

Promosso da
ABI Associazione
Bancaria
Italiana

Organizzato da
ABISERVIZI ABI EVENTI

In collaborazione con
dipo
dati & processi per le operazioni

Partner digitale
BANCAFORTE
innovation key

basilea.abieventi.it
[#abisupervision](https://twitter.com/abisupervision)



22 | 23 GIUGNO 2021

**SUPERVISION
RISKS &
PROFITABILITY**

INTESA  **SANPAOLO**

Credit framework and level of ambition: what does "being Paris aligned" mean?

June 23rd, 2021

Fabio Verachi, FRM

Enterprise Risk Manager – Risk Clearing



INTESA  **SANPAOLO**

AGENDA



PARIS ALIGNMENT AND ECB ROADMAP: TWO REALLY DIFFERENT TOPICS?



INTEGRATION OF ESG-CLIMATE METRICS WITHIN THE CREDIT PROCESS



FURTHER ACCELERATION OF THE BANKING SECTOR ALIGNMENT TOWARDS NET-ZERO



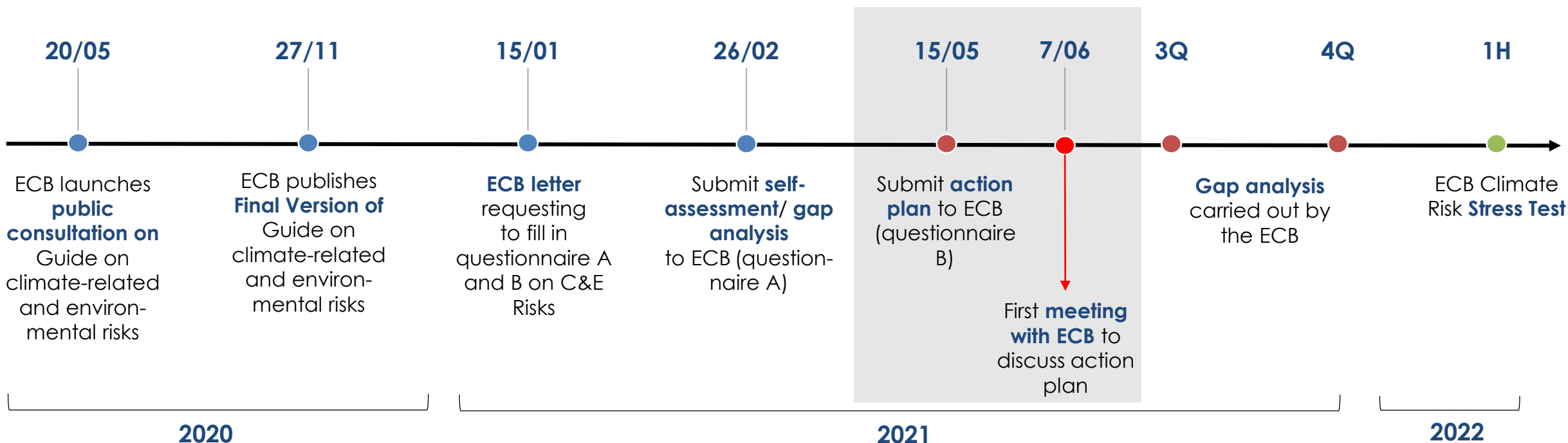
FINAL REMARKS AND TIME FOR QUESTIONS



ECB GUIDE ON CLIMATE & ENVIRONMENTAL RISKS

CLIMATE RISK SUPERVISOR'S DETAILED TIMELINE

Overview



- Initially, ECB **does not intend to fully reflect** the results of the self-assessment **in the quantitative part of the 2021 SREP**, but could consider selected quantitative and qualitative aspects in **specific cases**
- ECB has **planned to integrate** climate risks into the **SREP 2022** methodology to be provided by the ECB in 2021 (along with a specific stress test on climate)

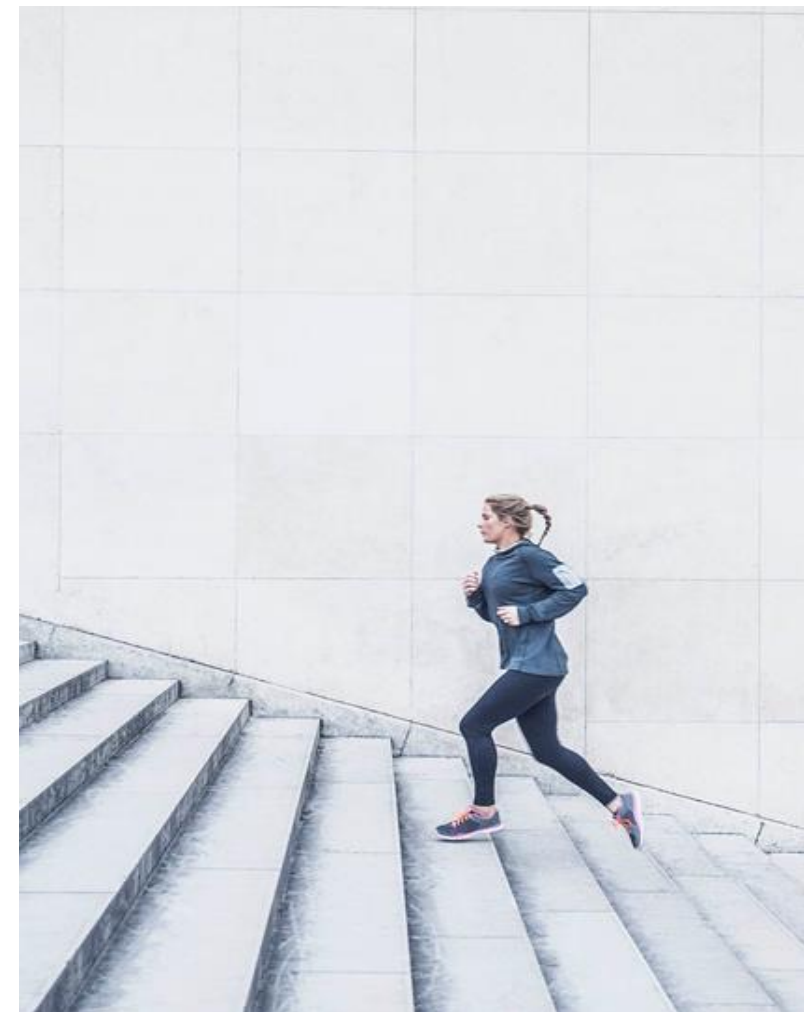
FIRST “QUICK WIN” STEPS TOWARDS PARIS ALIGNMENT

