improved? What specific actions are you planning, or would you suggest to achieve this improvement?

Improving the availability of meaningful and comparable data will require time for credit entities and for data providers to be able to collect necessary information.

Several banking regulations and supervisory exercises (e.g. CRR Disclosure, ECB Climate Risk Stress Test) have demanding data requirements for environmental risk while the relevant data disclosure regulations for corporates (e.g. CSRD) are yet to be implemented. While a harmonisation of future regulations should be targeted, it is important that banks are able to employ prudent and reliable methods around the use of proxies. To facilitate the comparability of data, industry supports the development of proxies in an aligned and coordinated way using a harmonised methodology, with the support of regulators.

⁸ <https://acpr.banque-france.fr/en/scenarios-and-main-assumptions-acpr-pilot-climate-exercise>

⁹ https://www.bankingsupervision.europa.eu/ecb/pub/pdf/ssm.climate_stress_test_report.20220708~2e3cc0999f.en.pdf

In the meantime, financial entities face difficulties in extracting ESG data (insufficient company disclosure, disclosure that may not be structured appropriately or easily gathered). This has been highlighted recently with the publication of reference information to the EU taxonomy¹⁰(publication of eligible activities by EU companies subject to NFRD). Vendors / Data providers may also experience the same difficulties in obtaining the necessary information.

We would note also that data definitions (e.g. EPC label classification, Scope 3 GHG measurement) are not yet fully consistent across EU Member States. A harmonisation of the most important data types should be targeted.

The disclosure of exposures to the “top 20 polluters” as envisaged within CRR disclosure, is a potentially difficult exercise for banks and it would be helpful if a central register or list could be provided by regulators.

A further general and wider observation is that taxonomy-based reporting will not provide sufficient data for risk modelling, as recognised by the EBA. Open-source initiatives to provide both reliable and normalised data could be promoted by governments and relevant institutions to improve the resources for analytical work. In this respect stress testing exercises have proven useful data collection exercises and have highlighted where data needs to be built up.

Q6: Do you agree with the risk-based approach adopted by the EBA for assessing the prudential treatment of exposures associated with environmental objectives / subject to environmental impacts? Please provide a rationale for your view.

We strongly support the risk-based approach adopted EBA. However, the EBA approach seems to be driven primarily by the extent of academic research to argue for correlation with environmental factors and risk. We would highlight that beyond externally available information, banks typically have deep understanding of their customers’ specific risk profile. Therefore, the risk-based approach should include sufficient flexibility for banks to exercise judgement beyond externally observed, broader correlations, which are insufficient to demonstrate the interconnection.

Aside from this, we would strongly advise against linking the treatment of ESG risks to the EU Taxonomy as this is not a risk-based framework. A bank for example might have a fully taxonomy aligned portfolio which can still be high risk investments such as newly emerging technology companies which might be classified as “venture capital” thus attracting a 400% Risk Weight under CRR3. For the same reason the Green Asset Ratio introduced as part of the Pillar 3 ITS is also not risk based and would be therefore inadvisable to drive capital policy.

Furthermore, we agree with the view that when considering any dedicated treatment, an understanding of the extent to which environmental risk drivers are already reflected in the prudential regime is needed. This is to ensure that environmental risk factors are appropriately captured, thereby avoiding underestimation or double counting which would weaken the consistency and robustness of the prudential framework. Double counting is a very real risk given the transitional aspects of climate risk may already be reflected in prior (and ongoing) economic trends, such as technological changes affecting various industries.

¹⁰ <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32020R0852&from=EN>

Q7: What is your view on the appropriate time horizon (s) to be reflected in the Pillar 1 own funds requirements?

The Regulatory capital framework is designed with a time horizon of 1 year. This equates to the minimum amount of capital which banks must hold for potential losses without the intervention of material mitigation and strategic actions.

We agree that there is uncertainty that chronic environmental risks will fully materialize over a short term. Thus, we believe the Pillar 1 framework is sufficiently robust to enable firms to absorb any potential losses over a one-year time horizon and remain solvent with a high confidence level. We therefore agree with the EBA's comments that extending the 1-year time horizon could lead to less precision. In addition, any changes to current time horizon to accommodate any environmental risks would either require all risks to be assessed using a different time horizon or alternatively result in asymmetric and unduly weighted risks – neither case being a desirable outcome. A short time horizon of the current Pillar 1 own funds requirement does not prevail those long-term risks are not priced into some extent, for instance in respect to maturity.

We would stress that the current timeframe should not be altered as the whole risk assessment, risk management, investment decisions and regulatory decisions on capital requirements are framed by the current time horizon. Any change to the current time horizon would have multiple unintended consequences with an unknown impact. For example, current capital ratios would change resulting in completely incomparable ratios and data. The minimum level of capital within the Pillar 1 framework is calibrated very conservatively, based on stressed periods and thus ensures adequate capitalization over typical cyclical economic fluctuations. We believe that the misalignment of time horizons between the Pillar 1 framework and climate-related risks represents just one of several reasons why the Pillar 1 framework is not suitable to incorporate any additional perceived climate risks.

