

Implementation of C&E strategy: a key role of the Network

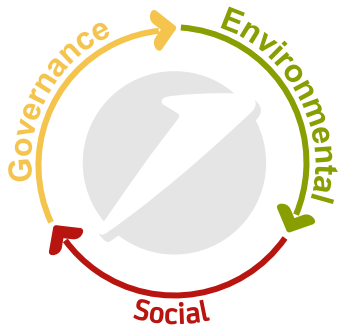
Group Credit Risk

Milan, June 2023

Win. The Right Way.
Together. |  **UniCredit**

UniCredit, as all the main Banks, has defined and communicated ambitious ESG targets...

- We will hold ourselves to the highest possible standards so that we do the right thing by our clients and society
- We are totally committed to supporting our clients in a just and fair transition
- We will reflect & respect the views of our stakeholders in our business and decision-making process



61.7 bn

FY22+1Q23 Actual
(+4bn in 1Q23 only)

150bn

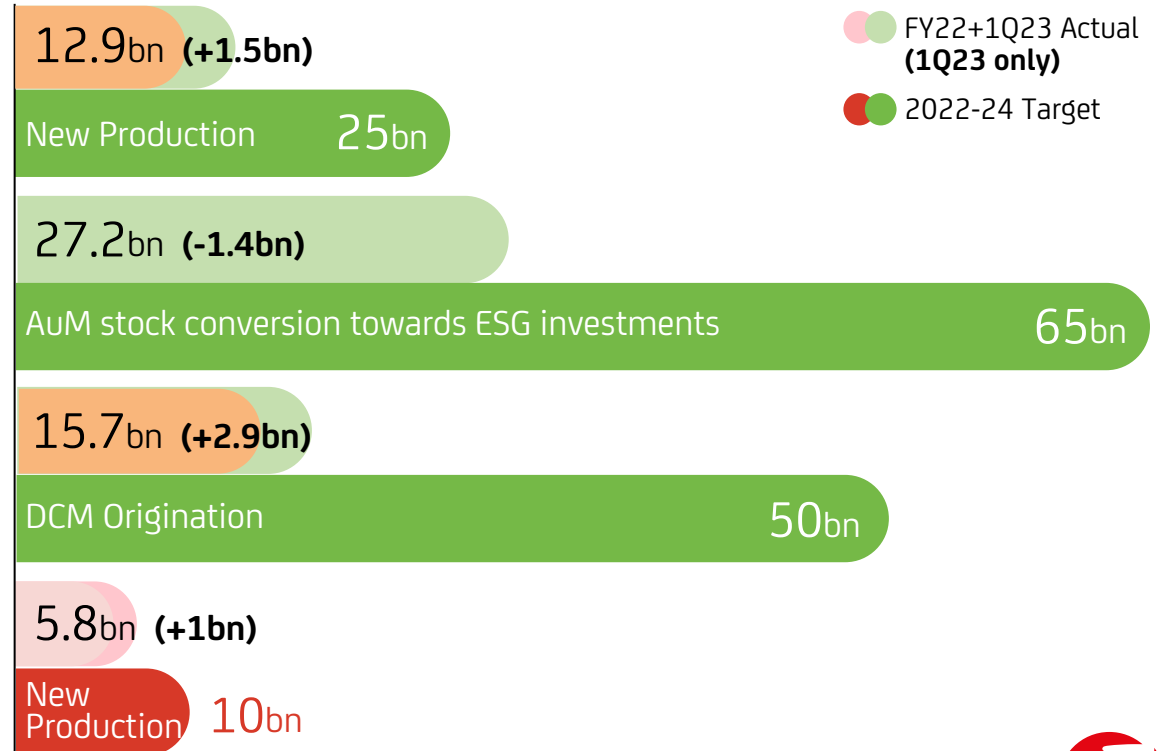
2022-24 Target

Environmental Lending¹
Despite lending slowdown,
good performance on Sustainability linked lending




ESG Investment Products²
Stock reduction due to SFDR Art. 8/9 reclassification,
with ESG Penetration rate at c.45%

Sustainable Bonds³
Slow start to 2023 but prospect
for recovery in next quarters

Social Lending¹
Lending for High Impact and Disadvantaged
Areas main drivers of growth



...and committed to relevant achievements in the support of our clients through the “green transition”

Sector	Value chain	Primary metric	Emission coverage	Main rationale	Portfolio in scope (drawn exposure, €bn) ¹	2021 Baseline ²	2030 Target ²
Oil & Gas 	<ul style="list-style-type: none"> Full value chain 	<ul style="list-style-type: none"> Financed emissions 	<ul style="list-style-type: none"> Scope 3³ 	<ul style="list-style-type: none"> Comprehensive value chain coverage Market best practices 	<ul style="list-style-type: none"> 7.8 	<ul style="list-style-type: none"> 21.4 MtCO₂e 	<ul style="list-style-type: none"> - 29% vs. baseline
Power generation 	<ul style="list-style-type: none"> Generation only 	<ul style="list-style-type: none"> Physical intensity 	<ul style="list-style-type: none"> Scope 1 	<ul style="list-style-type: none"> Market best practice Relevance for portfolio steering Data availability 	<ul style="list-style-type: none"> 8.9 	<ul style="list-style-type: none"> 208 gCO₂e/kWh 	<ul style="list-style-type: none"> 111 gCO₂e/kWh
Automotive 	<ul style="list-style-type: none"> Road vehicles⁴ manufacturers 	<ul style="list-style-type: none"> Physical intensity 	<ul style="list-style-type: none"> Scope 3 – Tank to Wheel³ 	<ul style="list-style-type: none"> Market best practice Relevance for portfolio steering Guidelines availability 	<ul style="list-style-type: none"> 1.8 	<ul style="list-style-type: none"> 161 gCO₂/vkm 	<ul style="list-style-type: none"> 95 gCO₂/vkm