1. Reporting of climate risks. Fine tuning and formalization of Group **loan portfolio segmentation** by introducing materiality criteria (2021)
2. Monitoring of **RAF limits** and deployment in business units (2021)
3. Stress test modeling with definition of **climate scenarios** (2021)
4. Development of **transition/physical analysis tools** for large/medium corporates and SMEs: to be assessed co-ownership with Credit Risk for synergies with rating and budget (2021)
5. Definition of a **physical framework** on real estate assets: Corp and retail mortgage portfolio (start in 2021)
6. Integration of ESG-Climate metrics in the **credit process** to favor counterparties with low ESG-Climate risks (start in 2021)
7. Definition of **data providers, data enrichment and IT architecture** (e.g. collecting emission footprints) (start in 2021)
8. Extension of climate lending policies. Climate Change **integration into ESG Guidelines** (2021)
9. Economic capital and **Pillar 2** (2022)
10. Monitoring, **reporting and Pillar 3 disclosure** (2022)
11. Extension with **SBT methodology** (Paris Alignment): to be evaluated cross-ownership within the Bank (start in 2021)

*Quite
manageable*



*Strong
effort
required*



CLIMATE ANALYSIS ALREADY DEVELOPED IN OTHER JURISDICTIONS

5

BANK OF ENGLAND CLIMATE BIENNIAL EXPLORATORY SCENARIO (CBES)

The **ECB** has also planned the following **activities for 2022**, for which further updates are expected in the course of 2021:

- Conduct its next **supervisory stress test on climate-related risks**
- Integrate climate risks into the **SREP 2022 methodology**

BoE has **already developed a stress testing approach** that can be used to understand potential ECB approach

Methodology

BoE provides input variables

- **Physical risk** (e.g. temperature pathways, frequency and severity of specific climate-related perils)
- **Transition risk** (e.g. carbon price pathways, commodity prices)
- **Micro-financial indicators** to be affected by climate change (e.g. GDP)









BoE prescribes calibration methodology

- **The risk metrics and calibration are defined for 3 scenarios** (Early policy actions, late policy action, no policy action) taking into account:
 - For physical risk variables: frequency and severity of physical risk
 - For transition risk variables: policies, technological changes, consumer preferences

Counterparty coverage

- BoE adopted **2-tiered approach in relation to counterparty coverage**, acknowledging resource-intensiveness of and data limitations in performing individual assessments
- Banks expected to **assess on a counterparty-level basis**:
 - **100 largest non-financial corporate** exposures
 - 3 largest companies from most climate-sensitive sectors
 - 5 largest financial exposures
- **Remaining corporate exposures** can be covered in a **top-down approach** using portfolio analysis and extrapolation

TO MEASURE CLIMATE RISK, TWO MAIN APPROACHES ARE REQUIRED

Type of analysis	Definition	Use case examples (not exhaustive)
Scorecard 	NFC Scorecard (UNEP FI/Moody's heatmaps, TAC, GHG emissions) 	Input to credit underwriting and monitoring process , as well as impacting pricing to reflect climate strategy of the bank 
	Scorecard/ haircut table impacting collateral value 	
Scenario analysis 	Bottom up stress test 	Stress test to understand impact of Climate risk on portfolio under different climate risk scenarios 
	Top down stress test 	

POSSIBLE STEPS FOR CLIMATE RISK MODELING ACROSS EXPOSURES

7

						<div> <div>✓ To be developed in ST</div> <div>⊙ To be developed in MLT</div> </div>	
	Segment	L2	Sector sensitivity	Scorecard	Scorecard / haircut table impacting collateral value	Bottom up stress test	Top down stress test
Credit risk	NFC	Large Corporates	Sensitive	✓		✓ Only for "first priority" sectors	
			Less sensitive	⊙ Anchor scores only			✓
		Other Corporates / corporate SMEs	Sensitive	✓			✓
			Less sensitive	⊙ Anchor scores only			✓
	Collateral assessment for loans secured by RE property	Residential mortgages ¹			⊙	⊙	
		Corporate loans collateralized by RE ²			⊙	⊙ Excluding corporates assessed bottom up in NFC stress test, to avoid double counting	
Financial institutions				⊙			