The Pillar 2 framework is designed to capture any risks not adequately captured within the Pillar 1 framework, however there is also concern that sufficiently granular data is not available to support the analysis (transition as well as physical) at this learning stage of the process.

Q8: Do you have concrete suggestions on how the forward-looking nature of environmental risks could be reflected across the risk categories in the Pillar 1 framework?

As has been well recognised by the regulatory community, climate risks are considered drivers of existing risks rather than a risk type per se. In addition, climate risks do not conform to traditional methods for modelling which makes use of historical data. This type of data is of limited use given the nature of climate risks has a forward-looking trajectory over short-, medium- and long-term time horizons. As noted more extensively in our response to Q7, Pillar 1 is not designed to address the long-term forward-looking trajectory of risks but is limited to a 1-year time horizon. We therefore consider Pillar 2 as the appropriate tool to address these risks through bank-specific analysis, e.g. via Pillar 2 Stress Testing and Scenario Analysis.

Chapter 5 – Credit Risk

Q9: Have you performed any further studies or are you already using any specific ESG dimensions to differentiate within credit risk? If so, would you be willing to share your results?

Our members may have put forward individual studies and undertaken internal analysis for consideration in their individual responses to this question, however, as an industry we have not performed studies comparable to the studies cited in section 5.1 of the EBA DP.

Q10: What are the main challenges that credit rating agencies face in incorporating environmental considerations into credit risk assessments? Do you make use of external ratings when performing an assessment of environmental risks?

We take note of the EBA's proposal to consider environmental risk through the use of external credit assessments, which should be subject to a review of the ECAI's methodology to capture environmental risks. Moreover, while there have been improvements in the products of ESG rating providers, there are still significant gaps that should be assessed:

- Data sets for rating development might be insufficient to prove significance of environmental risk factor (e.g., short time series of ESG related variables) in terms of availability and comparability of environmental / ESG disclosures by clients (both within and across industries). This could result in difficulty to translate and incorporate such varied (and still rather patchy) data and information in the wider business and financial risk assessment that forms the basis of every credit rating.
- Models: it is not clear whether a defaulted company defaults due to environmental-risk-associated event
- Incentives: there is reputational risk if the method is not properly validated, or market/authorities expects incorporation of ESG factors even if there is no statistical evidence
- Dependence on cooperation of rated companies: no incentive to report poor ESG related KPIs
- Lack of transparency on the methodologies used by providers to develop the ESG ratings. Same transparency as the defined for credit institutions internal ratings should be required to ESG rating providers.
- Backward looking perspective for most assessment and excessive focus on ESG disclosures rather than evaluating ESG strategic considerations.
- Limited transparency on raw data used to drive ESG sub-scores (and ultimately the overall ESG Rating).
- Differences in the ratings provided by different providers to a same company.
- Selection of peer groups (size, listed/non-listed) is normally not done by sectors.
- Potential instances where ESG rating providers can take advantage of being the only provider in a specific segment.
- Potential for conflict of interest when the ESG ratings provider also offer consulting services on the ratings.
- Limited coverage of SMEs.

Q11: Do you see any challenge in broadening due diligence requirements to explicitly integrate environmental risks?

While environmental risks are being integrated into the risk management, no additional due diligence requirements are needed, irrespective of whether external ratings may or may not be used. Client due diligence is already adapting to capture the climate and environmental risk dimension. This reflects both internal risk management considerations as well as debt and equity investors' increased awareness and sensitivity to this risk dimension. The gradual increase in client Climate & Environmental "C&E" related disclosures (be it government mandated or voluntary) – and trend towards greater standardization and comparability of disclosed metrics / KPIs – is expected to increase the consistency of C&E risk assessments, and resulting insight gained through it. Nonetheless, we would note the following challenges and potential mitigations in this respect:

- In many cases, environmental data is not made available by the client, central databases or external data providers. The regulatory and/or market standard for data requirements is fast developing but it is challenging. In particular, private clients do not have the knowledge nor the financial capacity to provide audited documentation on environmental risks (e.g. for their real estate). In addition there are currently not enough experts in the market to cover all these data requests (e.g. proofing EPC by inspections or calculation of energy supply for solar panels).
- Many data points have to be estimated on the portfolio level based on national or regional averages. Besides the underlying model risk, this also bears reputational risk for a bank since an outlier positive estimation could be considered greenwashing.
- To avoid substantial operational burden and complexity, due diligence requirements for integration of Climate Risk & Environmental Risk should be implemented with clear focus on portfolios / asset classes where this is most relevant. The "proportionality principle" should not be applied as a general exemption for smaller banks (which might also have relevant climate related risks), but rather in terms of how a bank should reasonably assess which are the most relevant portfolios for which additional due diligence requirements are useful (e.g. the definition could be based on size of asset, sectors, products).
- The use of external data sources (where available) should be considered as alternative source for the gathering of the needed additional data / information.

