

"Sviluppo sostenibile, finanza e rischio climatico" _{Roma, 3 luglio 2019}

INTESA M SANPAOLO

Integrazione dei rischi ESG e climate change nel sistema di valutazione e gestione dei rischi

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AGENDA



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1 ESG in Banks: recent developments

- 2 TCFD Banking Group Phase I & II
- 3 Integration of climate change risk in the Risk Management framework: IntesaSanpaolo experience



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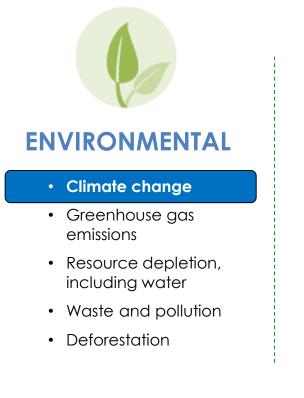
- 4 Monitoring to sensitive sectors
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- 6 ESG and Climate change in Credit Risk- Next steps





What does ESG mean? Towards sustainable finance

- ESG means using Environmental, Social and Governance factors to evaluate companies and countries on how far advanced they are with sustainability
- In recent decades, both **supply and demand for sustainable products are rapidly increasing** on the part of institutional investors and private savers. Investing according to ESG criteria means making choices that are consistent not only with your own return and risk objectives, but also with your own values and moral convictions





SOCIAL

- Working conditions, including slavery and child labour
- Local communities, including indigenous communities
- Conflict and humanitarian crises
- Health and safety
- Employee relations and diversity



GOVERNANCE

- Executive pay
- Bribery and corruption
- Board diversity and structure
- Fair tax strategy



Global warming together with the transition to a low-carbon economy, generate climate-related risks and opportunities

IT IS CLEAR THAT WE NEED A TRANSFORMED AND SUSTAINABLE INDUSTRY AND FINANCIAL PRACTICE... TO ACHIEVE THIS, WE NEED TO JOIN FORCES WITH REGULATORS, SUPERVISORS AND STAKEHOLDERS TO DEVELOP COMMON STANDARDS AS SOON AS POSSIBLE

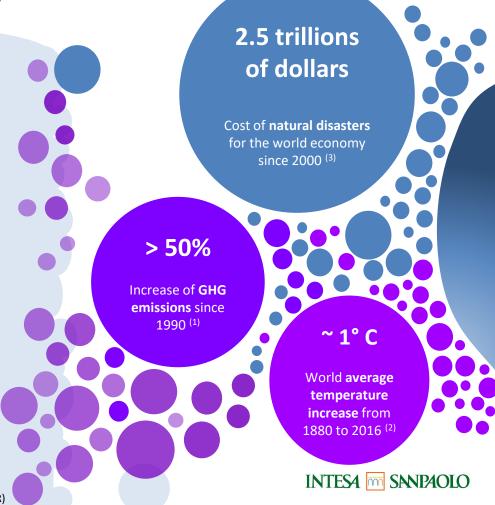
- WIM MIJS - CEO OF EUROPEAN BANKING FEDERATION

Transition to a **low carbon economy** could have significant implications for global trade flows...

... with consequences for the banks balance sheet in terms of new risks, but also opportunities

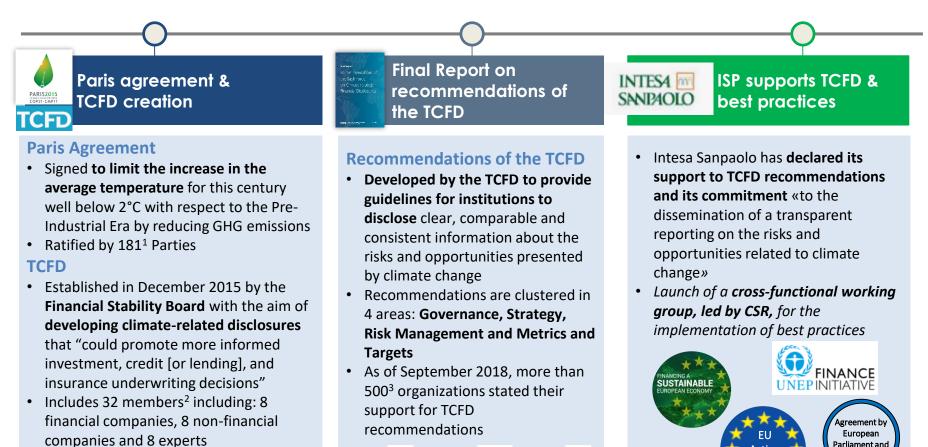
Following the recommendations of Task Climate-related Force on Financial **Disclosures** (TCFD), financial institutions should integrate these risks into the overall risk management framework. enrichina traditional approaches that focus on **Reputational Risk**, and sharing responsibility with the Corporate Social Responsibility (CSR)