1.Excluding Buy to let

2.Risk modelling approach for collaterals on top of counterparty level approach

AGENDA

➤ **PARIS ALIGNMENT AND ECB ROADMAP: TWO REALLY DIFFERENT TOPICS?**

➤ **INTEGRATION OF ESG-CLIMATE METRICS WITHIN THE CREDIT PROCESS**

➤ **FURTHER ACCELERATION OF THE BANKING SECTOR ALIGNMENT TOWARDS NET-ZERO**

➤ **FINAL REMARKS AND TIME FOR QUESTIONS**



ESG-Climate updates

To ensure **ESG-Climate criteria** are **considered** at all relevant stages of the credit-granting process, the following metrics may also **inform strategic and commercial processes**:

- **ESG-Climate Strategy by Sector**, based on **ESG Sectorial Assessment** and strategic/opportunity considerations
- **ESG Score at counterparty level** that will be also informed by a **Climate Risk score at counterparty level**, related to the current climate risk and including both transition and physical risk

Key processes

Steering processes

Description

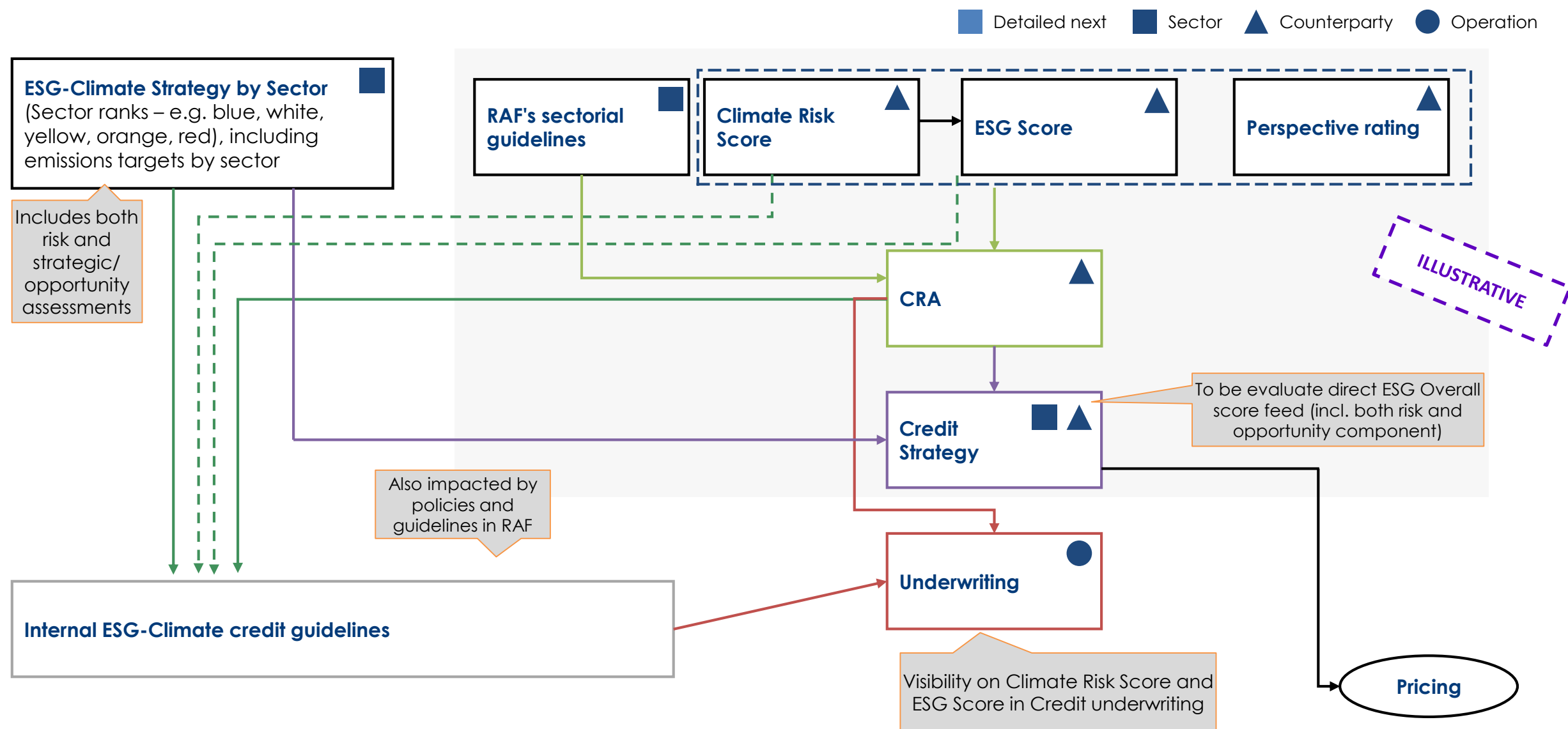
- **Risk appetite framework (RAF)** with limits and exclusions on specific sectors
- **Credit Strategies framework** to guide and steer BUs and to incentivize or disincentivize lending based also on ESG - Climate considerations (e.g. to be integrated to existing KPIs)
- **Internal ESG-Climate credit guidelines** to define the specific underwriting process to be followed based on available inputs (e.g. ESG/Climate score, ESG-Climate Strategy by Sector)

