

# The role of environmental risks in the prudential framework

*EBA- Discussion Paper on initial assessment*



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# 1 Executive summary

## The role of environmental risks in the prudential framework

The EBA has developed an initial assessment of how the prudential framework interacts with environmental risks and poses questions on whether adaptations are required to effectively address such risks

### 1-Objective

In **May 2022** the EBA published a DP which provides an overview of the **existing elements of the prudential framework** and how they interact with environmental risk. The analysis covers<sup>1</sup>:

- Relevant elements of the **prudential framework** and how they interact with environmental risks<sup>2</sup>.
- Specificities for **investment firms**.

### 2-Regulatory context

**CRR (Art. 501c) and IFR (Article 34) mandate EBA to issue a report on this topic.**

### 3-Next steps

Stakeholders to provide their **feedback by 2 August 2022.**

### Main conclusions of the analysis

#### Credit risk

- **SA approach.** External credit assessments are likely over time to incorporate environmental aspects into their **underlying methodologies**.
- **IRB approach:** Need to **improve forward-looking modelling**. Consideration of the possibility of introduction of an environment-related adjustment factor with **preference given** to consideration of **enhancements** within the **existing Pillar 1** framework.

As per the collateralized exposures, environmental risks may already be indirectly embedded through the valuation and re-evaluation of collateral.

#### Market risk

- **FRTB SA:** Some approaches are described to incorporate environmental risks into the existing components of the FRTB framework. Inclusion of an **ESG component in the identification of the appropriate bucket for risk-weighting** seems to be more suitable in order to better reflect environmental risks in the sensitivity-based method (SbM). Also, the residual risk add – on (RRAO) framework could be used to capitalise environmental or broader ESG risk
- **Internal Model Approach:** It is considered more pragmatic **modelling** environmental risks **outside the internal model**.



#### Operational risk

Need to **incorporate forward-looking** information.

#### Concentration risk

Possibility of introducing a **new monitoring and reporting standard** to improve the understanding of the size of exposures subject to environmental risks.

### Conclusions for Investment Firms

K-factors	Risk types in the CRR	Same Treatment?
K-NPR	Market risk	Yes 
K-CMG	Market risk	Some specific features
K-TCD	Counterparty credit risk	Yes 
K-DTF	Operational risk	Some specific features
K-CON	Concentration risk	Some specific features

[Access the entire document](#)