Phase out by 2028 policy for Coal in place

1. Drawn exposure of the in-scope perimeter as of 31/12/2021, which may be impacted by future evolution of committed undrawn 2. Baseline and targets could be updated over time according to guidance and methodology evolutions and/or data quality enhancements 3. Scope 3 category 11 4. Light duty vehicles



Guide on climate-related and environmental risks

WHO ECB released the final “**Guide on climate-related and environmental risks**” (“C&E risk”) on **27th November 2020**

WHAT The Guide presents **13 expectations** regarding how institutions should take into account climate-related and environmental risks in defining and implementing **corporate strategies, risk management and governance systems**

TO WHOM The expectations set out in this Guide are intended as a basis for the ECB's supervisory dialogue with the **significant institutions under its direct supervision**

ECB Expectations on climate risks

Climate-related and environmental risks

Exp. from #1 to #2
Supervisory expectations for business models and strategy

Exp. from #3 to #6
Supervisory expectations for governance and risk appetite

Exp. from #7 to #12
Supervisory expectations for risk management

Exp. #13
Supervisory expectations for disclosures

- Two **main risk drivers**:
 - **Physical risk**: refers to the financial impact of a changing climate
 - **Transition risk**: refers to an institution's financial loss that can result from the process of adjustment towards a lower-carbon and more environmentally sustainable economy
- **Business environment**: impact of climate risk to govern the strategic decision process
- **Business strategy**: include the impact on the business environment in short, medium and long term using scenario analysis
- **Management body**: allocate roles and responsibilities for decision on business strategy, business objective and Risk Management framework
- **Risk Appetite**: Include specific indicators into their RAS
- **Organizational structure**: assign management responsibilities to be included in policies, procedure and controls
- **Reporting**: report aggregated risk data on climate risk exposures to take strategic decisions
- **Risk Management framework**: quantify and monitor climate risks in the ICAAP process
- **Credit risk** (end to end credit process), **operational risk** (business continuity and reputational risk), **market risk** (pricing and ST)
- **Scenario analysis and ST**: inclusion of sensitivity analysis into ICAAP
- **Liquidity risk**: include outflow or depletion in liquidity buffer calibration
- **Disclosure policies and procedures**: publish meaningful information and key metrics in line with NFRD and TCFD recommendations



C&E factor is becoming more represented and influential in credit risk

Alignment and involvement of Network has a key role

General constraints ...

- » **Availability and Robustness of data**
- » Absence of the **common methodology**
- » **Complexity** (e.g. involvement and alignment of different functions / aspects)
- » **Costs for IT development** (i.e. IT tools)
- » **Dependence on external providers** (e.g. technological infrastructure) associated to the complexity

... Potential end-user constraints

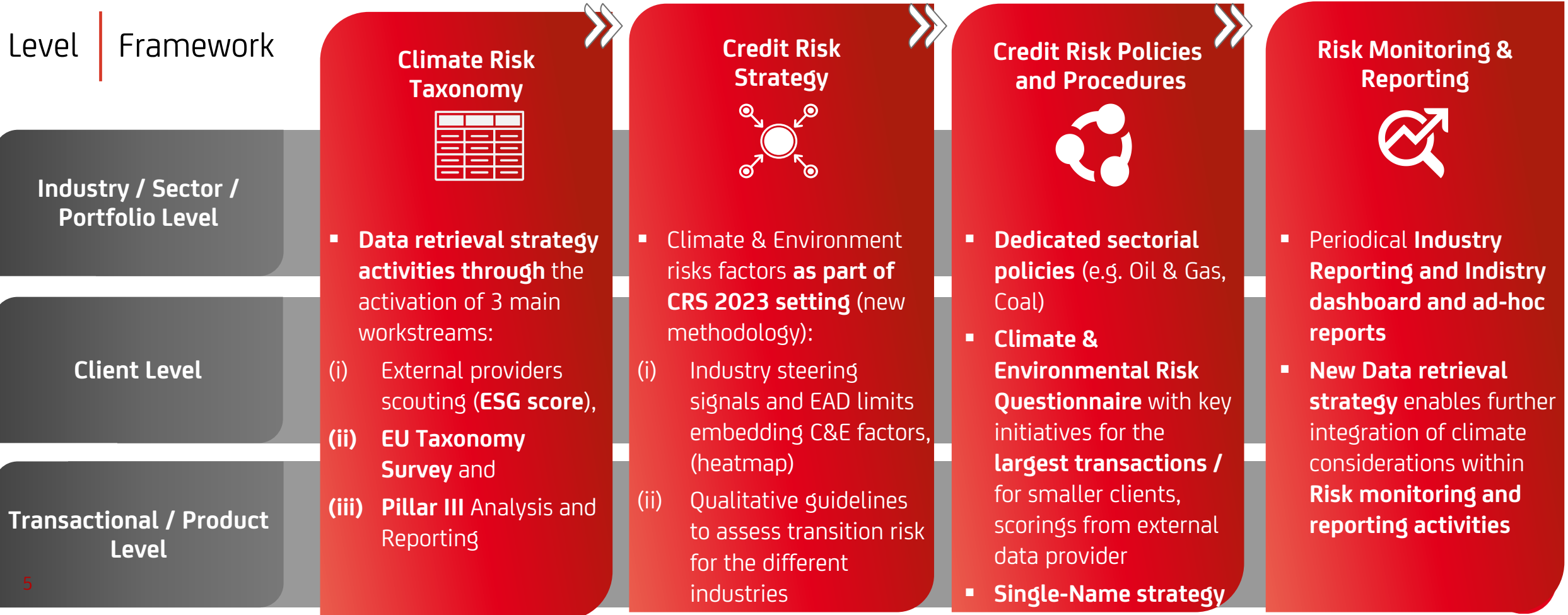
- » **Skills development** for adequate understanding and the final outcome **interpretability**
- » **Acceptance** issue by Network
- » **Time-to-market**
- » **Clear guidelines** for Network/ local Risk Management (supporting assessment at single client level)
- » Quantification of **trade-off in decisions**

