

Individual Scoring-Modifier

The ESG-Risk Score at sector-level is the starting point for the detailed risk assessment at counterparty or loan-level. Therefore, Individual Scoring-Modifiers are defined. These pragmatically assess to which extent a specific company shares the same risk as its sector and in which aspects a mitigation of this risk score is adequate.

ESG-Risk Score at Loan-Level

The result is the ESG-Risk Score at loan-level, which can also be incorporated into the lending process e.g., via the definition of thresholds. Based on this, further measures at loan-level such as pricing, collateral or other requirements can be taken to improve ESG-risk management.

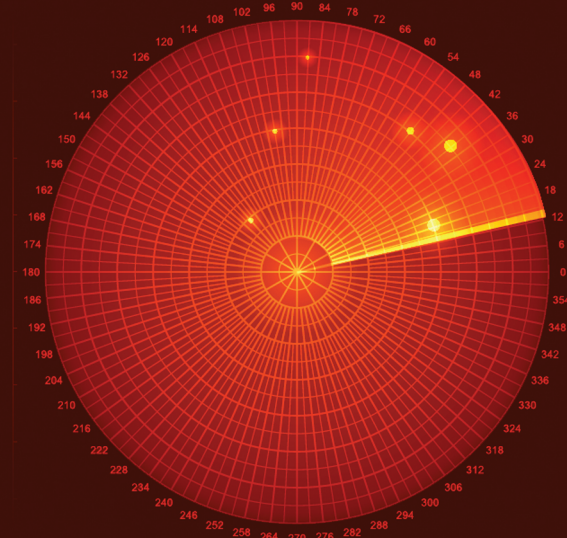
Risk Radar for fundamental ESG-risk assessment

The ESG-Risk Score at sector-level provided by the risk radar helps to analyze the vulnerability of the loan portfolio regarding ESG-risks. It also enables financial institutions to take informed decisions, for instance when setting limits at sector-level. As a more detailed modification, the ESG-Risk Score at loan-level supports decisions on limits or conditions on customer levels.

Covering both levels, the risk radar can support ESG-risk management for lending activities in a thorough and pragmatic way.

Risk Sector Score (RS)	≥ 8				Critical	
	7	Energy	6.06%	10.42%	High Risk	
		Agriculture	4.11%			
	6	Construction	14.63%	27.63%		
		Food, Beverage and Tobacco	8.14%			
	5	Real Estate	11.11%	18.96%		Vulnerable
		Financial Institutions	3.79%			
4	Hotels and Restaurants	10.09%	12.87%			
	Manufacture of basic Metals	2.08%				
≤ 3				Low ESG risks		

Heat Map Example by a National Bank
Figures: Share of each sector in the economy



Think globally, act locally, cooperate internationally

Sparkassen (Savings banks) were first introduced in Germany some 200 years ago as microfinance institutions for low-income earners. Since then, they have evolved into one of the largest financial groups in the world, successfully combining a high level of professionalism with a strong social mandate.

The mission of the Deutsche Sparkassenstiftung für internationale Kooperation e.V. (German Sparkassenstiftung for International Cooperation) is to disseminate this experience to developing countries and emerging economies.



For more information, please contact us:

Email: knowledge.management@dsik.org

Phone: +49 228 9703-0

Fax: +49 228 9703-6613

Website: www.sparkassenstiftung.de

Simrockstrasse 4 | 53113 Bonn | Germany

In cooperation with **Kempen University**



Risk Radar

A Climate Risk Management Tool
for Financial Institutions

How to manage Climate Risks

This question is at the very core of the Green Finance discussion and is of great concern to banks and many other financial institutions - especially since many of their clients are already heavily affected by climate risks.

Climate risks are an important part of Environmental, Social and Governance (ESG) risks. Their management is a high priority on the agenda of Central Banks worldwide to secure continuing financial stability.

Climate-related risks impact a lot of different aspects. For instance, if flooding occurs and farmers lose their crops, they may not be able to repay their loans. This means climate risks generate credit risks.

Moreover, climate risks are comparably new, so data is not easy to find. The traditional method used by financial institutions to interpolate data from the past into the future cannot be applied.