Operative cascading

- 1 **Credit risk appetite (CRA)** process including new ESG-Climate contribution to impact the counterparty CRA score
- 2 **Different pricing strategies** based also on level of **ESG-Climate metrics** and type of instrument / product (e.g. S-Loan) (including selective engagement with **virtuous counterparties** through **dedicated plafond**)
- 3 **Underwriting criteria** customized following the inputs received on sectorial, counterparty and operation level information

DRILL-DOWN OF ESG-CLIMATE METRICS: HIGH-LEVEL PROPOSALS

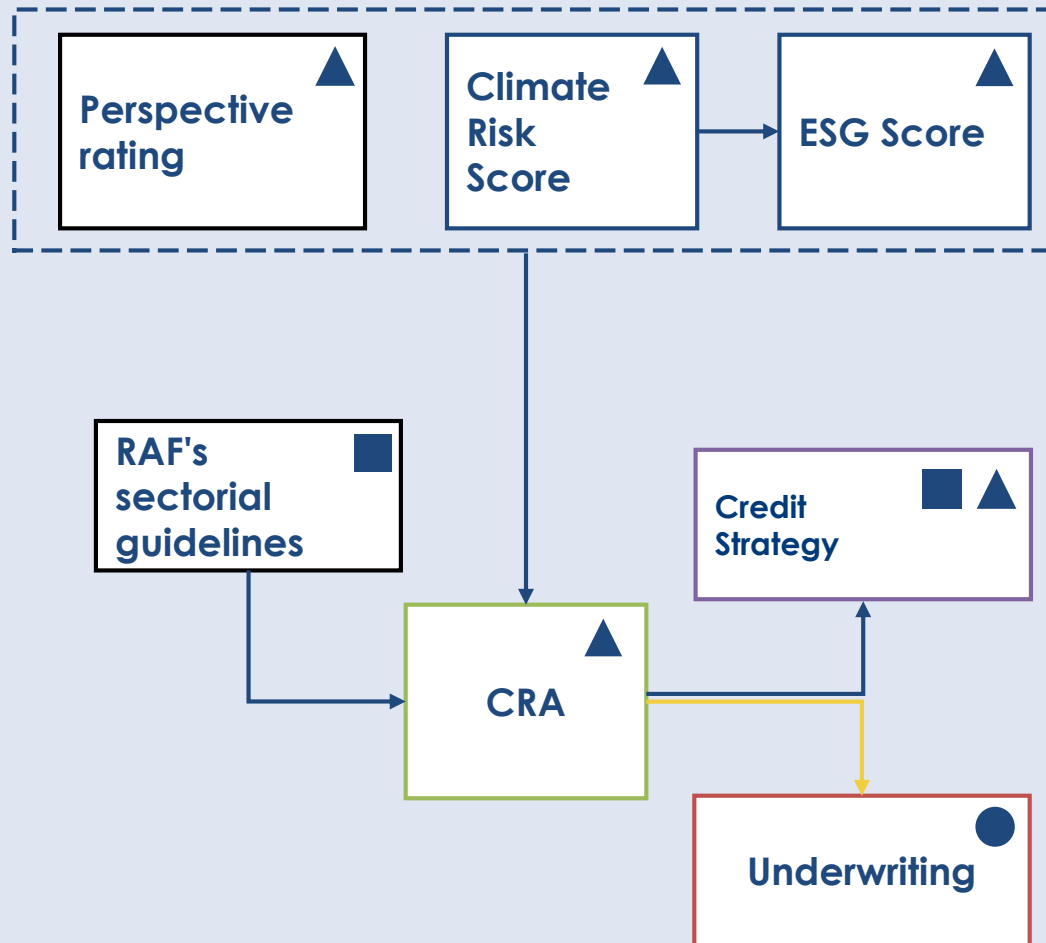
10



CONSIDERING ESG-CLIMATE BY CRA FRAMEWORK

11

CRA process

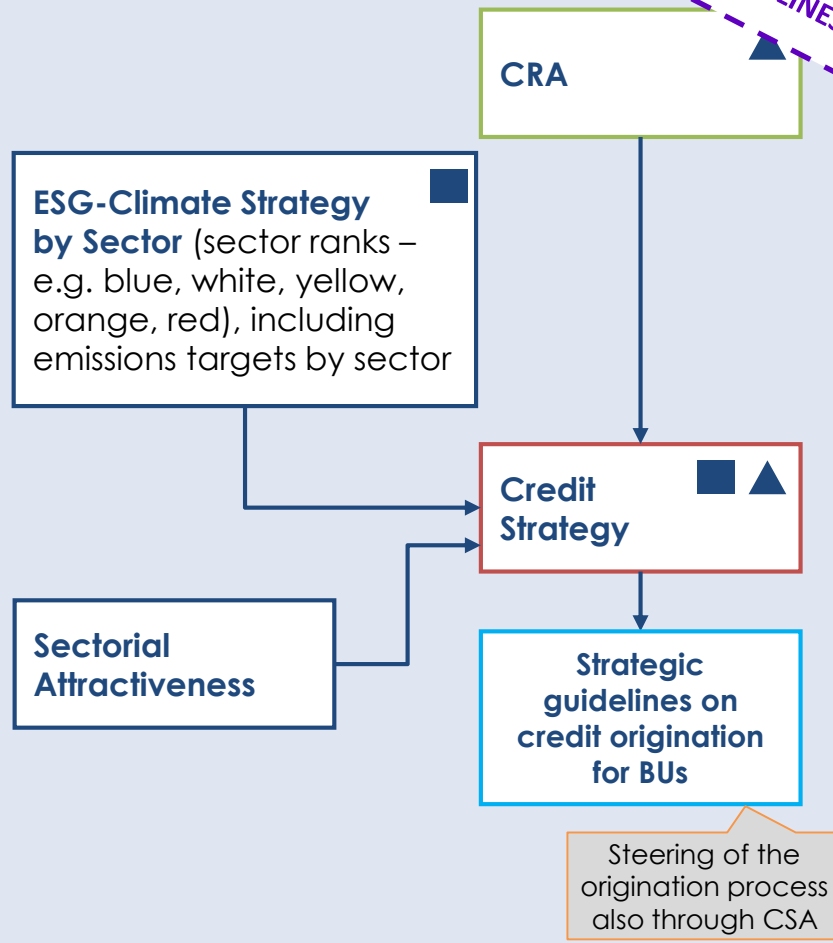


Output

■ Sector ▲ Counterparty ● Operation

- **Counterparty CRA score** (e.g. “green”, “yellow”, “red”) computed including new **ESG-Climate metrics**:
 - **ESG Score**, to be developed by Planning/Strategies
 - **Climate Risk Score**, to be developed by Risk Management
- Integration of ESG and Climate Score **impact CRA classification through a “notch-up”/“notch-down” of the CRA**
- **Limitations** on counterparties with low scores (e.g. plafond for “red” and/or “yellow” counterparties)
- **CRA score** including ESG and Climate Risk Score becomes **an input** for **Credit Strategy and Underwriting**

Credit Strategies



Output

Guidelines on portfolio steering for BUs on **counterparties to incentivize** (i.e. strategies to promote expansion) or **disincentivize** according to:

- **Risk:** CRA outcome integrating ESG-Climate considerations at counterparty level
- **Return:** sectorial attractiveness based on actual and prospective risk-adjusted revenues
- **ESG-Climate impact:** sectorial attractiveness based on ESG - Climate Strategy
- **CSA** to incentivize counterparties based on **ESG-Climate Strategy by Sector** and **product-specific incentives** (e.g. S-loan)

■ Sector ▲ Counterparty ● Operation

Open points

- Integration of **ESG-Climate Strategy by Sector** as either:
 - **An additional KPI** of credit strategy model **weighted/ranked** vs. current KPIs
 - **A separate dimension** within CRA and Sectorial Attractiveness
- Direct feeding of ESG Score into **Credit Strategy**, to properly weight counterparty's ESG component
- Introduction of a **dedicated ESG plafond**
- **Calibration** of **ESG metrics/ KPIs** weight in **CSA computation**