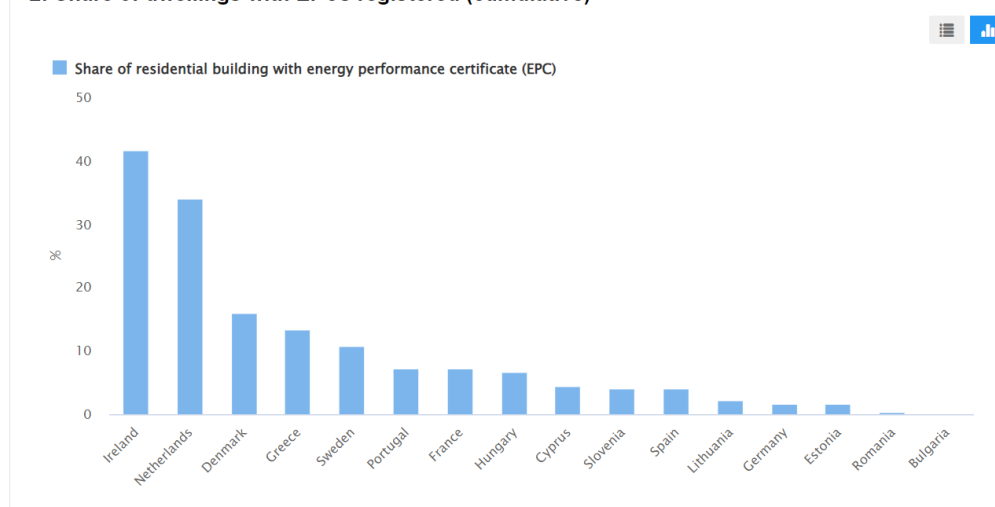
Q12: Do you see any specific aspects of the CRM framework that may warrant a revision to further account for environmental risks?

The current Pillar 1 framework allows for the recognition/inclusion of environmental risks without the need to modify the framework (e.g. through collateral evaluations, re-evaluations). PD, LGD and collateral valuations – as applicable to different type of exposures – remain the most appropriate analytical tools to condense the risk assessment of a counterparty, including its exposure to C&E risk. However, these parameters will be continuously reviewed in order to incorporate specific cases of environmental risks. In case there are aspects where it is not yet known how to measure it or the measurement may be considered incomplete, Pillar 2 is available to complement it.

Q13: Does the CRR3 proposal's clarification on energy efficiency improvements bring enough risk sensitiveness to the framework for exposures secured by immovable properties? Should further granularity of risk weights be introduced, considering energy-efficient mortgages? Please substantiate your view.

We support the generic clarification of the CRR3 proposal that energy improvements should improve the valuation of the home, in the same way other home improvements can be accounted for in the loan valuation process. Nonetheless we would urge caution in linking this to EPC certification. EPCs should be homogenized before any adjustment to the prudential framework on the basis that EPC models and data availability is very heterogenous across the EU.¹¹ While the Revised Energy Performance of Buildings Directive (EPBD) should help to ensure comparable national standards, it is still under review and will take time to build consistency. This also does not take account of the fact that energy certificates are not used in many jurisdictions outside Europe, which would make it inappropriate for global institutions to apply in their RWs to non-EU real estate.

2: Share of dwellings with EPCs registered (cumulative)



Furthermore, we note that under the ECB Taxonomy, energy efficiency has to be proven by EPC documentation. For EPCs, there is a huge data gap as well as lack of experts to provide sufficient documentation for the already booked transactions on the balance sheet. For data availability, a central European governmental initiative is needed to collect standardized data (at least within Europe). This lack of data availability has also been demonstrated by the results of the recent stress testing exercise where banks taking part were unable to allocate 17% of their reported collateral to an EPC bucket and 65% of the banks predominantly relied on proxies.¹²

Finally, while there seems to be a correlation between energy efficiency and the performance of a loan, the causality remains to be proven.

Q14: Do you consider that high-quality project finance and high-quality object finance exposures introduced in the CRR3 proposal should potentially consider environmental criteria? If so, please provide the rationale for this and potential implementation issues.

¹¹ Source: [EU Buildings Factsheets | Energy \(europa.eu\)](https://ec.europa.eu/eu-buildings-factsheets/) – see “certification” tab

¹² See [ECB presentation](#) of the stress test results p. 16

CRR suggests a lower risk weight for high quality project finance / object finance. We fully support the intent of the Commission to introduce a lower risk weight to better reflect the higher quality risk profile of such assets. It should be noted that HQ Object Finance and HQ Project Finance exposures benefit from an enhanced due diligence to ensure that financial risks are adequately covered. Due diligence includes environmental and legal considerations. Consequently, we do not support the explicit consideration of environmental criteria as it would contradict the overall risk-based approach.

Q15: Do you consider that further risk differentiation in the corporate, retail and/or other exposure classes would be justified? Which criteria could be used for that purpose? In particular, would you support risk differentiation based on forward-looking analytical tools?

No. Methodologies for running forward-looking analysis for climate risk are not mature enough, nor is there sufficient data to underpin differentiated prudential treatment. Provided the methodologies and data availability evolves sufficiently, this could be considered.

Until there is a demonstrable and robust link between a more sustainable exposure and improved risk behavior, no adjustments to the prudential framework should be made.

Q16: Do you have any other proposals on integrating environmental risks within the SA framework?