⁽¹⁾ 2018 - Intergovernmental Panel on Climate Change (IPCC), UN
 ⁽²⁾ 2016 - NASA/Goddard Space Flight Center Scientific Visualization Studio
 ⁽³⁾ 2013 - Global Assessment Report (GAR), UN Office for Disaster Risk Reduction (UNISDR)



In this context, Intesa Sanpaolo has decided to support TCFD and undertake the journey towards a sustainable finance

Regulatory framework is changing... and banking system is adapting



BLACKROCK CIT

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BBVA

BNP PARIBAS

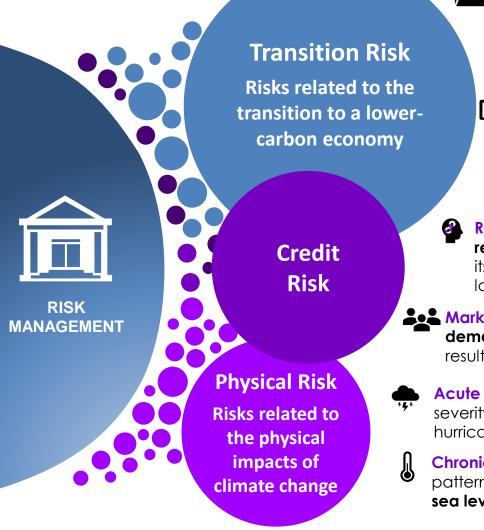
Bloomberg ICBC Dividever

1.180 Countries and EU; 2. More information available at: <u>https://www.fsb-tcfd.org/about/</u>
 3. More information available at: <u>https://www.fsb-tcfd.org/tcfd-supporters/</u>

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Parliament and Council 4

Climate Change: which risks? Transition and Physical – TCFD Taxonomy



Policy and Legal Risk: risks stemming from continuously evolving policy actions, attempting to either constrain actions that contribute to adverse effects or to promote adaptation to climate change and from litigation risks (e.g. claims and court hearings)

- Technology Risk: risk related to technological improvements or innovations that support the transition to a lower-carbon economy and that can have a significant impact on firms to the extent that old systems are disrupted by new technologies
- **Reputation Risk:** risk of an organization's **image and reputation** being affected by its customers' perception of its contribution to (or detraction from) the transition to a lower carbon economy
- Market Risk: risk describing the potential shifts in supply and demand for certain commodities, products and services as a result of climate changes
 - Acute Risk: risks that are event-driven, including increased severity of extreme weather events, such as cyclones, hurricanes or floods
 - Chronic Risk: risks that refer to longer-term shifts in climate patterns (e.g. sustained higher temperatures) that may cause sea level rise or heat waves

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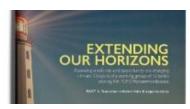




TCFD Banking Group – Phase I



UNEP FI⁽¹⁾, along with 16 of the world's leading banks, tried to implement **TCFD recommendations**. **Phase I** of the pilot project provided interesting results in terms of scenarios, models and metrics to enable a current and prospective assessment of risks and opportunities related to **Climate Change**



Extending our Horizons The first report of April 2018 describes a scenario estimation method linked to Transition Risk

Source: UNEP FI/Oliver Wyman



Navigating a New Climate The second report of July 2018 deals with the evaluation methods of Physical Risk

Source: UNEP FI/Acclimatise



Climate Change: Managing a New Financial Risk The final report of March 2019 includes a survey of 45 global financial players

Source: Oliver Wyman

>

Scenarios

- Transition Risk: description of a coherent macroeconomic environment through time, sectors and geographical areas
- Physical Risk: description of extreme weather events and incremental climate shifts