... The **impact that C&E risks** can have on the economy, the financial system and intermediaries makes it necessary for the latter to adopt adequate **safeguards to manage this new type of risks**

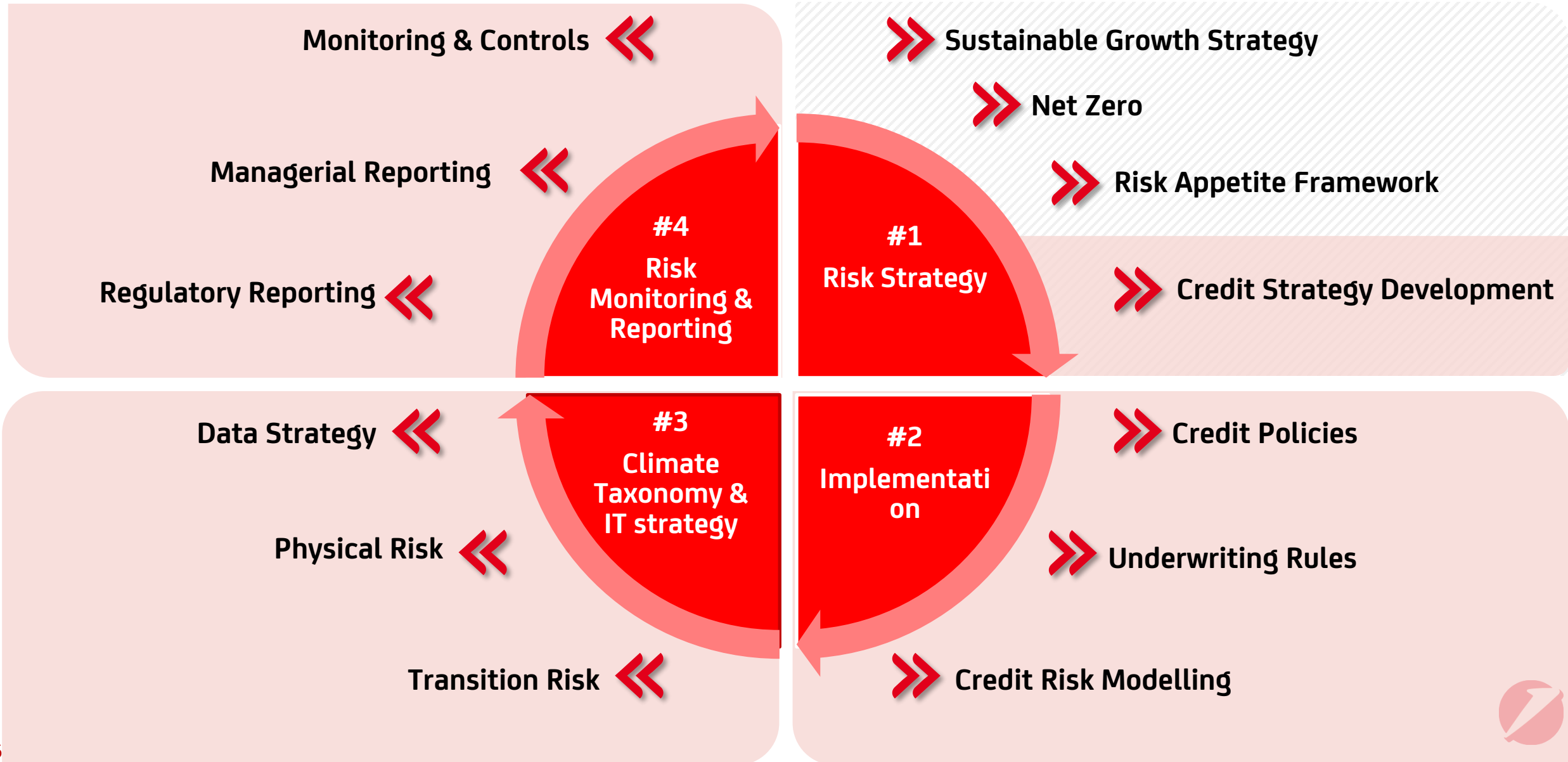


UniCredit Example (simplified view)

UniCredit has adopted a **comprehensive C&E approach through every phase of the credit activity and across different level** of granularity