MAIN DISCRIMINATING ELEMENTS FOR THE UNDERWRITING PROCESS

13

Drivers for the definition of the underwriting process

Description

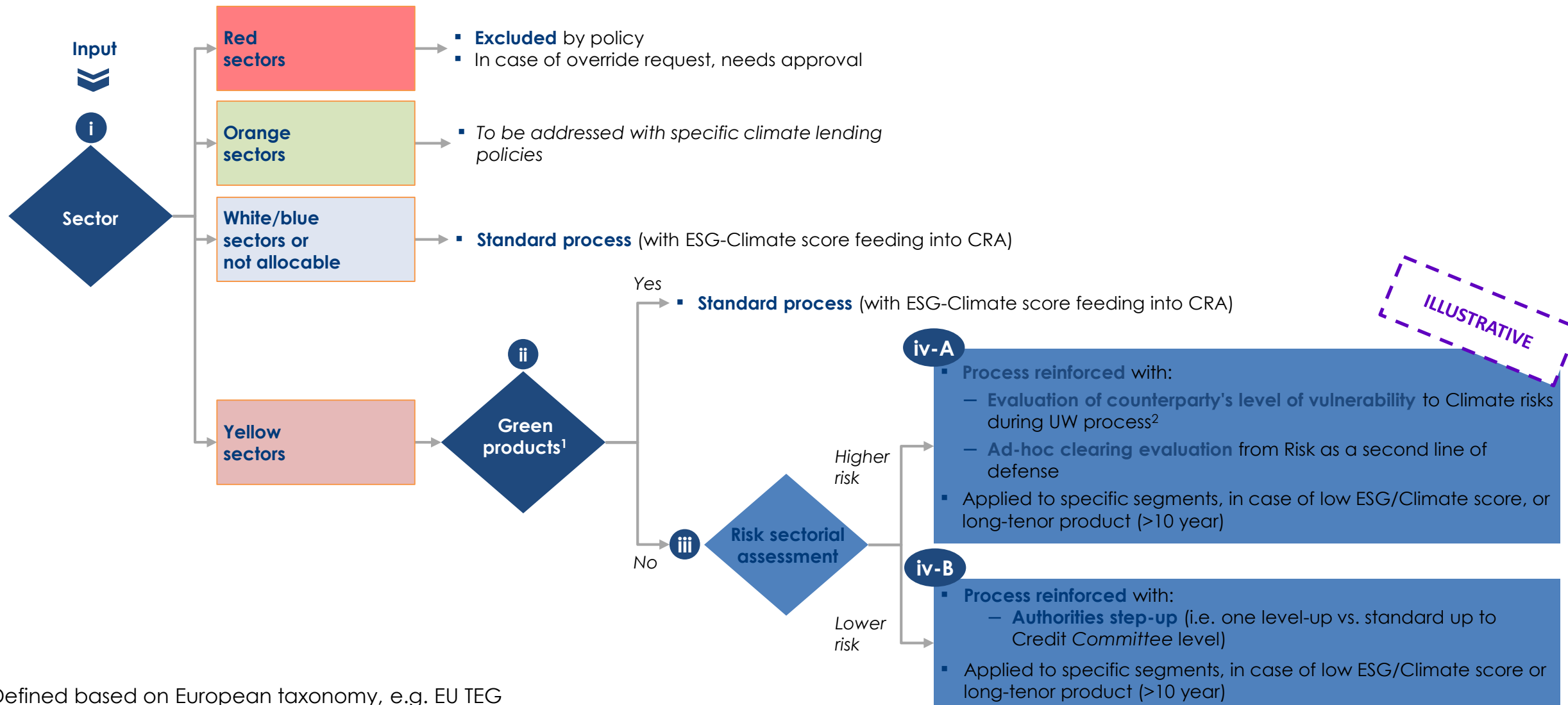
- | | | |
|-----|--|---|
| i | ESG-Climate Strategy by Sector | Different processes depending on ESG-Climate Strategy by Sector (i.e. color) |
| ii | Type of product (i.e. green vs. others) | Standard process for green products defined according to EU taxonomy, also for yellow sectors |
| iii | Risk sectorial assessment (for yellow sectors) | For yellow sectors, differentiation of higher risk sectors (based on climate transition or ESG risks) vs. lower-risk ones |
| iv | Specific counterparty/operation characteristics | Underwriting process further tailored based on: <ul style="list-style-type: none">▪ Counterparty ESG-Climate score,▪ Counterparty segment (e.g. Large Corp, Corp, SME Corp)▪ Transaction tenor▪ Credit authority |

Potential impacts on underwriting processes

- **Exclusions** (e.g. for red sectors)
- Evaluation of **sensitivity** to Climate risks (and of Transition plans when available) performed by **1st level** (e.g. for high-risk counterparties in high-risk yellow sectors)