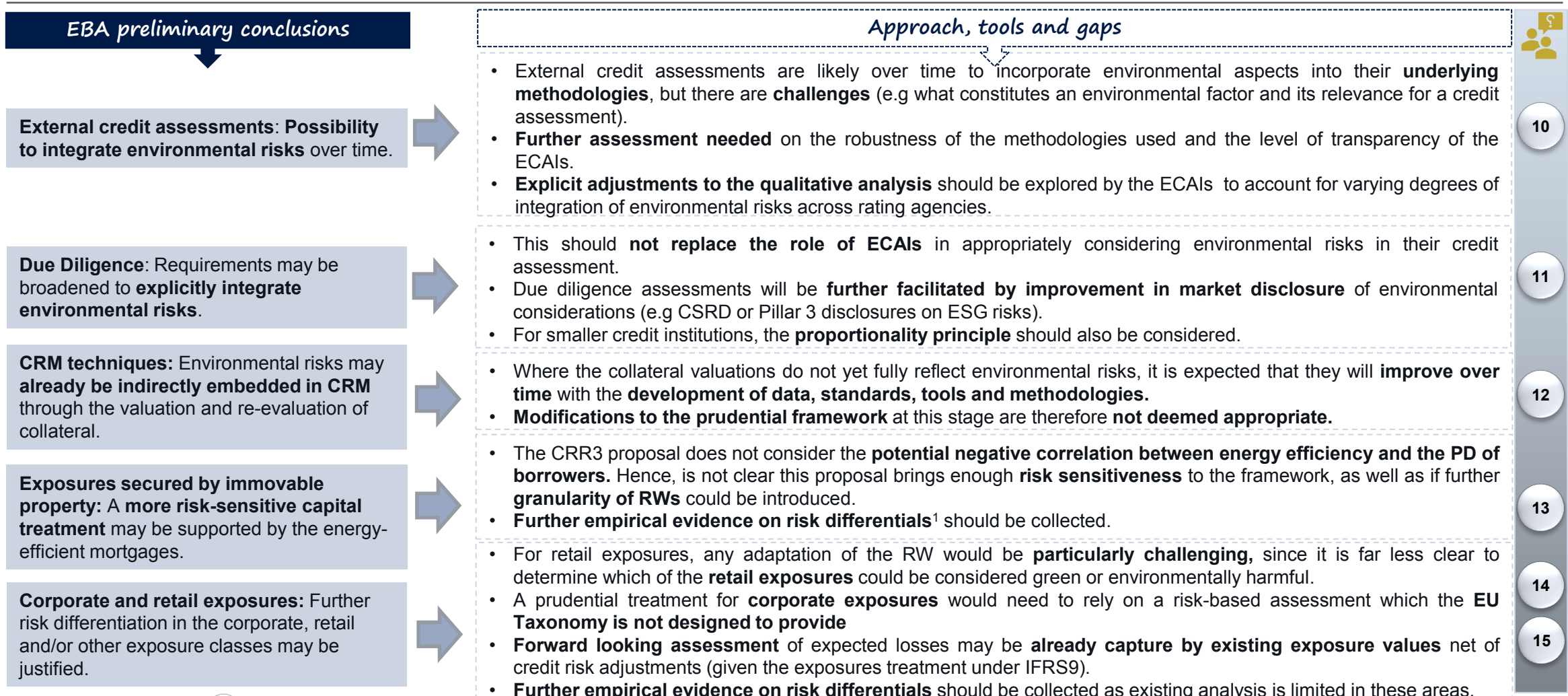
(1) In the analysis presented in this paper both dimensions of 'double materiality' (financial materiality and environmental materiality) of the counterparty or invested asset are taken into account to the extent that they affect the credit, market and operational risks of the institutions. A **question have been raised** on these matter ( Question number 4). See [Annex II](#)

(2) Some aspects of the prudential framework are not covered in depth in this DP: i) the securitisation framework, although the considerations presented for credit risks by construction also indirectly apply to its treatment.; ii) liquidity ratios, since these are expected to remain mostly unaffected by environmental risks and have a limited role in addressing such risks; iii) exposures associated with social objectives and iv) the leverage ratio, since it is a non-risk-based measure which functions as a backstop. Thus, does not interact with environmental risks. Even though, **questions have been raised** on these issues (Questions number 1 and 2) . See [Annex II](#).