Methodologies

- Impacts on Portfolio
- Identify the most climate sensitive sectors
- > Calibration sector/borrower level:
 - specifies the relationship between economic scenarios and credit risk
 - proxy estimate of the scenario impact on individual borrowers

Impacts on stressed PDs compared to baseline projections, identifying consequences on sectors and operating margins (revenues and COGS)



TCFD Banking Group – Phase II



UNEP FI, expanding the number of banks and starting from methodologies, evidences and recommendations emerged during Phase I, is promoting an improvement in the implementation of the **TCFD recommendations**

Phase II of the project aims to broaden and improve the results of the previous phase

WHAT'S NEXT?

ASSET DATA & SCENARIOS

METHODOLOGY

- Partnership / coordination with external companies that provide "climate scenarios" (e.g. IPCC, CICERO, IEA, IIEASA, PIK) and/or able to examine aggregate asset-data (e.g. Stanford, Oxford, CDP, WRI, 2di)
- Deepening on the typology of methodological framework
- Greater awareness of analysis tools and governance processes

LEGAL

Disclosure of the impact estimations based on high-level dataset aggregations (e.g. geographical and/or sectorial analysis)

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ISP positioning on climate change risk and what the bank is doing: different areas of intervention

- Intesa Sanpaolo is aware of having a significant impact on the social and environmental context, thus choosing to act not only on the basis of profit, but also with the aim of creating long-term value for the Bank, its employees, customers, community and the environment
- The management of ESG/climate change risks has been developed over the following streams:



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Management of Intesa Sanpaolo direct exposure to environmental and climate change risks



What we have done

Intesa Sanpaolo considers environment and the more specific topic of climate change as a fundamental part of a wider management **model of social and environmental strategy**, therefore it has:



- issued a specific policy (Group's "Rules for the environmental and energy policy") in order to reduce its ecological footprint and that of its customers and suppliers
 adhered to important international initiatives such as UNEP FI, CDP, UNGC aimed at promoting dialogue among firms, international organisations and society in general and to pursue respect for the environment
- applied technological innovations for the modernisation of plants and introduced more energy-efficient systems

What we are doing

- 1. We are working to fulfill the goal set by **Climate Change Action Plan** of a 37% reduction in CO_2 emissions over the 2012-2022 period (2018-2021 Intesa Sanpaolo Business Plan)
- 2. Implementing TCFD Task Force on Climate-related Financial Disclosures recommendations



Assessment of business related environmental and climate change risks and involvement of Risk Management area



What we have done

The Evaluation of ESG risks/climate change risks at present is performed mainly through:

- the reputational risk management framework, especially with reference to the reputational risk clearing process aimed at assessing potential reputational risks related to the most significant business transactions, main capital budget projects and Group's supplier/partner selection
- the adoption of Equator Principles' guidelines for the assessment of social and environmental risks for Project finance
- the inclusion of "Social" and "Environmental" information in the "qualitative and quantitative component" of the Corporate rating model (focus in the following slides)

What we are doing

- 1. Participation to the TCFD Banking Group Phase II (coordinated by UNEP);
- 2. Further development of ESG risks evaluation within the **risk clearing process** and the **credit risk appetite/credit risk models**
- 3. Analisys and **monitoring** of credit exposures towards relevant sectors

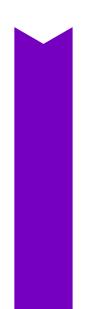


Evaluation of environmental and Climate change risks linked business opportunities



Many Institutional investors regard sustainable finance as a way to manage long-term risk. Banks should tap this demand offering specific products

What we have done



- Investment products characterized by sustainability criteria and attention to environmental, social and good corporate governance (ESG) factors (e.g. Eurizon Sustainable Global Equity fund and the Eurizon ESG Target)
- Issuing of green bonds (e.g. Intesa Sanpaolo Green Bond, issued in 2017 for 500 million euro, fully allocated to 77 projects, which made it possible to avoid the generation of over 213,000 tonnes of CO2 emissions annually)
- Green loans: loans and mortgages for environmental purposes (retail customers), projects for renewable energy and energy efficiency works (for professionals and businesses). In 2018, the Group disbursed approximately 1,922 million euro to the green economy (3.2% of all Group loans)
- Allocation of a specific 5 billion euro credit plafond dedicated to the Circular Economy