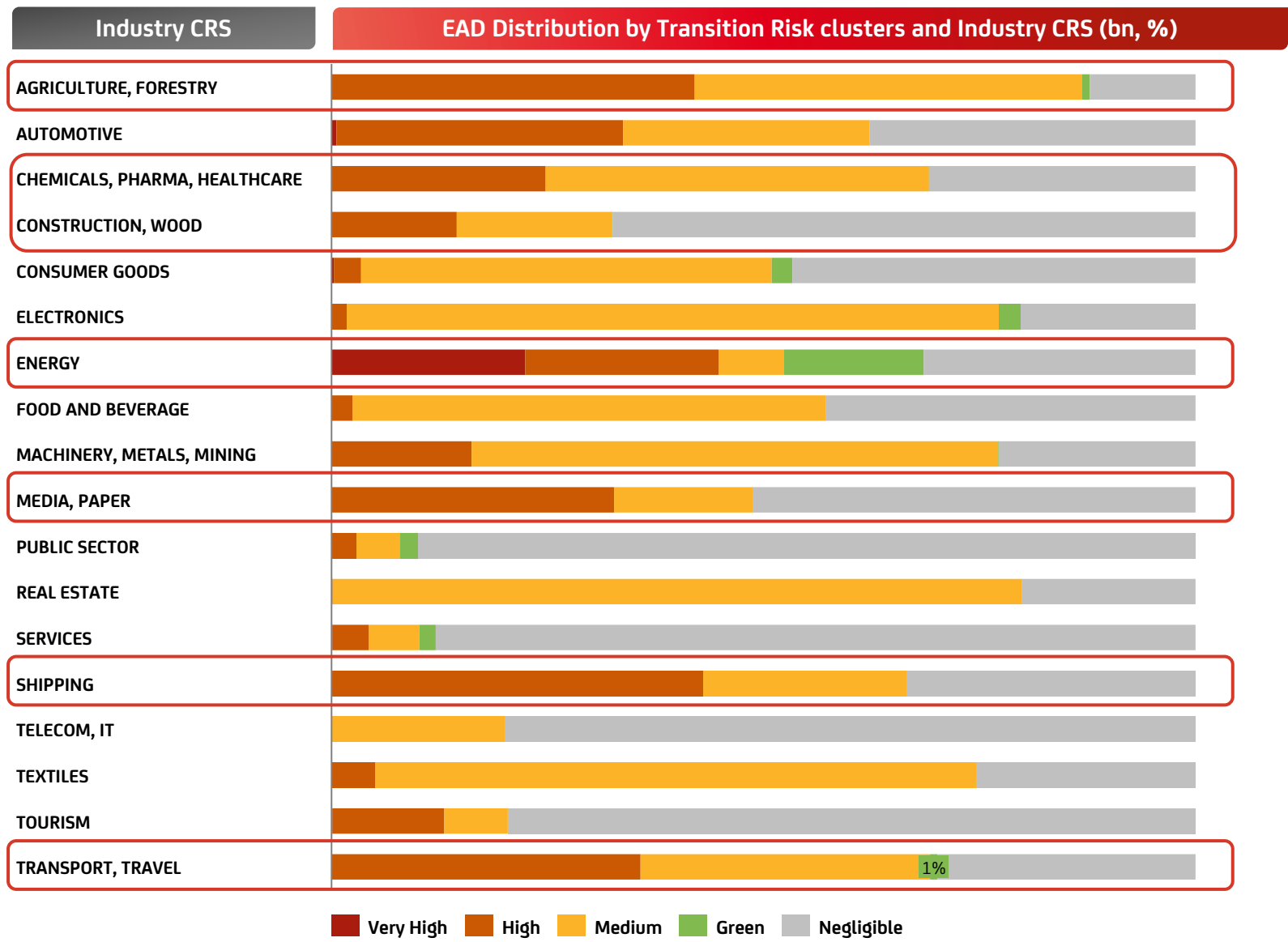


To measure and manage C&E risk, it is necessary to integrate climate factors in the different dimensions of the credit risk cycle



2023 Credit Risk Strategies (CRS) Steering Signals include Transition Risk component on all industries

Illustrative



CRS Approach

- Industry steering signals and EAD limits embedding C&E factors, with the creation of an heatmap
- Qualitative guidelines to assess transition risk for the different industries

CRS Key elements for the steering

- Industry steering signals and EAD limits cascaded in all the LEs following usual CRS process
- Clear guidelines for Network/ local Risk Management (supporting assessment at single client level)
- Ongoing monitoring and escalation processes at Holding and local level



Note: Data as of 2Q22. Perimeter reported as per CRS definition excl Russia (NACE codes not reported by CERVED forced as "Negligible")

Single large files are assessed from a C&E point of view leveraging user-friendly tools

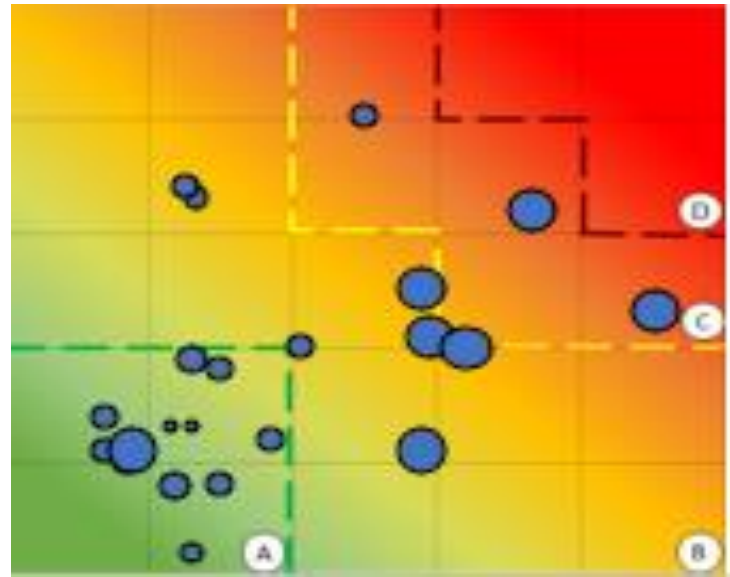
Illustrative

Climate and environmental questionnaire

Assessment of our clients' from a Climate and Environmental perspective evaluating:

- **Current exposure** e.g., level of GHG emission, water/ energy consumption
- **Forward looking climate change management** e.g., Company's investment plan, GHG target
- **Potential impacts** in terms of **Cost & Revenues**

Transition risk scoring



- Transition risk scoring rating clients on 4 levels of risk i.e. **High, Medium-high, Medium-low** and **Low**

Credit decision

- Climate and environmental **information collected** as well as the resulting **scoring** are **evaluated during the Credit Committee discussion**