# 2 | Credit risk (1/2)

## SA approach

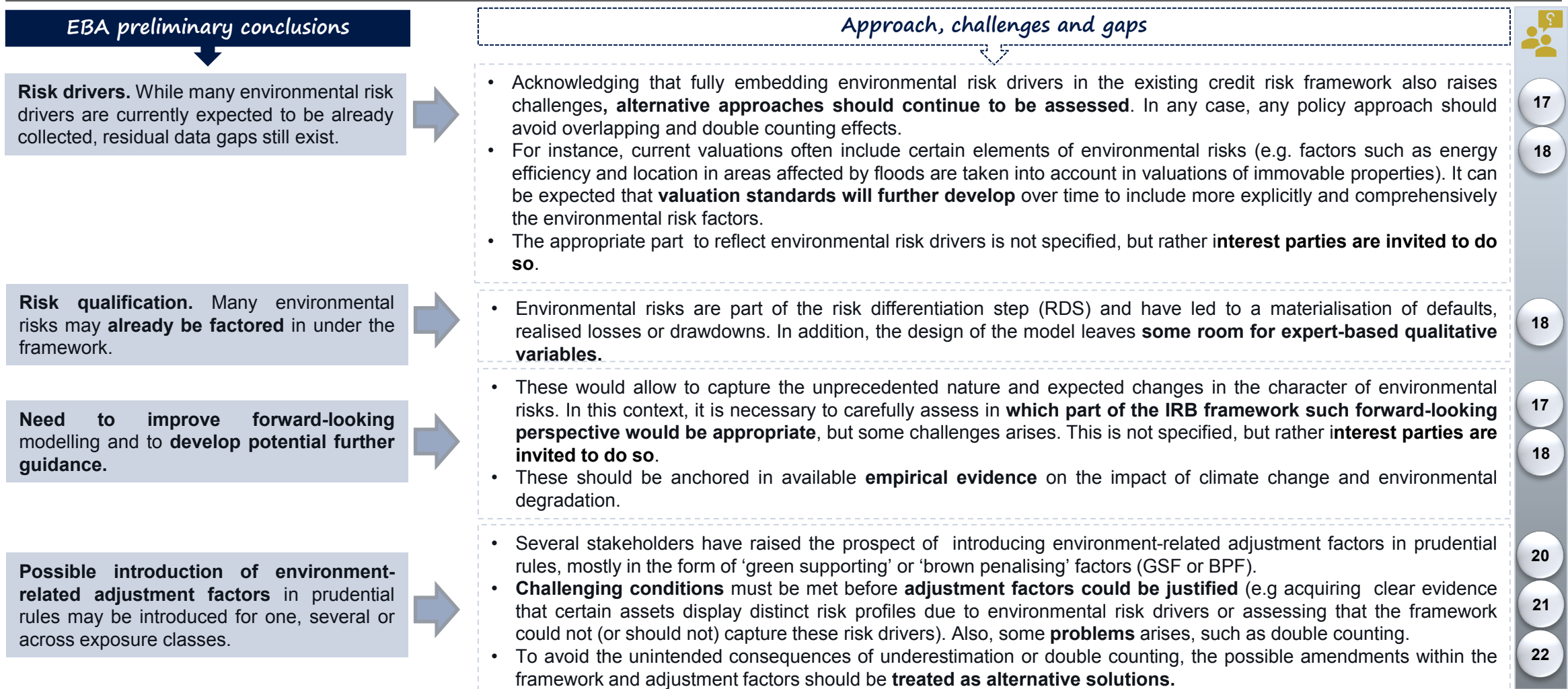
Environmental risks should be better reflected in the framework, while avoiding excessive complexity which may be achieved through different tools which EBA has identified



# 2 | Credit risk (2/2)

## IRB approach

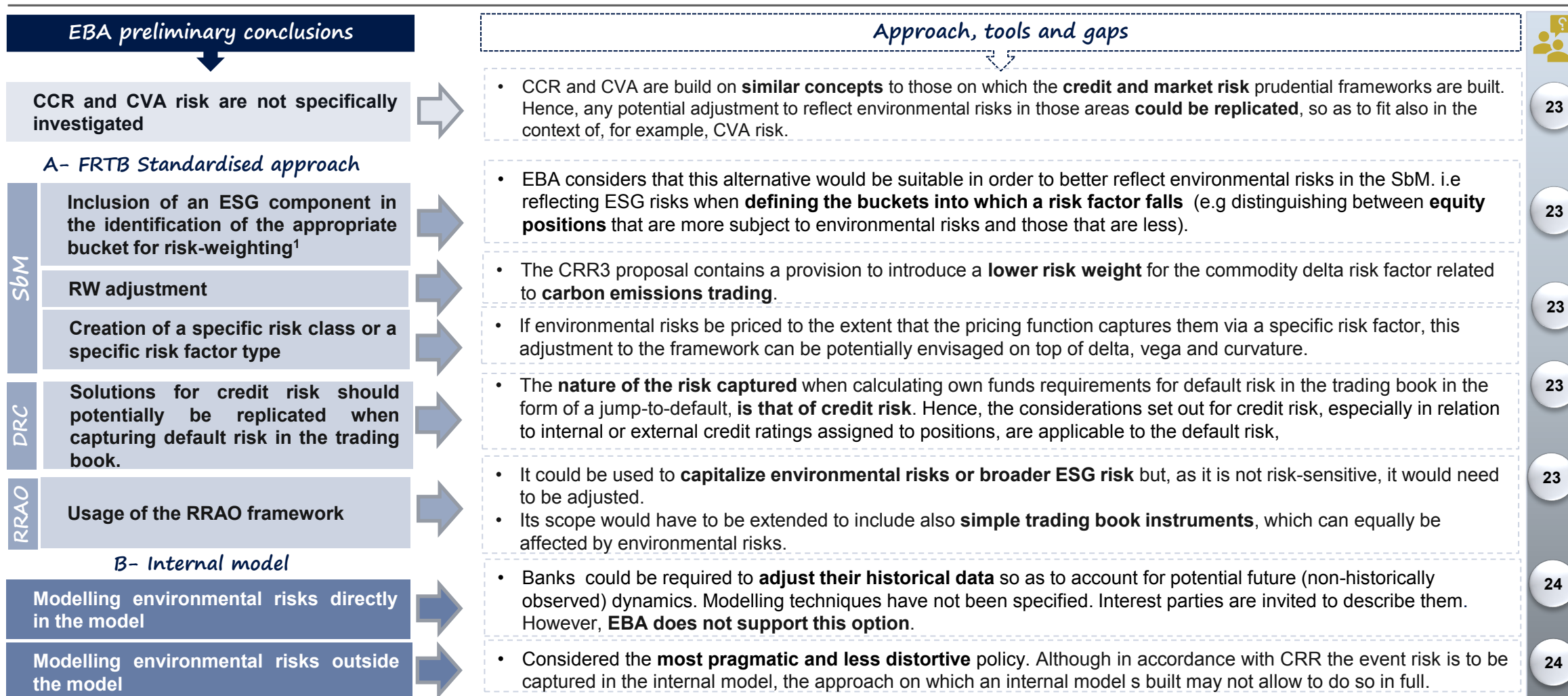
EBA considers that any adjustments in the IRB framework should not lead to an undue decrease in the model performance. On the other hand, is key to ensure that the calculation of RWAs is not distorted and to maintain risk-based capital requirements