What we are doing

- 1. Participation to **EBF working group** on sustainable finance incentives
- 2. Further **development of sustainable products** in order to promote the transition towards a more sustainable economy



Focus: TCFD has identified 4 areas impacted by climate change, encompassing all key aspects of bank activities

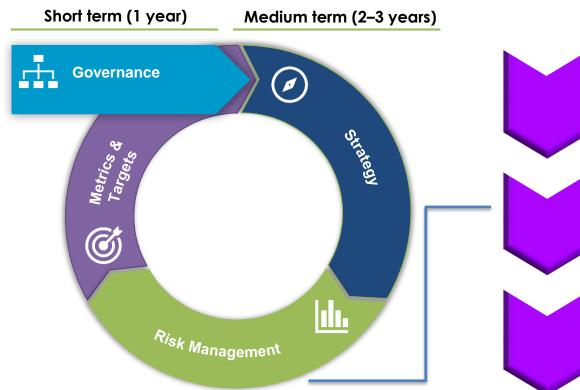
Framework of recommended Climate-Related financial disclosure

Examples

Governance	Strategy 🧭	Risk Management	Metrics and targets 🧭
Organization's governance around climate related risks and opportunities Board and management role	 Risks and opportunities: over the short, medium, and long term on businesses, strategy, and financial planning 	Organization processes for: • identifying and assessing climate- related risks; • integrating climate risk management into overall Risk Management Framework	Metrics and targets used to assess and manage relevant climate- related risks and opportunities
BoD Reporting	Stress test on climate-	Credit risk models	
Roles and Responsibilities	Specific strategies	Credit risk processes 💘	List of metrics and targets
Risk Appetite Framework	Risk identification	Operative controls	

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ISP is improving governance and addressing strategy & risk management in the medium term ...



Once the Governance is in place, the definition of the Strategy will drive the underlying **Risk Management** processes and Metrics & Targets definition through a **multi-step process**

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RISK FRAMEWORK

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Describe the role of topmanagementindefiningclimateriskexposurepolicies

Identify the risk and opportunities to which the bank is exposed

Manage risk within the already in place and fully consolidated modeling processes

Monitor the risk with the creation of dedicated metrics



... first steps to enhance climate change and to reach compliance with TCFD requirements

Key enhancements to be implemented to fully comply with TCFD and to guarantee risk control on climate change issues therefore include:

1	Enhance climate change taxonomy	Quick wins
2	Improve governance (RAF, BoD reporting, responsibilities assignments)	
3	Design and implement a risk management framework on climate change	
4	Implement scenario analysis	Medium term activities

Implications for RAF

Risk Appetite Framework, within the climate change workstream, should support the bank for developing the most urgent activities and to define a clear project set up

- In order to drive the **transition process** it is necessary to:
- 1. Define a clear **project governance** defining roles and responsibilities for every department
- 2. Design a **transition roadmap** identifying the target state and key activities to be implemented over the next 3-4 years



Degree of sophistication of RAF statement and extensions of embedded climate considerations in internal processes

1. General statement			Group commits to create a climate culture and to invest in activities aimed at minimizing potential climate change impact in order to protect business, structures, image, customers and employees
		Level	In order to guarantee sound risk management practices on climate related issues and opportunities, the Group should carry on an assessment to identify the impact of climate change across its key areas and processes
		of co	In case of relevant impact, the bank can evaluate to adjust processes by including climate change considerations
2. Identification of impacted areas		ommitment & cor	 Draft list of key processes to be scrutinized include: Rating attribution Credit strategies Credit Appetite Framework Operazioni di Maggior Rilievo (OMR) Credit granting
3. Scenario analysis		omplexity	Moreover the Group is going to develop scenario analysis with the aim of quantifying the value at risk in a set of potential scenarios
イ 4. Limit on scenario analysis impact		Ϋγ	As a last step, Intesa Sanpaolo will identify and set a limit in its Risk Appetite Framework, based on the desired level of the stress impact obtained in the scenario analysis