No. As raised in question 6, current lack of data does not allow to conclude a more sustainable exposure implies a better credit risk performance, neither the severity nor frequency of the environmental impacts on exposures. Until the interconnection between a more sustainable exposure and improved risk behavior is confirmed, there should not be any adjustment to the prudential framework.

As a general comment we note the DP links the standardized approach to smaller banks, however, not only small banks use the SA – there are also diversified European banking groups with international presence using the SA.

Q17: What are your views on the need for revisions to the IRB framework or additional guidance to better capture environmental risks? Which part of the IRB framework is, in your view, the most appropriate to reflect environmental risk drivers?

In our view, there is no need for revision to the IRB framework.

Until a common data framework has significantly matured, there should be sufficient flexibility for banks to integrate environmental risks into IRB models where relevant (this is most likely to be the case for corporates (PDs) and Real estate (LGDs)). Banks have the best understanding of their customers' risks and can apply their expert judgement using forward looking analysis. Regulators should allow banks to adequately integrate these risks and analysis in their models, a process which is already underway.

Q18: Have you incorporated environmental risks or broader ESG risk factors in your IRB models? If so, can you share your insight on the risk drivers and modelling techniques that you are using?

Members have not indicated that they've made modifications to models explicitly but they are considering these risk factors internally as follows:

- As part of the credit rating calculation process;
- Assessing whether ESG factors can impact PD and LGD models;
- Qualitative assessments of the environmental and social topics which could be potentially material for each industry;
- Capturing environmental risks have a short-term impact on PD in target financial KPIs in the finance or market modules of IRB models;
- The possibility for overrides in the models based on ESG factors; and
- Additional data collection on emissions and transitional plans.

Q19: Do you have any other proposals on integrating environmental risks within the IRB framework?

No. We believe current Pillar 1 framework allows for the recognition/inclusion of environmental risks without the need to modify the current framework.

Q20: What are your views on potential strengthening of the environmental criterion for the infrastructure-supporting factor? How could this criterion be strengthened?

We do not support directly linking the application of the infrastructure supporting factor to the EU Taxonomy. As noted in previous questions, the ISF is not a clear indicator of risk. If introduced in the CRR3 regulation we think the scope is defined in such a narrow way that the ISF could become unusable. Further feedback will be provided via the current EBA survey on the Infrastructure Supporting Factor¹³.

Q21: What would in your view be the most appropriate from a prudential perspective: aiming at integrating environmental risks into existing Pillar 1 instruments, or a dedicated adjustment factor for one, several or across exposure classes? Please elaborate.

From a risk-sensitive perspective, neither a general Pillar 1 requirement, nor a sector wide adjustment factor is appropriate. Credit risk should assess the default risk of an exposure class. Until there is clear evidence and data demonstrating increased default risks resulting from exposures affected by environmental risks, there should not be any quantitative Pillar 1 requirements. Nonetheless, environmental risks are considered risk drivers and will therefore by default be included as such in the Pillar 1 once there is data to enable it to be. For individual assessments, instruments in Pillar 2 are already taken into consideration.

¹³ <https://www.eba.europa.eu/eba-launches-survey-banks-application-infrastructure-supporting-factor>

Q22: If you support the introduction of adjustment factors to tackle environmental risks, in your view how can double counting be avoided and how can it be ensured that those adjustment factors remain risk-based over time?

We do not support adjustment factors for a number of reasons, as also recognised in the EBA's own findings. The risk of double counting is a major concern – not only with a potential adjustment factor but also with **existing prudential provisions**, e.g. Systemic Risk Buffer, Capital Conversation Buffer, Pillar 2 capital add-ons. Regulators need to set out clearly how such a double count would be avoided if any factors were introduced.

Moreover, regulators will start to take into account **transition plans** and banks progress on these, which should reduce on GHG emission. Hence, transition plans should impact capital requirements positively.

Chapter 6 – Market Risk

Q23: What are your views on possible approaches to incorporating environmental risks into the FRTB Standardised Approach? In particular, what are your views with respect to the various options presented: increase of the risk-weight, inclusion of an ESG component in the identification of the appropriate bucket, a new risk factor, and usage of the RRAO framework?

In summary, we welcome the acknowledgement that there is a growing market in ESG-related products and welcome EBA initiatives to integrate these into the revised market risk (FRTB) framework. Some of these products, like bonds issued to fund green initiatives, do not have any new market risk factors, thus require no change in Pillar 1/FRTB rules. Where environmental risk acts as a risk driver rather than a risk factor, and although assessment in Pillar 2 might be a more flexible option, there is concern that there is no sufficiently granular robust data available to support the analysis. We believe that ESG-related products are a nascent market and currently not very material in the trading book, thus a pillar 1 charge is not necessary as we outline in more detail below.

Risk Weights

The risk weights (RW) currently used in the FRTB sensitivity-based method (SbM) are defined in the regulation and are based on historic stress data. We note that the calibration of these existing risk weights is already conservative and as they are calibrated based on historical data would already incorporate some environmental risk. The inclusion of forward-looking scenarios (which would be almost impossible to calibrate), on top of risks calibrated with historical data, would be a significant divergence from the existing approach. This would, given its likely macro design, differentiate exposures which exhibit high levels of environmental risk from other market risk exposures and would introduce complexity for management steering of Bank portfolios through limit setting.