Climate & Environmental Risk Scorecard		Banking that matters.	
I. Client Information		II. Climate & Environmental Assessment Matrix	
<p>Client Information</p> <p>Economic Group Name: AAAAA Group Super NDG: 10001 Business Division: CBK_ITA Main Borrower: AAAAA Industry: Construction, Cement High/Low Emission Sector: High Emission Revenue (M €): 5000 Credit Approval Authority: Group Credit Committee (GCC) Committee Date: 24/02/2021</p>			
III. Key Selected Indexes		IV. Climate & Environmental Assessment Result	
<p>GHG Emission Cost: € 0 (€ 5000) Low Risk</p> <p>GHG Emission Cost (MC): € 5000 (€ 5000)</p> <p>GHG Emission Cost (MR): € 5000 (€ 5000)</p> <p>ENG External Rating: Medium Risk</p> <p>Annual GHG Emission Reduction: € 6 (€ 1) Low Risk 10.0%</p> <p>Green Capex Ratio: € 100 (€ 1,000) Medium Risk 10.0%</p> <p>Green CAPEX (MR): € 100 (€ 1,000)</p> <p>Green CAPEX (MC): € 100 (€ 1,000)</p> <p>C&E Cost - Revenue: € 1 (€ 100,000) Low Risk</p> <p>C&E Cost (MR): € 1 (€ 100,000)</p> <p>C&E Revenue (MR): € 100,000 (€ 100,000)</p>		<p>Climate & Environmental Result</p> <p>Rating B: Medium-Low C&E Transition Risk</p> <p>- C&E Vulnerability: Medium</p> <p>- C&E Exposure: Low</p> <p>- Economic Impact: Low</p> <p>Additional Comments</p> <p>The client has Medium-Low position but medium Vulnerability due to no information on Green Capex. Further information will be available when the client starts publishing the sustainability report in next year.</p>	

Complete and clear integration of C&E factors in credit risk processes will be defined during 2023

Illustrative

▪ Framework envisaging **following steps**:

1. *Reputational risk assessment*
2. *Net Zero strategy/ Transitional risk assessment*
3. *Possible “green loan” assessment based on EU taxonomy survey (coherently with transition risk/ net Zero strategy)*
4. *Physical risk assessment*

	Credit strategy	Transition risk scoring
Full Support	<ul style="list-style-type: none">▪ No limitation in terms of products, including both green and general financing	Green – Low –Medium
Transition Support	<ul style="list-style-type: none">▪ Prevalence of ESG related products with Limited portion of General Financing.▪ Deviations foreseen based on adequate detailed explanation considering the client relationship	High
Limited Support	<ul style="list-style-type: none">▪ Support to the customer needs mainly focusing on ESG related Products, to support climate transition▪ Deviations foreseen based on adequate detailed explanation considering the client relationship	Very High



Dedicated IT architecture collects data and made them available for all different purposes, including support to Network

Illustrative

✓ Completed

3 Key pillars of ESG Global Infrastructure

- 1 **Survey /Front-End (S-FE): tool to retrieve data at origination** to (i) collect EU Taxonomy/ Green Bonds KPIs (ii) **make climate information available to relationship managers** through the ESG KPIs Cockpit
- 2 **Calculation Engine (S-CE) for the classification of green loans** using information collected at origination and from providers
- 3 **Data Repository (S-AR): ESG information repository to enable data analysis** and reporting both for managerial and regulatory purposes

Deliveries allowed by IT architecture

- ✓ **Pillar 3 disclosure**
- ✓ **ECB Short Term reporting Exercise** (related to GHG financed emissions and EPC)
- **Set-up of managerial reporting**, for Holding and legal entities
- **Cockpit**, to ensure visibility on C&E risks parameters for single clients, transactions and collaterals

Implementation of EU taxonomy alignment survey further enriching data collection on climate risk

Due date

- *March 2023*
- *March 2023*
- *Set-up ongoing by wave*
- *Main countries by 3Q-2023*

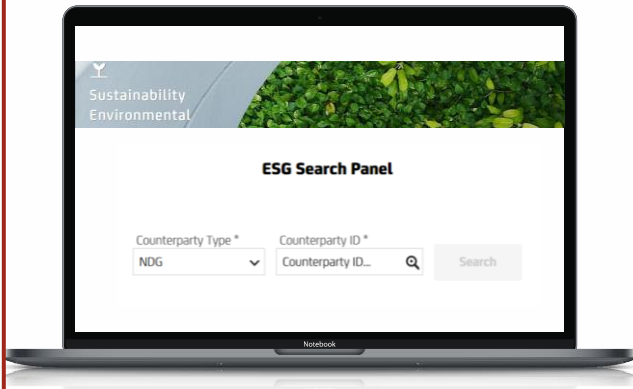
Focus of next slides



Cockpit ensures Network awareness on portfolio climate risk and support client onboarding

Illustrative

The **ESG KPIs Cockpit** provides **Relationship Managers** with a **synoptic view of ESG KPIs related to their portfolios (by client)**, supporting the Network's **ESG educational journey** and in the implementation of **ESG strategies and guidelines within the credit processes**.



ESG Cockpit Key features

- 1 **Credit Risk and Business steering tool**
- 2 **Single interface collecting key ESG KPIs, that can be consulted at any time**
- 3 **KPIs available at different granularity levels** (i.e. Counterparty, transaction, collateral)
- 4 **Flexible tool** that can be integrated in other IT systems (e.g. UW) over time as needs evolve

3 Different views

Counterparty KPIs

- **ESG Score** and its components **E-S-G**
- **Physical** and **Transition risk scores**
- **Reputational Risk scores**
- **GHG emissions** data
- **Top 20 polluters information**

Survey Loan KPIs

- **Loans EU Taxonomy Eligible** and **Aligned**
- **EU Taxonomy Alignment Score**
- **Loans ICMA Eligible** (for Bond issuing)