FOCUS IN NEXT SLIDES

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Climate Change - monitoring to sensitive sectors

ISP is committed to integrate climate change risk considerations in its risk management framework

Risk mgmt. Pillar	Actions
	Included climate change risk into the RAF (see below)
Governance 🕂	Formalize roles and responsibilities on climate change risk monitoring and management
Quantification and monitoring	 Develop a dashboard to monitor exposure to sectors mostly subject to climate change Enrich/integrate available information on Companies/segmentation to better identify sectors sensitive to climate change
	Adopted Equator Principles' guidelines for the assessment of social and environmental risks for Project finance
Processes	 Identification of processes/rules to be updated in line with the objectives of climate change monitoring and management
Methodologies	 Analyze/develop methodologies aimed at identifying the aspects of credit risk induced by climate change, in order to carry out a comprehensive evaluation of creditworthiness
୬×	Deep-dive on scenario analysis methodologies in order to evaluate feasibility

Statement

High Level Statement

«The Group is committed to enhance climate risk awareness and to guarantee sound risk management practices on climate related issues in order to reduce the potential impact of climate change implications and to protect its reputation, its business and its investors»

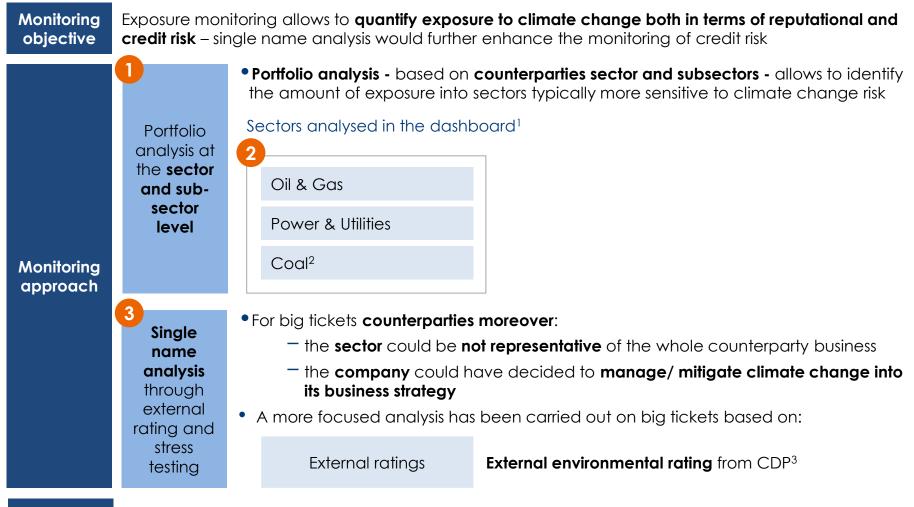
Second Level Statement

ISP Group is committed to integrate climate change risk considerations in its risk management framework - with particular reference to credit risk and reputational risk - and to monitor the exposure of the part of credit portfolio more sensitive to climate change risk



Climate Change - monitoring to sensitive sectors

Objective & Monitoring approach



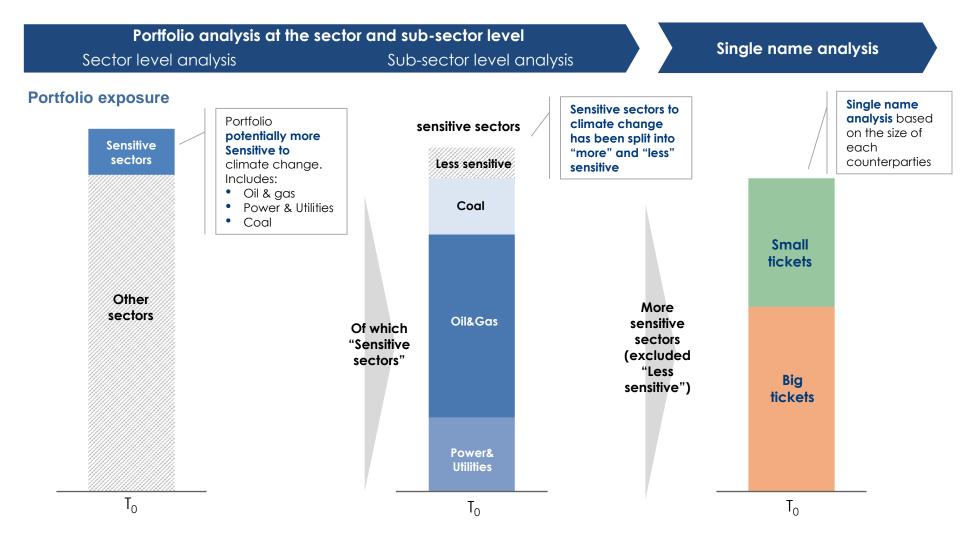
Reporting Monitoring has been reported to Board of Directors through the Tableau de Bord of Group risks, on a quarterly basis