If environmental related risks are to be included in the Prudential risk framework, it should be done in a way which incentivises proactive management of environmental-related risks and so facilitates balance-sheet steering, rather than an approach which unnecessarily increases the cost of capital for legitimate client servicing activities.

An illustration of how environmental risk is already embedded into the current assignment of risk weights is through the RW for credit spread risk. This depends on the rating of the corresponding issuer, and we expect information on environmental risk to have been incorporated for at least the upcoming year, in line with the time horizon for pillar 1 requirements.

Risk Buckets

At present, equities are classified according to industry sector and economy (advanced or emerging). Similarly, bonds are categorised according to counterparty type and credit rating. Under this approach, an additional dimension would be included in the bucketing process to reflect environmental risks, which may lead to an increased risk weight for carbon-intense sectors. This approach in effect introduces brown penalising factors and/or green supporting factors for securities in the trading book, an approach which EBA has rejected for credit risk.

If ESG Linked products become prevalent then out of the given options to amend the FRTB SA for ESG risk, it might be possible to introduce an additional dimension in the bucket structure in which

a risk factor falls and assign different risk weights dependent on the expected ESG risk. Thereby, an increased volatility driven by future ESG risk could be accounted for.

The classification of a new risk bucket might also be difficult to maintain in terms of risk profiles as in practice the underlying will transition over time with more favourable ESG scores thus it would likely require regular changes to the regulation (meaning, how to determine what should be allocated to that bucket as of today vs. future).

Risk Factors

The establishment of new risk factors for products which explicitly reference climate and environmental risks, such as weather derivatives and ESG linked derivatives, is in principle sensible and will enhance the associated risk management techniques. As these markets become more significant, market participants will benefit from the implied market-based pricing for these risks. In more general terms, we consider that the development and universal application of environmental risk factors would be flawed, for the simple reason that the environment is not a risk factor but a risk driver: it is for this reason that we refer to environmental-*related* market risks. We would not expect therefore to determine a specific 'risk factor type' in addition to delta, vega and curvature, but rather seek to understand the impact of physical and transition risk scenarios on the prospective evolution of these existing parameters.

We agree with the EBA *"while environmental risks may not lead to the introduction of new risk factors per se, they may affect the magnitude of their shocks. In other words, the presence of environmental risks may lead to a 'classical' risk factor (e.g. an equity price, or an exchange rate) being more volatile than historically observed"*, and therefore do not believe that an additional ESG risk factor is needed to be added to the Standardised Approach (SA) at this time.

If ESG-linked products become prevalent for banks then this could potentially be done as part of the commodities risk class, such has been the case for carbon trading, or as a new risk class. It would be very difficult to disentangle the ESG Risk component embedded into a market price and as a consequence it could be very difficult to properly identify the appropriate financial instruments or calibrate the shocks/stresses to observable market prices (independently of the framework adopted to capitalize such risks).

There is currently uncertainty of how ESG-linked products will evolve in banks trading book profiles, we propose that further investigation is needed on the possible evolution of this market.

Residual Risk Add-on (RRAO)

The EBA note that the RRAO framework could in principle be used to determine capital requirements for environmental related risks, so as not to tamper with the two main building blocks of the existing FRTB framework (SbM and JTD). We remark, consistent with EBA analysis, that the intended purpose of the RRAO is to address risks linked to complex products, as opposed to the environmental related risks associated with conventional products.

The RRAO remains the correct place for the assessment of capital requirements for complex products whose payoff is highly sensitive to environmental risk considerations: for example, structured ESG products or complex weather derivatives. However, we believe that the inclusion of vanilla products within the scope of RRAO would be overly conservative and would harm the integrity of the existing framework. Where vanilla products exhibit environmental-related risks, these should be assessed in a manner more appropriate to the product.

Furthermore, the RRAO is designed to be risk insensitive as its charge is simply based on a fraction of the notionals and does not allow for any hedging between products.

SA Default Risk Charge (DRC)

The SA DRC relies on the rating of the issue/issuer and therefore it is assumed that rating agencies will incorporate environmental risks in their assessments, there will be no need to change the regulatory text.

Q24: For the Internal Model Approach, do you think that environmental risks could be better captured outside of the model or within it? What would be the challenges of modelling environmental risks directly in the model as compared to modelling it outside of the internal model? Please describe modelling techniques that you think could be used to model ESG risk either within or outside of the model.

The FRTB IMA expected shortfall measure relies on objective data in the form of financial market time series to include market stress events of the last 15 years, such as the financial crisis (2007-08), eurozone sovereign debt crisis (2010-13), the Covid-19 pandemic (2020-21), and the current Russia-Ukraine crisis. These crises collectively indicate the potential magnitude of a financial crisis, based on objective financial data, however these do not explicitly capture environmental events.