- **Ad-hoc clearing evaluation from Risk** as a second line of defense (e.g. for high-risk counterparties in high-risk yellow sectors)
- **Reinforced credit authorities** due to ESG-Climate related considerations (e.g. for high-risk counterparties in lower-risk yellow sectors)
- Standard process for **green products for yellow sectors** (note: E2E timing to be mapped, with countermeasures to be evaluated in case of timelines too long vs. competitors for green products)

POSSIBLE "ISSUE TREE" TO IDENTIFY THE UNDERWRITING PROCESS

14



1. Defined based on European taxonomy, e.g. EU TEG

2. Especially for high-transition risk sectors

AGENDA

- **PARIS ALIGNMENT AND ECB ROADMAP: TWO REALLY DIFFERENT TOPICS?**
- **INTEGRATION OF ESG-CLIMATE METRICS WITHIN THE CREDIT PROCESS**
- **FURTHER ACCELERATION OF THE BANKING SECTOR ALIGNMENT TOWARDS NET-ZERO**
- **FINAL REMARKS AND TIME FOR QUESTIONS**



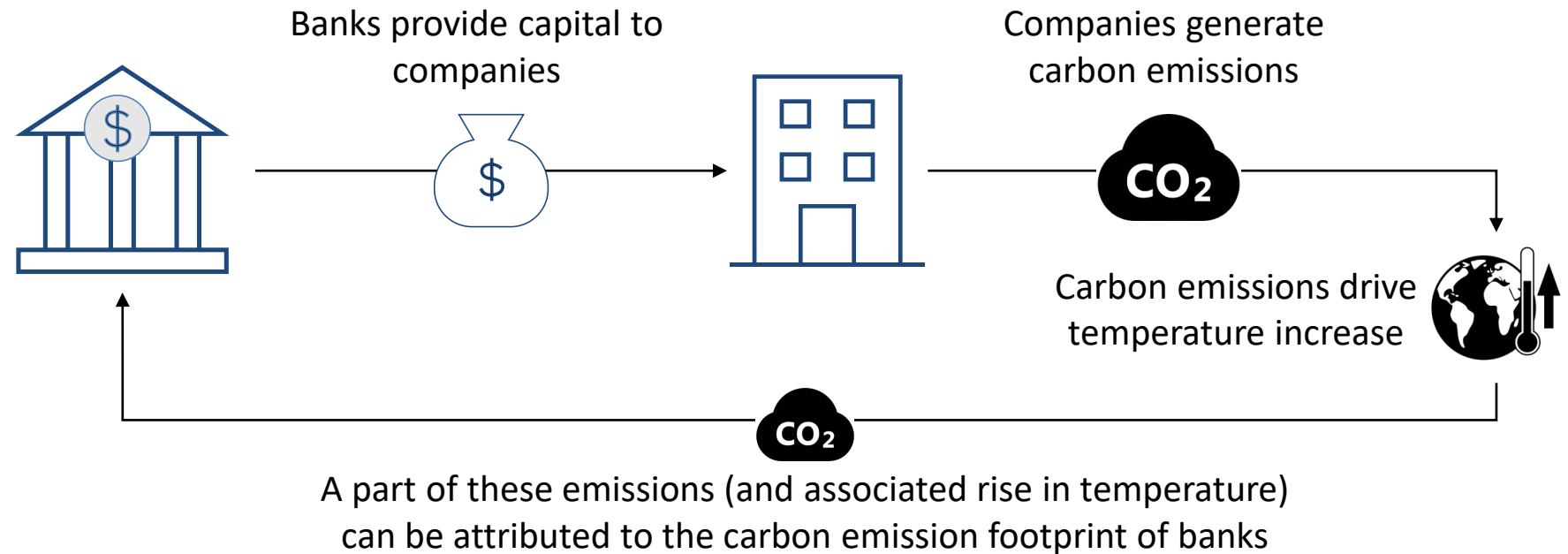
WHAT DOES "BEING PARIS ALIGNED" MEAN FOR A BANK?