# 3 | Market risk

## FRTB Standardised and Internal Model approach

For the FRTB SA EBA describes possible approaches to incorporating environmental risks. For the internal model EBA considers more pragmatic modelling environmental risks outside the internal model



(1) For example, the RW applicable to capture equity risk depends on the economy (advanced versus emerging) and the sector. An additional dimension distinguishing between equity positions that are more subject to environmental risks and those that are less so could be introduced



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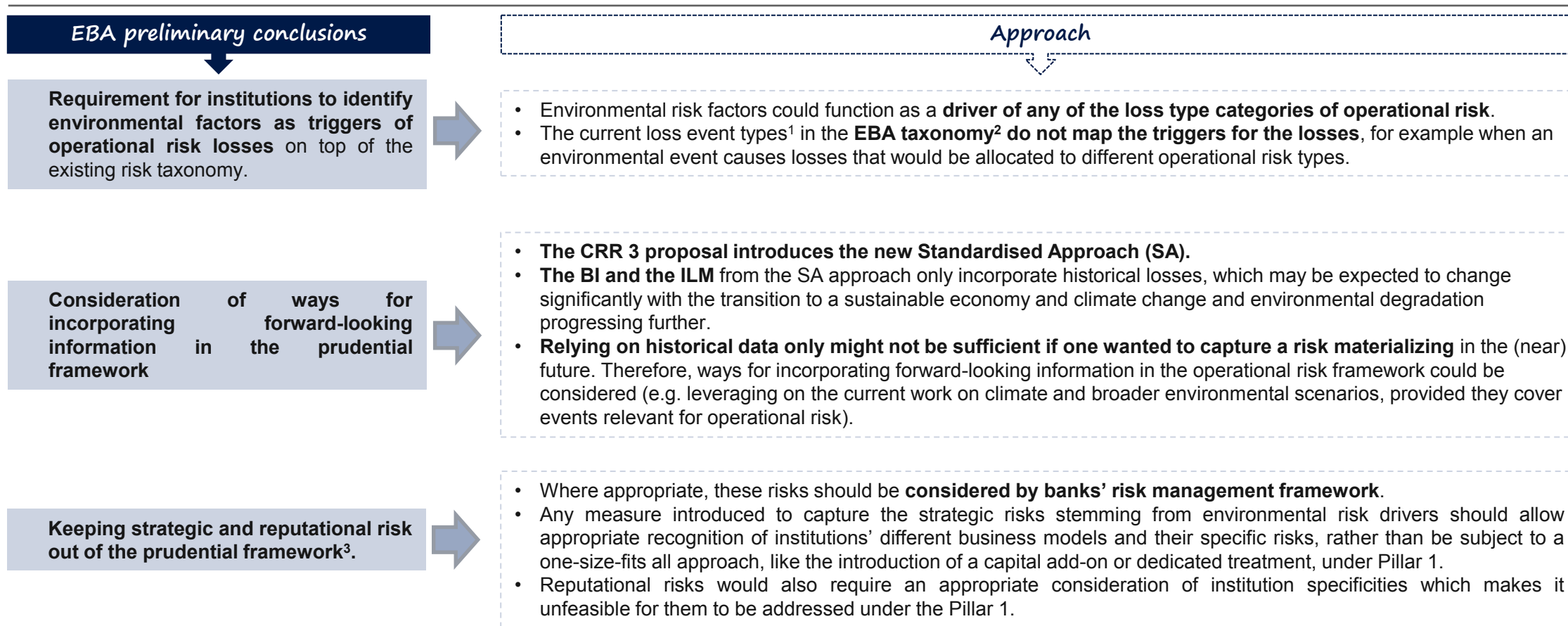
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# 4 | Operational risk