In the absence of historical data, Banks may need to consider alternative 'environmental scenarios (e.g., the Intergovernmental Panel on Climate Change Representative Concentration Pathways 'IPCC RCPs') and translate these into sets of actionable stress parameters, making use of public sources such as the NGFS toolkit.

However, the present model already does reflect shocks to the relevant underlying's of the bank's portfolios, independently of the cause of those shocks, and should therefore not require any modification. We highlight below our reasoning:

- Environmental risks are a driver of existing financial risks and thus are embedded within current risk factors therefore we believe that these risks are to some extent already implicitly captured within the FRTB IMA framework.
- The IMA expected shortfall measure relies on historical time series of prices (and rates) going back at least to January 2007. Any potential adjustment to historical prices/rates to incorporate environmental risks would be against the regulatory expectation of the revised IMA framework to use real prices (i.e., those actually observed or proxied from other real prices). Moving forward, prices/rates are likely to incorporate environmental risks as market participants take into account those risks.
- Some environmental risks may not be sufficiently captured in the prices/rates related to a stressed period. For products with ESG underlying's that did not exist during the stress periods, proxies may have to be constructed to populate the time series during the stress periods. Proxying based on the relationship to current risk factors are allowed in the FRTB IMA framework as long as it is justified statistically.
- Trading positions are assumed to be maintained between 10 and 120 days, a relatively short time span relative to the longer-term nature of environmental risks.
- If new risk factors are identified or are deemed to be non- modellable, related to environmental risks, the non-modellable risk factor framework is prepared to conservatively assess those risk factors, so there is no need to change the regulatory text to cater for them, although considering

ESG risk as a non-modellable risk factor would result in an unintended penalization of ESG compliant instruments.

- The FRTB Framework imposes an alignment between Front Office and Risk Management, therefore it seems not possible to define a new risk factor which is not directly linked to the current pricing of asset classes. In fact the moment a risk factor would become material in markets and thus needed to be incorporated in front office pricing, such a new risk factor would automatically affect the profit & loss attribution test (PLAT). That in turn would lead to a review of the risk factors in the internal model (and associated time series data). We believe the framework is sufficiently comprehensive to cater for such an eventuality.
- The IMA default-risk charge (DRC) is better prepared to capture environmental risks, as it is based on estimates of PDs and LGDs. Increases in PDs or LGDs due to increases of environmental risks should be captured by the banks without the need of changes in the regulatory text. The internal model validation and internal audit teams are designed to ascertain that the models to estimate PDs and LGDs are adequately robust, so there is no need to change the regulatory text.

Lastly, If ESG Linked products become prevalent, the liquidity horizons assigned to the underlying's may need to be adjusted in the FRTB IMA framework. They might otherwise be classified as "other commodities price" which would lead to a punitive liquidity horizon and disincentivize trading ESG-linked products.

Q25: Do you have any other proposals on integrating environmental risks within the market risk framework?

Any significant changes to Pillar 1 should be globally co-ordinated through the Basel Committee and any changes to the BCBS market risk standards would need to be made in parallel to avoid an uneven playing field. Uncoordinated policy initiatives leading to divergent Pillar 1 regimes will shift carbon financing to non-EU jurisdictions and would not address underlying concerns. This will not mitigate the systemic risks associated with potentially disorderly future market transitions.

The Pillar 2 framework might be a more flexible option to assess environmental risks that are inadequately captured in the Pillar 1 market risk framework, however there is concern there is not currently sufficiently robust granular data available to support the analysis.

To help understand, account for and monitor an institutions ESG investments, methodologies might be developed using sophisticated econometric/historical models that could be used as a managerial tool.

Chapter 7 – Operational Risk

Q26: What additional information would need to be collected in order to understand how environmental risks impact banks' operational risk? What are the practical challenges to identifying environmental risk losses on top of the existing loss event type classification?

First of all, it would be appropriate to clarify that environmental, social and governance trends/events do not represent new forms of risk, but risk drivers that increase the probability of occurrence and / or the severity of already existing risk categories (e.g. Credit, Market, Operational and Reputational).

Therefore, we consider the existing event types to be sufficient, as they cover types of events that may be caused by climate risks. In order to be able to identify losses from environmental risks, an additional flag to the existing event types could be introduced as proposed in the DP.

Therefore, at this stage an environmental or ESG flag as suggested in the paper will be sufficient to enable more structured risk event reporting and analysis. We support defining climate-related metrics that can be relevant for Operational Risk and that would be aligned with the overall TCFD guidelines (which define metrics for other risk areas). We propose using existing industry bodies involved with OR, such as AFME and the ORX consortium to develop an industry standard / guidance for the application of such a flag. This way a widely accepted classification can be derived that can also be used for internal risk management purposes. Having said that, identification of relevant exposures and ensuring robust data requirements would require considerable time and effort.

The current classification by event types focusses on the effect of operational risk (e.g. physical damage). One way to incorporate more transparency could be to add a cause dimension (e.g. weather effects). A challenge with respect to climate risk will be the differentiation between normal weather events and climate risk e.g. rainfall as a normal natural event and rainfall as climate risk event.