Collateral KPIs

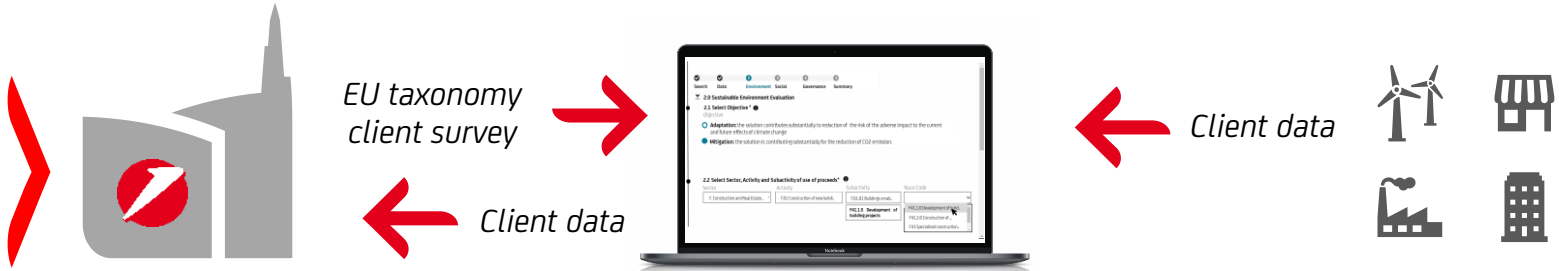
- Collateral **location** with **interactive map**
- **Transition Risk KPIs** (e.g. EPC, PED) for collaterals
- **Physical Risk information** (e.g. Hazard events and risk intensity)

EU taxonomy survey integrates data collection at transaction level, helping Network to identify “green loans”

Illustrative

UniCredit, in order to identify and monitor “green loans” and complementing **KPIs collected at counterparty level**, designed a specific survey, that will be submitted at loan level (based on EU taxonomy standards)





The survey will be **editable**, results will be loaded **automatically** without manual intervention by the RM



EU Taxonomy Survey Main Steps

- 1 Taxonomy Eligibility
- 2 Substantial Contribution Criteria (SCC)
- 3 Do Not Significantly Harm (DNSH)
- 4 Minimum Safeguards (MS)

Simplification drivers

-  Survey Digitalization
-  Automatic prefilling of some KPIs through internal data availability
-  Limited documentation required
-  Routing system and closed-ended questions