## Environmental risks and the operational risk framework

The EBA considers to incorporate forward-looking information in the operational risk framework as the new BCBS SA for operational risk measurement currently does not include forward-looking elements



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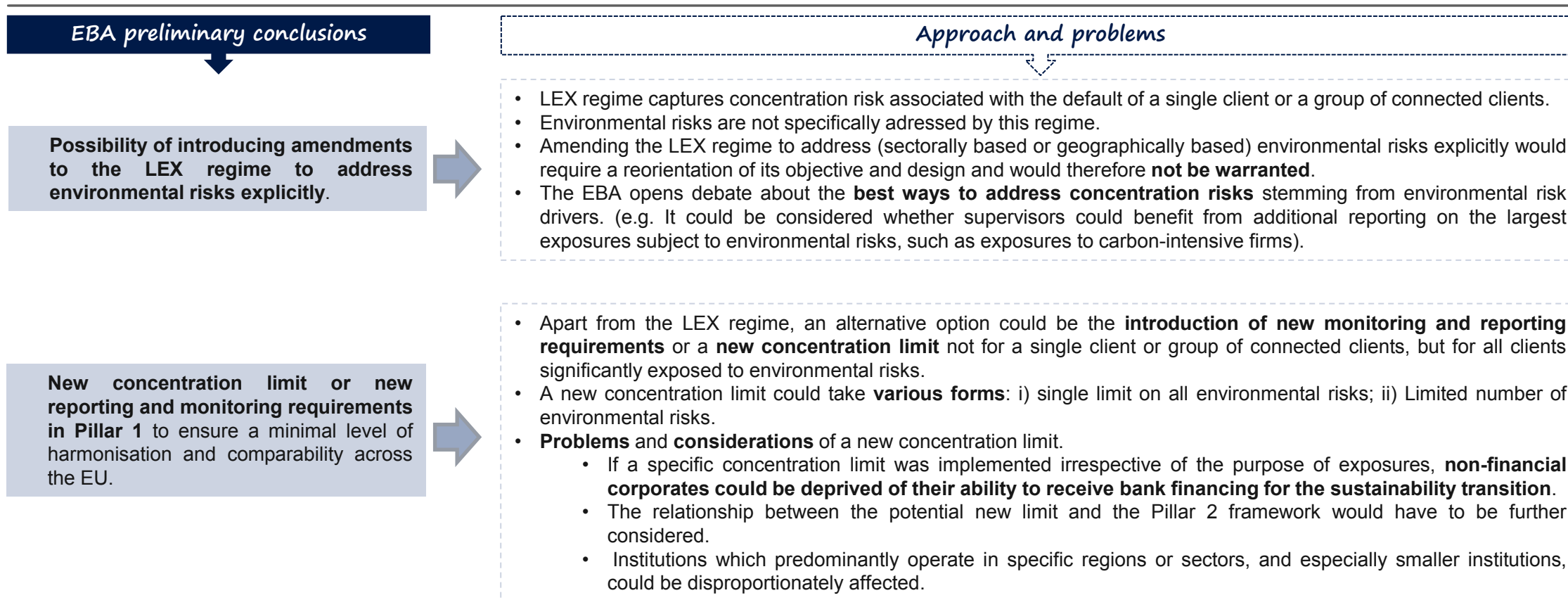
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(1) e.g. Internal fraud; external fraud; employment practices and workplace safety; clients, products, and business practice...  
 (2) EBA internal risk taxonomy on operational risk ([link](#)).  
 (3) Currently, these two risk types are already addressed under the Pillar 2 framework