With regards to physical risks, AFME and our members see another challenge that needs to be carefully thought through. As pointed out in the paper, access to climate data and forecast possibilities are limited. Where banks are not able to access/model these, risk assessments from regulators could be helpful. E.g. risk scores for certain regions in order to assess physical risk for own infrastructure or 3rd party providers in these regions.

Q27: What is your view on potential integration of a forward-looking perspective into the operational risk framework to account for the increasing severity and frequency of physical environmental events?

As correctly summarized in the EBA paper, SA-OR is not designed to give a forward-looking perspective. This applies to all operational risks, not just the environmentally driven ones. Such a simple approach was decided by the BCBS after the sub-optimal experience with more complex approaches under the previous framework. Therefore, the Pillar 1 SMA is accompanied by sound operational risk management in Pillar 2. Hence, in case there are aspects where it is not yet known

how to measure them or the measurement may be considered incomplete, Pillar 2 would be the tool for complementing the Pillar 1.

The industry further notes that in this context it is challenging to predict the severity and frequency of physical environmental events in the mid - to long- term, resulting in predictions with a high level of uncertainty. Because structural changes in severity and physical environmental events do not happen overnight, an annual evaluation of scenarios is likely more efficient and reliable. However, we note that any Pillar 2 requirements would need to be substantiated through risk identification or scenario analysis by the NCAs and not applied without clear justification.

Q28: Do you agree that the impact of environmental risk factors on strategic and reputational risk should remain under the scope of the Pillar 2 framework?

We agree with the proposal to keep the risk factor on strategic and reputational risks under the Pillar 2 framework. This allows applying bank specific situations to the assessment, rather than relying on the more standardized approach under Pillar 1, to provide appropriate outcomes. At the same time, guidance is expected to prevent the development of an unlevel playing field. It is important when developing these guidelines that the EBA takes into account supervisory exercises which are already ongoing, and that the flexibility regulators and supervisors are providing in terms of methodologies is maintained. This is due to the large-scale investments that banks are undertaking to develop methodologies and internal systems in order to ensure robust environmental risk identification, reporting and management.

Q29: Do you have any other proposals on integrating environmental risks within the operational risk framework?

It is essential that any regulatory framework treats ESG as a risk driver (i.e., similar to conduct risks) rather than an isolated new risk type. It is difficult to recommend an industry-wide specific approach to integrating environmental risks into the operational risk framework and, more specifically, the risk taxonomy as the choices made would invariably depend on individual banks' internal risk organisation and enterprise risk-wide structures. In case there are aspects where it is not yet known how to measure them or the measurement may be considered incomplete, Pillar 2 is available to complement it.

Chapter 8 – Concentration risk

Q30: What, in your view, are the best ways to address concentration risks stemming from environmental risk drivers?

We support the EBA's opinion, that new concentration limits might have a negative impact on the financing of the counterparty's transitioning to environmentally sustainable and agree that the existing Large Exposures (LEX) Framework is not the correct path to address this perceived risk due to its focus on Groups of Connected Clients. Against this background we consider reporting and monitoring of potential concentration risk - complemented by Pillar 2 measures in case necessary – to be more effective. Tailor-made supervisory reactions based on meaningful / powerful reporting will prevent adverse effects on the transitioning.

Taking into account the proposed focus on sectoral and geographic concentrations however, some challenges arise:

- A classification of exposures is needed. At this stage, the taxonomy is incomplete, only those activities that contribute to environmental objectives are defined. So, it would not be appropriate or feasible to use this to classify all bank's exposures;
- A specific sector/counterparty may cover some activities that are contributing to the environmental objectives, but at the same time other activities that do not contribute to environmental objectives. Therefore, the extra reporting may not help, as expected, to understand the size of exposures of banks towards environmentally harmful activities/counterparties; and
- This classification would not be risk-based. That means it could not be demonstrated that this concentration poses a greater risk to the bank.

If there is still a desire to progress reporting before the issues above have been addressed, consideration should be given to the extent to which current / future reporting requirements are sufficient and the extent to which these can be leveraged, rather than introducing new requirements. We highlight the following requirements that institutions are obliged to comply with:

- Current LEX reporting: according to Art. 394 (1) S. 3 CRR institutions shall also report – as part of LEX – all exposures of a value greater or equal to €mn 300 (but less than 10 % of the institution's Tier 1 capital). The reporting (template LE1 / C27) comprises the residence and the sector (plus NACE code) of the counterparty. For large institutions a threshold of €300mn warrants the reporting of all significant counterparties.
- Current Pillar 3 disclosure and future ESG reporting: templates 2 and 3 of EBA/ITS/2022/01 on prudential disclosures on ESG risks in accordance with Art. 449a CRR already consists of a distinction between “exposures towards sectors that highly contribute to climate change” and “exposures towards sectors other than those that highly contribute to climate change”. Besides this, for all banking book exposures classified as “towards a sector that highly contribute to climate change” a detailed granular sectoral breakdown is required.

The disclosure templates mentioned could be integrated in the future ESG reporting requirements (according to art. 430 (1) h CRR3–draft) without any significant extra efforts for the institutions. Therefore, we do not see any need for an additional sectoral concentration reporting. If considered necessary, a similar geographical reporting could be integrated in the future ESG reporting.