Reaching Paris Agreement goals requires decreasing CO₂ emissions to net-zero

Article 2 Long-term temperature goal: limiting "[...] global temperature increase to well below 2 degrees Celsius [...] and pursuing efforts to limit the temperature increase to 1.5 degrees."

Article 4 Global peaking and 'climate neutrality': To achieve this temperature goal, "Parties aim to reach global peaking of greenhouse gas emissions as soon as possible"

Banks provide capital to economies and therefore have a key role to play in the transition of their counterparties to support the Paris Agreement



Article 2.1 (c) Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development

Source: Report of the Conference of the Parties on its twenty-first session, held in Paris from 30 November to 13 December 2015 (29 January 2016)

FUNDAMENTAL DIFFERENCES BETWEEN NET ZERO VS PARIS ALIGNMENT

17

█ Explicit target
 █ Implicit/partial target
 █ No target
 █ Generally accepted first hypothesis

Key targets	Paris Alignment (PA)	Aggressive Net Zero (NZ)	Rationale
Compliance	█ Paris alignment is compliant with the Principles for Responsible Banking	█ A Net Zero ambition is compliant with the Paris Agreement (and therefore the PRB)	Starting position: Exposure to carbon-intensive sectors lower / greater than EU peers (e.g. power, oil & gas, manufacturing)?
Point on time for reaching net zero	█ PA does not set a specific target deadline for carbon neutrality, as long as <2° is achieved (however, sector targets must have a well defined timing)	█ NZ specifies carbon neutrality must be achieved by a certain date (typically by 2050)	Optionality: Possible to switch (and become more ambitious) from PA to NZ, not vice-versa
Temperature	█ PA specifies temperature must decrease well below 2°	█ NZ does not provide a temperature reduction target (although implicitly setting the bar closer to 1.5 C)	Peer / industry alignment: PA would be aligned to what most peers are opting for (I.e. industry standard)
Carbon budget	█ PA specifies emissions target reduction (although with carbon offsets allowed)	█ NZ does not set clean carbon budget on the whole time horizon	
Expected CO₂ reduction by 2030	 ~30% ¹	 30-60% ²	<div>CO₂ intensity reduction generally considered <i>relative</i> to the overall lending balance sheet size</div>

1. Average of multiple scenarios, including IEA 2020 WEO SDS scenario (-20%) and ClimateWorks 2020 2C Pathways (-43%)

2. Depending on accepted global temperature increase (e.g. 2°C vs 1.5°C). Average of multiple scenarios based on 1.5°C pathway, including NGFS 2020 1.5 with CDR (-35%) and ClimateWorks 2020, '1.5C All in' pathway (-69%)

Approach

Top-down model developed to have a **directional estimate of sensitivity and impacts for the Bank from a reduction of the Bank's financed emissions** by 30% by 2030 (i.e. Paris Alignment)

Key inputs:

- **Initial exposure** by sector and sub-sector
- **CO₂ intensity** (Kg of CO₂ for '000 of loans) by sector, for the relevant geographical footprint

Defined **3 potential scenarios** depending on the type of response:

- **Scenario 1: passive response**, with selected counterparties inertially transitioning and no other actions. Target reached by purchasing carbon offsets (*non-plausible scenario*)
- **Scenario 2A: active response**, with focus on **supporting counterparties transition** and **optimizing portfolio**
- **Scenario 2B: same as 2A**, but with **expansion of green finance business**

Financial impacts

Key dimensions of pre-tax P&L impacted (cumulative by 2030):

- **Delta revenues**, due to reduction of business from **exited counterparties**; reduced profitability due to **portfolio optimization** (e.g. reduced margins on greener products/counterparties); additional revenues from increased volumes of **green finance**
- **Delta credit impairments**, due to **higher/lower risks** for counterparties in the following years (e.g. lower risks for counterparties that will successfully transition, higher risks for others)
- **Investments/expenses required**: costs to **purchase carbon offset** or to enable the increased **green finance business**