- 1. Here presented a sample of the sectors exposed to climate change risk
- 2. Coal mining: exploration and extraction of coal from the ground
- 3. Carbon Disclosure Project

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Climate Change - monitoring to sensitive sectors

Monitoring allows to quantify exposure to climate change both in terms of reputational and credit risk



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ESG Profile (as-is situation)

- At the beginning of 2009, with the introduction of FIRB Corporate rating model, "Social" and "Environmental" information are take into account in the "qualitative component" of the model (complementary component to the economic-financial section of the rating model in order to improve the companies assessment), through a question included in a qualitative questionnaire filled by the Analyst. Other questions related to "Social" and "Governance" items are included in the qualitative questionnaire. Next releases of the model, occurred in the 2010 (transition to AIRB approach) and 2014, confirm the same treatment of this information in the rating model.
- With the last Model Change of the Corporate model, occurred in the April 2017, in addition to this information, other social and environmental information are taken into account in the "quantitative component" of the model. In detail, information about the presence/not presence of certification (such as quality, environmental, occupational health, information security, ...), trademarks and patents is collected.
 - The analysis of this information (coming from external provider as Accredia) has been made on the time series used for the new model estimation where, for each counterparty, the number of certifications obtained at each observation point is collected.





ESG Profile (as-is situation)

"E" Profile	"S" Profile	"G" Profile
Environmental information	Social information	Governance information
 Qualitative questions about: exposure of the company to environmental risks (harmful substances, pollution, job safety, respect for human rights, etc.) presence of insurance coverage for operating risks (business interruption) and/or credit risks Information about presence of Environmental certification 	 Qualitative questions about: exposure of the company to environmental risks (harmful substances, pollution, job safety, respect for human rights, etc.) presence of risks linked to pending trials on fiscal disagreement and/or social security recourse to debt restructuring recourse to the C.I.G. or to other forms of wage to protect employment 	 Qualitative questions about: information level shared by the management relating the results achieved by the company evidence of problematic/internal conflict (management/ownership)

Focus in the next slide





ESG Profile (as-is situation)

Focus on Environmental Certification:

- Certification ISO 14000: Specific certification tool about environmental management that considers all aspects of the company activity (energy efficiency, efficiency in the use of materials and water, correct management of waste, emissions etc.)
- EMAS (Eco-Management and Audit Scheme environmental efficiency): European Commission regulation (substantially similar to ISO 14000) and considered by some analysts to be more rigorous than the previous one
- FSC (Forest Stewarship Council): certification concerning the purchase of forest products of which we know the origin and good management on an environmental level. It is used by companies in the wood / paper / furniture industry.
- **Organic certification:** specific certifications on cultivation methods (in the case of farms) or the origin of the raw material (in the case of food companies).
- Overall, these four type of information cover most of the aspects of the Supply Chain Environment of the graph.
- In particular, ISO and EMAS have an impact mainly on water management, climate change, pollution and resource management, while FSC and Organic certification have also impact on biodiversity area.



ESG Profile (as-is situation)

Focus on "Environmental" items - Analysis on Corporate portfolio

Below, an analysis of the answers to the question about "Social and Environmental Risk" and of the different types of Environmental certifications collected on the overall time series, both in term of distribution and riskiness (default rates).