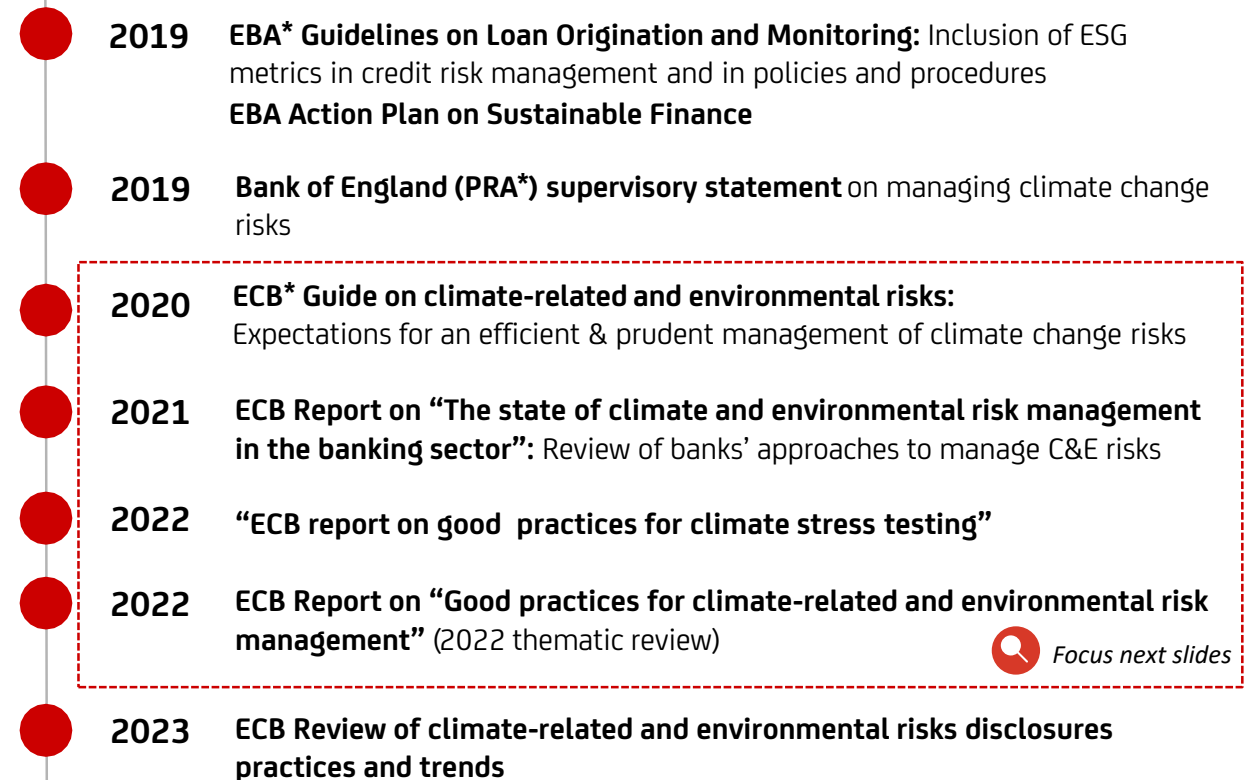
ANNEX

Overview on ECB Guide

A comprehensive approach | Roadmap

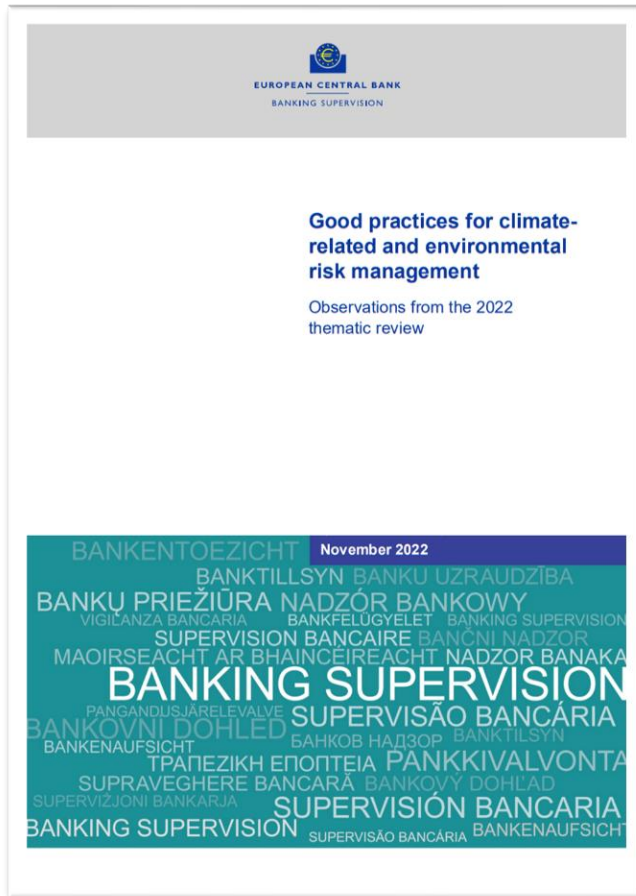
European Regulators are **increasingly focusing** on **C&E*** risk in the last few years pushing on its integration in the Business model and governance framework of financial players. A summary of the main reports that international institutions have published about C&E risks is presented in the following timeline

- **Regulators are continuously** publishing rules and guidelines **focusing the attention on disclosure and transparency** and on the integration of **climate risks** within Banks' systems, processes and valuation models:
 - Improve quality and consistency of the information that accompanies credit rating actions
 - Disclosure Regulation and EU Taxonomy Regulation
 - Green Asset Ratio
 - ...

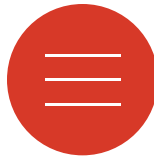


Challenging the current set up and assessing potential impacts stemming from supervisory expectations as starting point to strategically review the overall risk management framework

A comprehensive approach | ECB Good Practices



On November 2022, ECB published a **thematic review** on the *good practices* for climate-related and environmental risk management



These practices are **part of a broader framework** of best practices in the marketplace that can be drawn upon to better perform when dealing with ESG



Precisely because of their "guiding" nature, good practices are **meant to exemplify a broader range of virtuous behaviors** that can be adopted in order to be aligned with ECB expectations, and therefore it is **not mandatory to follow** them



Climate & Environmental Transition Risk

What is transition risk?

- Risk that a bank incurs **financial losses** that can result, directly or indirectly, **from the process of adjustment towards a lower-carbon** and more environmentally sustainable economy
- This could be triggered, for example, by a relatively **abrupt adoption of climate and environmental policies**, technological progress or **changes in market sentiment and preferences**



How are bank impacted?



- **Credit risk:** substantial adaptation costs and lower corporate profitability, which may lead to a higher PD as well as lower collateral values

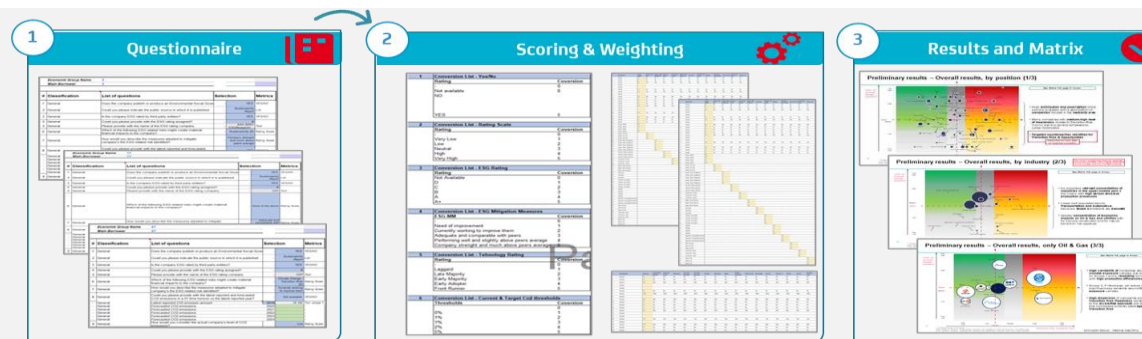


- **Market risk:** abrupt repricing of securities and derivatives, for example for products associated with industries affected by asset stranding.



- **Operational risk:** Financing of environmentally controversial activities

Climate & Environmental Transition risk questionnaire



- For top clients, assessment performed through the **dedicated internally developed questionnaire** resulting into **C&E Scoring**
- Assessment at **Counterparty Group level**
- **C&E Scoring** attached to the credit application and triggering the differentiation in the final strategy based on the C&E scoring

Climate & Environmental Physical Risk Assessment

What is Physical risk?

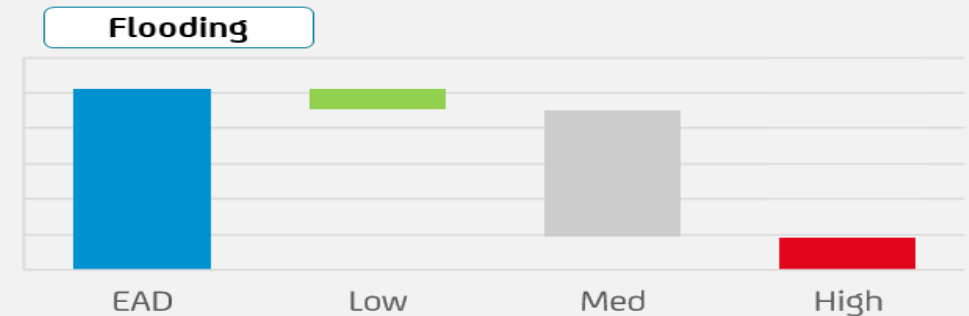
- **Financial impact of a changing climate**, including more frequent **extreme weather events** and gradual changes in climate
- Physical risk is “**acute**” when it arises from **extreme events**, such as **droughts, floods** and **storms**
- **Physical risk is “chronic”** when it arises from progressive shifts, such as **increasing temperatures, sea-level rises**, water stress, biodiversity loss, land use change and resource scarcity



How are bank impacted?