# 5 | Concentration risk

## Environmental risks and the concentration risk framework

The EBA considers the possibility of an introduction of a new monitoring and reporting standard to improve the understanding of the size of exposures subject to environmental risks



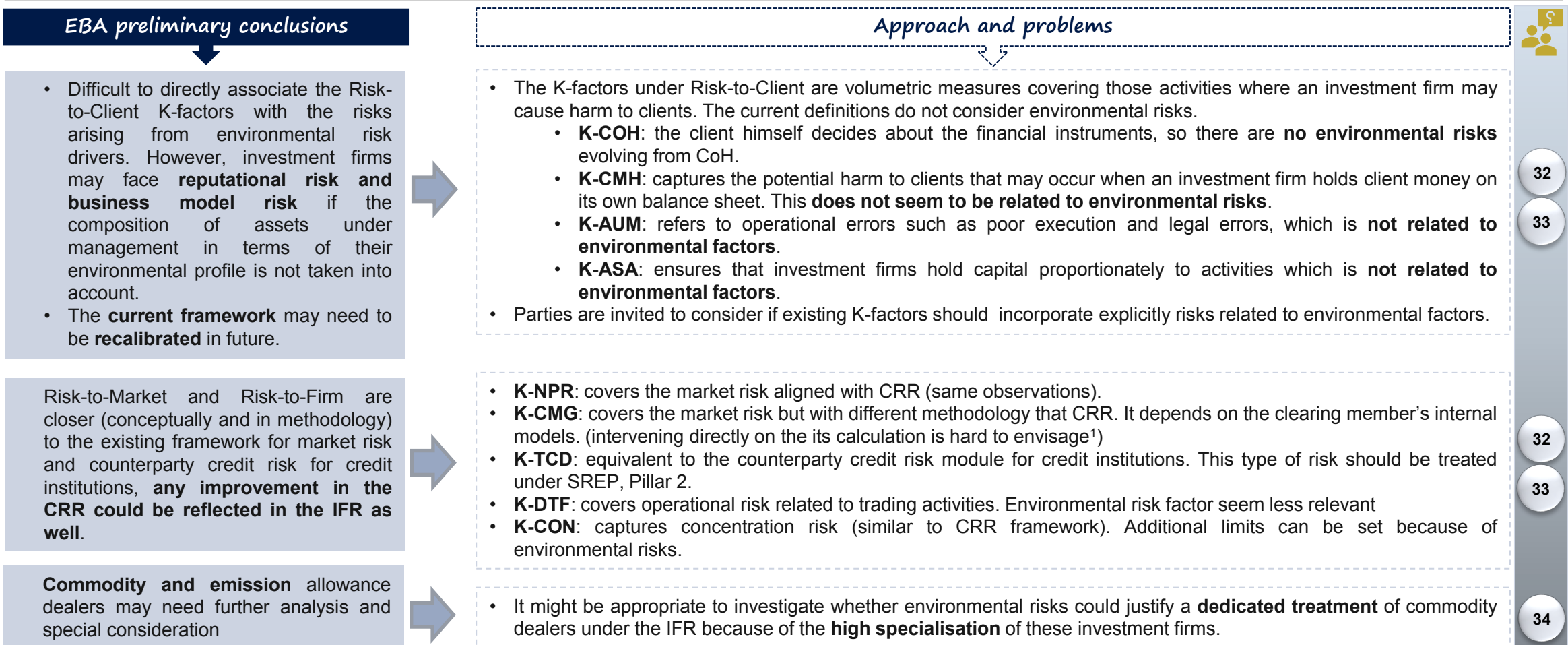
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# 6 | Investment firms

## Environmental risks and the investment firms framework

The EBA highlights the interrelations between the IFR and CRR frameworks and the importance of taking them into account to ensure consistency and proportionality while addressing environmental risks



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For the purpose of this analysis, the term 'investment firms' refers to the investment firms applying the K-factor and not to the large and systemically important ones or to the small and non-interconnected investment firms.