Question - Social/Environmental Risks	Distribution %	Default Rate
a - No	59%	96%
b) Yes, but the company operates in compliance with the regulations by adopting forms of protection	39%	104%
c) Yes, potential environmental risk	2%	132%
Total	100%	100%

Co al arra	Social and	bio		
Sectors	a	b	с	b+c
Oil & gas	28%	70%	3%	72%
Power & utilities	27%	70%	3%	73%

The answers "b" and "c" (Yes risks) show an higher riskiness than the average of the portfolio.

Analyzing the answers to the question in combination with the "sensitive sectors" to the environmental risks, it's note that the answers "b" and "c" (yes risks) are the most used in these sectors.

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ESG Profile (as-is situation)

> Below, the analysis of Environmental certification in term of distribution and riskiness (default rates).

Environmental Certification	Distribution %	Default Rate
No	97%	101%
Yes	3%	62%
Total	100%	100%

EMAS	Distribution %	Default Rate
No	99.7%	100%
Yes	0.3%	71%
Total	100%	100%

FSC	Distribution %	Default Rate
No	99.2%	100%
Yes	0.8%	64%
Total	100%	100%

Organic Certification	Distribution %	Default Rate
No	98%	101%
Yes	2%	63%
Total	100%	100%

The analysis shows that:

- the presence of the each type of certification is associated to a lower riskiness
- the presence of environmental certifications increases in the more "sensitive sectors" (9%), confirming the same results in terms of riskiness.



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ESG and Climate Change - Next steps

ISP has the aim to create a climate-conscious culture to minimize the potential impact of climate change

2H 2019

- Inclusion of climate change considerations in the Risk Appetite Framework statement
- Monitoring of most sensitive sectors to climate change in terms of credit risk
- Identification of the relevant ESG drivers in line with industry best practices.
- Assessment of ESG drivers to evaluate the related correlation with credit risk

New ESG risk drivers will have to take into account, for example:

- Environmental: greenhouse gas emissions, waste and pollution, deforestation
- Social: working conditions, conflict and humanitarian crises, health and safety
- Governance: executive pay, board diversity and structure, fair tax strategy

1H 2020

2H 2020

In order to guarantee sound risk management practices on climate related issues and opportunities and on the basis of the analysis results:

- Possible introduction of a dedicated limit within Credit Risk Appetite (Risk Appetite Framework), in order to control the riskier operations or introduction of a ESG component as a risk/resilience driver within Credit Risk Appetite
- Possible evaluation on Green Bond
- Coverage of physical risk among insurance agreement
- Bond Collection of documentation and data (both "Environmental" and "Social") on the portfolio to evaluate a scorecard model based on ESG risk drivers, from the statistical point of view

 On the basis of statistical evidence, possible introduction of a scorecard model based on ESG risk drivers or qualitative integration in the rating model within the Corporate model change expected for the end of 2020

 Possible introduction of a sustainable finance supporting

factor through the pricing model, according to the evolution of Regulator decision.



ANNEX

ESG assessment – Latest news by EBA

ESG assessment - Latest news by EBA

EBA: Draft Guidelines on loan origination and monitoring – 19 June 2019

- "Institutions should include environmental, social and governance (ESG) factors as well as risks and opportunities related to ESG in their risk management policies, credit risk policies and procedures. Institutions should adopt a holistic approach, and incorporate ESG considerations in their credit risk policies and procedures";
- "The action plan on sustainable finance adopted by the European Commission mandates the EBA to assess the incorporation of ESG risks into the supervisory process (CRD Art. 98 amendment) and to assess the prudential treatment of assets associated with environmental or social objectives (CRR Article 50da amendment)";
- "Financial institutions are expected to benefit from the adoption of ESG factors into their loan origination practices as including and monitoring environmental factors will help them to streamline the processes develop and to ensure that environmental and social due diligence are incorporated in credit decisions";
- "This will help to take those risks adequately into account and thereby avoid or mitigate financial losses, reputational risk, and social and environmental harm";
- "Further, the disclosure by financial institutions and borrowers of green performance information, including total green lending flows, and the degree of adoption and implementation of core practices, is expected to support system-level monitoring and encourage a level playing field";
- "As these Guidelines reflect the forthcoming EU policy actions to stimulate sustainable finance, compliance with these Guidelines is expected to support institutions' prudent treatment of ESG related loans throughout the life cycle of the loan by implementing adequate standards at the initial stage of the loan origination".

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