The Risk Radar supports Financial Institutions and Central Banks to manage Climate Risks

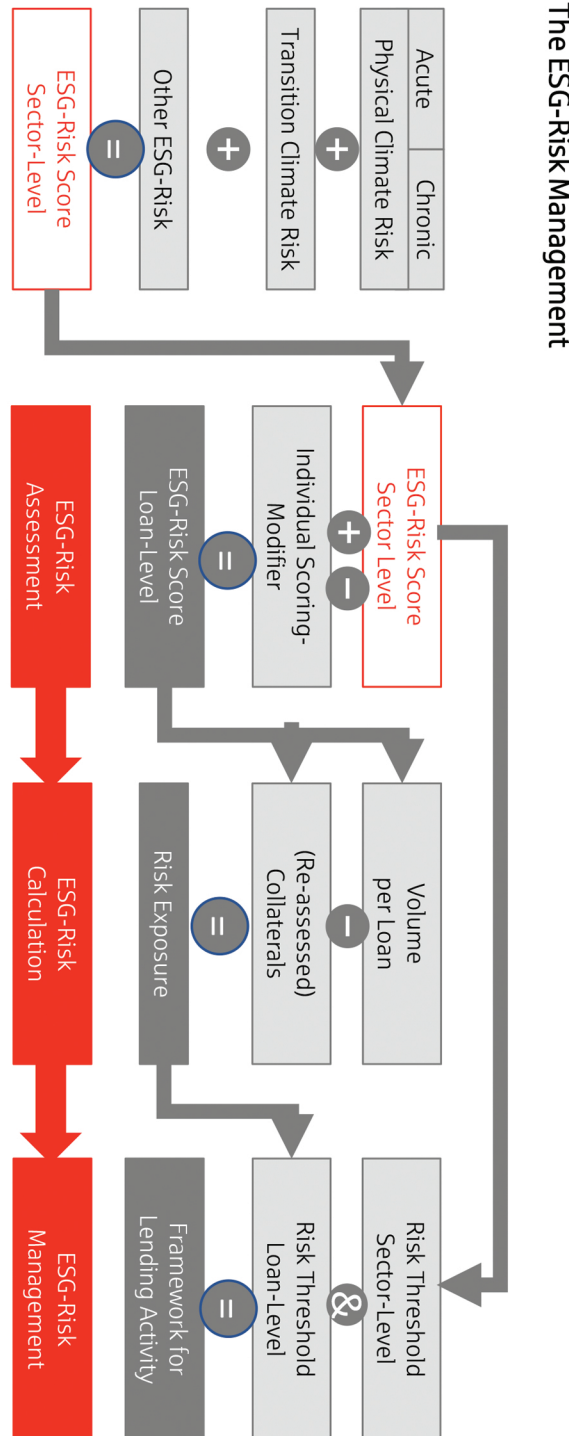
What is the Risk Radar?

The Risk Radar is both a systematic and pragmatic approach which supports ESG-risk management at client and portfolio levels. It is based on the Exposure Method recommended by the European Banking Authority as the most practical and straightforward way to manage climate risks.

The tool builds on a scoring methodology using the top-down approach: Potential climate risks are first assessed at the sector or industry-level because in most cases, the necessary information is not yet available at the loan-level.

On this basis, it is possible to define and use Scoring-Modifiers to modify the assessment, considering the individual situation at the loan-level.

The tool can be adapted to the individual context and needs of each financial institution. The data behind the calculation is fully disclosed so that users can understand how the scores were generated and can customize and update the data according to their needs.



Sector Assessment to manage ESG Risks

Physical Climate Risks

The assessment of the physical climate risks comprises both the acute event-driven risks such as cyclones, floods etc. and chronic risks referring to longer-term shifts in climate patterns, such as sea level rise or chronic heat waves.

Transition Climate Risks

The assessment of transition risks estimates how rapidly and vehemently change will occur in each sector. This is considered as a combination of the sector's contribution to greenhouse gas emissions, the availability of alternative technologies, public awareness, and finally, the probability as well as the impact of regulatory developments.

Other ESG-Risks

Other ESG-risks are considered in terms of biodiversity loss, human rights issues as well as other environmental and social risks.

Assessment Process with the Risk Radar

The assessment of all components above results in the ESG-Risk Score at sector-level. Here, the interconnection between sectors, for instance within a supply chain, is taken into consideration as well.

The sector-level ESG-Risk Score can now be used for a heat-map analysis: The heat-map provides an initial overview of the extent to which a financial institution is affected by ESG-risks by analyzing the scoring-distribution within the loan portfolio. This works equally well for large banks and small microfinance institutions.

The Risk Radar is a proven tool that is used in more than 100 financial institutions in Germany and different projects of German Sparkassenstiftung worldwide