(1) This could only be possible via either: (a) an external add-on to the K-CMG, or (b) limiting further the use of the K-CMG. Intervening directly on the calculation of the K-CMG is hard to envisage.

# Annex I

Abbreviation	Meaning
AUM	Assets Under Management
ASA	Assets Safeguarding and Administering client assets
BCBS	Basel Committee on Banking
BI	Business Indicator
BPS	Brown Penalising Factors
COH	Client Orders Handled
CCF	Credit Conversion Factor
CMG	Clearing Member Guarantee
CMH	Client Money Held
CON	Concentration
CRM	Credit Risk Mitigation
CRR	Capital Requirements Regulation
CSRD	Corporate Sustainability Reporting Directive
DP	Discussion Paper
DRC	Default Risk Charge
DTF	Daily Trading Flow
EBA	European Banking Authority
ECAI	External Credit Assessment Institution
ESG	Environmental Social and Governance
FOR	Fixed overheads requirement

Abbreviation	Meaning
GSF	Green Supporting Factors
FRTB	Fundamental Review of the Trading Book
IFR	Investment Firms Regulation
IFRS	International Financial Reporting Standards
ILM	Internal Loss Multiplier
IRB	Internal Rating Based
JTD	Jump-to-default
LEX	Large Exposures
LGD	Loss Given Default
NPR	Net Position Risk
PD	Probability of Default
RDS	Risk Differentiation Step
RW	Risk Weighted
RWA	Risk Weighted Asset
RRAO	Residual Risk Add-On
SA	Standardised Approach
SBM	Sensitivity-Based Method
SEM	Small and Medium-sized Enterprises
SREP	Supervisory Review and Evaluation Process
TCD	Trading Counterparty Default

# Annex II

## EBA questions background and rationale

- 1 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

## EBA questions on principles, premises and challenges

- 2 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?
- 3 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?
- 4 Should the '**double materiality**' concept be incorporated within the **prudential framework**? If so, how could it be addressed?
- 5 How can availability of **meaningful and comparable** data be improved? What specific actions are you planning or would you suggest to achieve this improvement?
- 6 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
- 7 What is your view on the **appropriate time horizon** (s) to be reflected in the Pillar 1 own funds requirements?
- 8 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?

# Annex II

## EBA questions on credit risk

### A- Standardised approach

- 9 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?
- 10 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?
- 11 Do you see any **challenge in broadening due diligence** requirements to explicitly integrate environmental risks?
- 12 Do you see any specific aspects of the **CRM framework** that may warrant a **revision** to further account for environmental risks?
- 13 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
- 14 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.
- 15 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?
- 16 Do you have any other proposals on **integrating environmental risks within the SA framework**?

# Annex II

## EBA questions on credit risk (cont.)

### B- IRB approach

- 17 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?
- 18 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?
- 19 Do you have any **other proposals** on **integrating environmental risks** within the **IRB framework**?
- 20 What are your views on **potential strengthening of the environmental criterion** for the infrastructure-supporting factor? How could this criterion be strengthened?
- 21 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.
- 22 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?

# Annex II

## EBA questions on market risk

### A- FRTB Standardised approach

- 23 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?

### B- Internal model approach

- 24 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.
- 25 Do you have **any other proposals** on integrating environmental risks within the market risk framework?

## EBA questions on operational risk

- 26 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?
- 27 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? What are the theoretical and practical challenges of introducing such a perspective in the Standardised Approach?
- 28 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**?
- 29 Do you have any **other proposals** on integrating environmental risks within the market risk framework?

# Annex II

## EBA questions on concentration risk

- 30 What, in your view, are the **best ways to address concentration risks** stemming from environmental risk drivers?
- 31 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?

## EBA questions on investment firms

- 32 With reference to the **three risk categories** the IFR is based on (Risk-to-Client, Risk-to-Market and Risk-to-Firm), which of these could be related to environmental risks, and to what extent?
- 33 Should any of the existing **K-factors incorporate explicitly risks related to environmental factors**?
- 34 What elements should be considered concerning the risk from environmental factors for **commodity and emission allowance dealers**? Are there any other specific business models for which incorporation of environmental factors into the Pillar 1 requirements of the IFR would be particularly important?
- 35 Do you have any **other suggestions** as to how the prudential framework for investment firms could be adjusted to account for environmental risk factors?



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