6 MAIN LEVERS TO REDUCE THE FINANCED CO₂ OF CREDIT PORTFOLIO

19

NOT EXHAUSTIVE

	Description
1 Inertial counterparty transition	Counterparties within the portfolio will transition to lower CO ₂ emissions, according to their current and stated policies
2 High emitters divestment	Partially or fully exit from selected counterparties with highest ratio between CO ₂ emitted & revenues
3 Support to transition and portfolio optimization	Support and accelerate counterparties transition, and/or reallocate exposure from relatively GHG intensive counterparties (worst in class already exited in lever 2 "High emitters divestment") to greener industry peers (however potentially with expected reduced profitability – "green premium")
4 Portfolio reallocation	Reallocate exposure from CO ₂ intensive industry segments to less carbon intensive industry segments (however potentially with expected reduced profitability – "green premium")
5 Green finance	<p>Progressively shift towards green lending (e.g. loans towards renewable energy) with ~0 CO₂ emissions; however with a general reduced profitability (i.e. "green premium") and potential higher-risk product structures</p> <p>Additional revenues from non capital consuming green finance activities (e.g. advisory, etc.)</p>
6 Carbon offsets	Purchase of carbon credits to meet required emission-reduction target by 2030

- Analysis at the moment performed with static balance sheet hypothesis
- Included wide range of hypotheses on profitability reduction in greener loans, to capture uncertainty/ risks in this field
- Levers could have different priorities in different timeframes (e.g. support transition in the short-term, reallocate portfolio in the mid-term)

OVERVIEW OF DIRECTIONAL IMPACT OF THE IDENTIFIED LEVERS ON P&L

20

○ Positive P&L impact ○ Negative P&L impact

Key dimensions of P&L impact	1 Inertial counterparty transition	2 High emitters divestment	3 Support to transition and portfolio optimization	4 Portfolio reallocation	5 Green finance	6 Carbon offsets
Delta revenues		- Lower revenues due to exiting selected counterparties or reduced profitability after portfolio optimization (e.g. reduced margins on greener products/counterparties)			+ Additional business generation	
Delta credit risk impairments	+ Overall increase in impairments due to selected counterparties that will not be able to transition successfully	- Slightly lower credit risk impairments due to exiting high risk counterparties (i.e. the ones with higher emissions and, thus, higher transition risk)				+ Additional expenses to purchase carbon offset credits
Investments/expenses needed					+ Costs related to growing of Green Finance business (e.g. additional people)	

LEVERS TO BE APPLIED DEPENDING ON THE RELEVANT SCENARIO

NOT INTENDED AS
STRATEGIC GUIDELINES

Scenario	1 Inertial counterparty transition	2 High emitters divestment	3 Support to transition and portfolio optimization	4 Portfolio reallocation	5 Green finance	6 Carbon offsets	Cumulative P&L impact ¹ % losses, by 2030
1 Momentum case: no action from the bank No active portfolio steering levers by the bank (<i>non-plausible scenario</i>)	✓					✓	-x% to -x%
2A Proactive management Active portfolio steering scenario in which the bank selectively reallocate its exposure by: <ul style="list-style-type: none"> Divesting from worst offenders In high emitting segments, reallocation of part of the exposure to greener industry peers At portfolio level, reallocation of ~x% of portfolio from high emitting segments to less GHG intensive ones 	✓	✓	✓	✓	✓	✓	-x% to -x%
2B Proactive management with Green finance boost On top of active portfolio steering as in scenario 2A, slight growth of balance sheet by expansion of green finance business from ~<x% today to ~x%	✓	✓	✓	✓	✓	✓	-x% to +x%

Ranges explained by:

- Assumptions on reduction of profitability for greener operations (5 to 50 bps)
- Assumptions on carbon prices in 2030 (EUR 10 to 20)

- Pre-tax. Mainly due to: (i) reduction of revenues from exited counterparties or reduced profitability due to portfolio optimization; (ii) reduction or increase in expected impairments due to C&E risks; (iii) costs for carbon offset; (iv) additional revenues from increased volumes of green finance

AGENDA

- **PARIS ALIGNMENT AND ECB ROADMAP: TWO REALLY DIFFERENT TOPICS?**
- **INTEGRATION OF ESG-CLIMATE METRICS WITHIN THE CREDIT PROCESS**
- **FURTHER ACCELERATION OF THE BANKING SECTOR ALIGNMENT TOWARDS NET-ZERO**
- **FINAL REMARKS AND TIME FOR QUESTIONS**





Thanks for your attention!

fabio.verachi@intesasnpaolo.com

- ✓ Do you have any proposals that could help in implementation activities and insertion into **credit framework** after sending the action plan to ECB (i.e. definition of workplans, timing, structures to be involved and links with other projects) ?
- ✓ Many banks are discussing the commitment to **Paris Alignment and/or Net-Zero**. Do you have suggestions on how to develop the plans ?
- ✓ Probably the main problem regards the **data quality and consistency**. Where do you think the focus should be further extended (i.e. GAR metric consistency, Pillar 3 issues) ?
- ✓ The **ECB climate stress test** is scheduled for 2022. Are you ready to take it on or do you believe it needs to be further addressed ?