- **Credit risk:** Impact on PD and LGD within **sectors or geographies** vulnerable to physical risk (e.g. **lower collateral valuations** in real estate portfolios)
- **Market risk:** **shifts in market expectations**, sudden repricing, higher volatility and losses in asset values on some markets
- **Operational risk:** physical damage to branches and data centers as a result of extreme weather events

Assessment of collaterals



Assessment of Physical Risk exposure of the **Bank's collaterals** (for residential and commercial mortgage portfolio) and **counterparties' assets** (e.g. production sites)



ESG Cockpit

Counterparty Section

Illustrative view

COUNTERPARTY - LEVEL INFORMATION

ESG - Score **LOW**

ENVIRONMENTAL

E - Score **LOW**

Transition risk score

Counterparty **LOW**

Group **MEDIUM**

Physical risk score **VERY LOW**

SOCIAL

S - Score **LOW**

GOVERNANCE

G - Score **HIGH**

REPUTATIONAL RISK POLICY

FLAG COAL POLICY	Final Class (RepRisk Evaluation)	A	Classification done in exception	No	Date of RepRisk review	10/12/2022
FLAG OIL&GAS POLICY	Final Class (RepRisk Evaluation)	A	Classification done in exception	No	Date of RepRisk review	10/12/2022

GHG EMISSION LEVEL

Scope 1	Scope 2	Scope 3	Total GHG	GHG Intensity
93 tCO ₂ e	0 tCO ₂ e	17.109 tCO ₂ e	17.202 tCO ₂ e	255.583 tCO ₂ /revenues

FLAG PAB EXCLUSION	N/A	FLAG TOP 20 CARBON INTENSIVE FIRM	WORLD LEVEL	No
---------------------------	------------	--	-------------	-----------

SURVEY LOAN - LEVEL INFORMATION

TAXONOMY SURVEY SUBMITTED - NUMBER OF LOANS

4

TAXONOMY SURVEY ELIGIBLE - NUMBER OF LOANS

2

TAXONOMY SURVEY ALIGNED - NUMBER OF LOANS

1

OUTSTANDING AMOUNT

907.957,55 €

OUTSTANDING AMOUNT

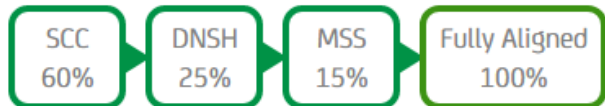
311.144,15 €

OUTSTANDING AMOUNT

161.144,15 €

EU TAXONOMY SURVEY - PERCENTAGE OF COMPLETENESS

Survey Details - ID: 14627



TAXONOMY ALIGNMENT:

Fully Aligned



Survey Details - ID: 14915



TAXONOMY ALIGNMENT:

Not Aligned

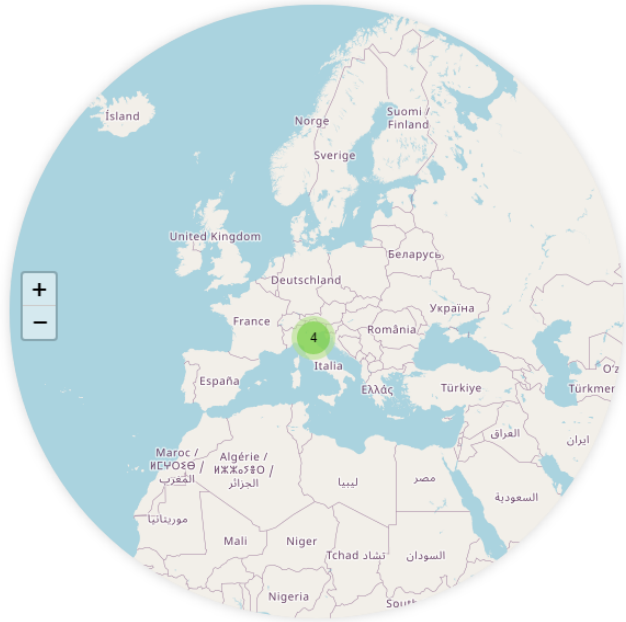


ESG Cockpit

Collateral section

Illustrative view

COLLATERAL - LEVEL INFORMATION



Total Locations: 4

Location	Zip Code	Total Asset
VENEZIA	30125	Asset: 1
LOREGGIA	35010	Asset: 1
CESENATICO	47042	Asset: 1
CANOSSA	42026	Asset: 1

TRANSITION RISK - ENERGY EFFICIENCY ↗

Number of Assets: 4

ASSET	TOTAL CO ₂ EMISSIONS	FAIR VALUE	PED - PRIMARY ENERGY DEMAND	EPC - ENERGY PERFORMANCE CERTIFICATE
0000000000073519	24		109	D
0000000000175878	21		95	C
0000000000129452	24		109	D
0000000000129453	36		166	E

PHYSICAL RISK ↗

Number of Physical Risk: 20

ASSET	HAZARD TYPE	HAZARD EVENT	RISK INTENSITY
0000000000175878	Acute	Tornado	● High
0000000000175878	Chronic	Water Stress	● Very High
0000000000175878	Acute	Heavy precipitation (rain, hail, snow/ice)	● High
0000000000175878	Chronic	Heat Stress	● High
0000000000175878	Chronic	Changing precipitation patterns and types	● High
0000000000129453	Chronic	Changing precipitation patterns and types	● High
0000000000129453	Chronic	Water Stress	● Very High