Overall, we consider the current reporting requirements including those already intended in the CRR3 -draft proposals are sufficient to cover the prudential information needed regarding sectoral and geographical breakdowns. In respect of counterparty concentration risk a reporting threshold of €300mn is sufficient to cover all significant counterparty risks for large institutions. Before considering the implementation of new concentration reporting requirements, the appropriateness of the current (or already intended) reporting requirements should be reviewed, including the extent to which such reporting provides a risk-based view of such concentrations. If additional reporting requirements are considered necessary, those should be harmonized with the existing requirements to avoid any duplicative reporting requirements. To avoid an ongoing extension of reporting requirements – and reporting burden for institutions - the elimination of existing reporting requirements should be examined.

Q31: What is your view on the potential new concentration limit? Do you identify other considerations related to such a limit? How should such a limit be designed to avoid the risk of disincentivising the transition?

Industry does not favour developing any new concentration limit at this point. We consider that it is too soon at present to be able to design a correct concentration limit for environmental risk drivers.

Members do not have enough information about past environmental events to correctly build a concentration limit. We cannot measure a concentration limit as a % of T1 or total capital without information about the effect that these kinds of risks have posed to banks or the financial system. Moreover, currently our members are not in a position to correctly define the scope of counterparties that should fall under the scope of any potential new limit.

In addition, it is important to note that the implementation of concentration limit might work for transition risk but is less suited to physical risks. According to Basel Committee (BCBS d517)¹⁴, physical risks are likely to affect all types of exposures including retail, corporates, and sovereign exposures, regardless of size. It also has considerable impacts on the real economy, especially in geographical locations that are exposed to extreme climatic events. As mentioned in the BCBS d517, for example, studies suggested that the Caribbean and East Asian and Pacific regions, many of which are island nations, are particularly vulnerable to sea level rises¹⁵ while southern Europe has experienced longer and more intense droughts¹⁶. Therefore, introducing a concentration limit for physical risk could be an inappropriate course of action. Instead, it is recommended to consider other climate-related policies with an in-depth focus on physical risks.

Furthermore, the potential cost of introducing such a limit, i.e. building the methodologies and IT systems to monitor it according to the (to be established) regulatory rules at each bank and proving and auditing its compliance for the entire EU banking industry risks to exceed its potential economic benefit. This is particularly the case given cases of bank default caused by overexposure to natural

¹⁴ BCBS, [Climate-related risk drivers and their transmission channels](#), April 2021

¹⁵ Dasgupta, S (2018). "Risk of sea-level rise: high stakes for East Asia and Pacific region countries", World Bank Blogs, 9 March, blogs.worldbank.org/eastasiapacific/risk-of-sea-level-rise-high-stakes-for-east-asia-pacific-region-countries.

¹⁶ Vicente-Serrano, S, J-I Lopez-Moreno, S Beguería, J Lorenzo-Lacruz, A Sanchez-Lorenzo, J García-Ruiz, C Azorin-Molina, E MoránTejeda, J Revuelto, R Trigo, F Coelho and F Espejo (2014): "Evidence of increasing drought severity caused by temperature rise in southern Europe", Environmental Research Letters, vol 9, no 4, April, iopscience.iop.org/article/10.1088/1748-9326/9/4/044001/meta.

catastrophes are not evident. (If so, it may be rather a topic for insurers or reinsurers.) Banks' interests are to build a balanced credit and asset portfolio, taking concentration risks of all kinds into account, e.g. through a regular review of industry-specific portfolios and their idiosyncrasies.

Before considering the introduction of a concentration limit therefore, the supervisory focus should be on reporting requirements, which should also help inform the possible implications of the introduction of any such limit, like impeding clients from receiving financing for transitioning to environmentally sustainable activities from the banking sector. Careful assessment of the implications before introducing any new measure may help to avoid clients being forced to seek capital from other sources, including from sources not regulated or supervised.

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About AFME

AFME represents a broad array of European and global participants in the wholesale financial markets. Its members comprise pan-EU and global banks as well as key regional banks, brokers, law firms, investors and other financial market participants. We advocate stable, competitive, sustainable European financial markets that support economic growth and benefit society. AFME is the European member of the Global Financial Markets Association (GFMA) a global alliance with the Securities Industry and Financial Markets Association (SIFMA) in the US, and the Asia Securities Industry and Financial Markets Association (ASIFMA) in Asia. AFME is listed on the EU Register of Interest Representatives, registration number 65110063986-76. Information about AFME and its activities is available on the Association's website: www.afme.eu.

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Since 1985, ISDA has worked to make the global derivatives markets safer and more efficient. Today, ISDA has over 990 member institutions from 78 countries. These members comprise a broad range of derivatives market participants, including corporations, investment managers, government and supranational entities, insurance companies, energy and commodities firms, and international and regional banks. In addition to market participants, members also include key components of the derivatives market infrastructure, such as exchanges, intermediaries, clearing houses and repositories, as well as law firms, accounting firms and other service providers. Information about ISDA and its activities is available on the Association's website: www.isda.org.