Central Bank of Armenia

ESG Risk Radar for Armenia

Assessment of climate-related and other ESG Risks

Central Bank of Armenia

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Table of Contents

Acknowledgements

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List of Abbreviations

BIS	Bank for International Settlement
CBA	Central Bank of Armenia
EBA	European Banking Authority
ESG	Environmental, Social and Governance Factors
IPCC	The Intergovernmental Panel on Climate Change
GDP	Gross Domestic Product
GF	Green Finance
GHG	Green House Gases
MFI	Microfinance Institution
NACE	Nomenclature statistique des activités économiques
NBG	National Bank of Georgia
SRI	Socially Responsible Investment
TI	Transitional Indicators

List of Figures and Tables

1. The Risk Radar Overview

In the context of the economic consequences of climate change, the management of Environmental, Social and Governance (ESG) risks has become a high priority on the agenda of Central Banks world-wide to secure continuing financial stability.

To overcome the systematic challenges of financial institutions to manage ESG and especially climate-related risks, German Sparkassenstiftung for international Cooperation (DSIK) is offering the tool Risk Radar in cooperation with Kempten University to enable financial institutions to analyze climate related and other ESG risks within their credit portfolios. This instrument uses a pragmatic yet comprehensive approach: Based on the persuasion that risk management is at its best when it is fully understood, it replaces speculative modelling with knowledge-based, transparent assessments. As a result, it offers a complete overview over ESG risks in the loan portfolio in the form of a heat-map analysis that is compatible with the recommendations of the Bank for International Settlement (BIS) and can be used as a basis for individual risk analysis and pricing in the loan giving process.

By applying a systematic top-down scoring methodology, risks become measurable and comparable, which in turn enables financial institutions and regulators to implement successful risk management strategies.

The assessment process consists of the following steps:

- Desk research resulting in ESG-risk assessment on sector-level based on public and non-public sources of information, international reports and conducting comprehensive literature research.
- Integration of local expertise and scientific institutions for the evaluation and optimization of the assessments in a multi-stakeholder process.
- Compilation of an extensive ESG-risk database on sector level as well as explanatory sector profiles (detailed reports for sectors with high ESG risk)
- “Heat Map”-assessment for individual financial institutions as well as aggregated on country-level.
- Full disclosure of the findings and method of calculation of the analysis for the evaluation, use and needs adjustment of the data for the financial institutions.

In its first version, this cost-effective, tried and tested method has been implemented with financial institutions and central banks on five continents.

This handbook is now introducing the second version of the Risk Radar. The methodology has been further optimized and streamlined: The use of sub-scorings for all major scoring-items allows an even more detailed and transparent assessment and reduces the subjectivity inherent in knowledge-based approaches to a minimum. To achieve this greater degree of

objectivity and precision, the methodology was completely reworked and fundamentally expanded.

2. ESG Risks

Climate change in combination with the transformation toward sustainability are giving rise to risks that have so far been neither recognized nor considered by conventional risk management. These risks, which are referred to as "ESG risks" or "sustainability risks", have the peculiarity that the name was chosen very unfortunately. This is because – contrary to what the name suggests – these ESG risks do not result from ESG or sustainability, but from a lack of both. This lack can be on the side of a company if sustainability aspects are not or not sufficiently taken into account and this leads to economic or legal disadvantages in the context of the transformation of society and the markets. Alternatively, the lack can also be on a global level and affect companies in a specific region, e.g., through the effects of climate change – regardless of whether they have made efforts to operate sustainably.

The supervisory authorities – with the European Banking Authority (EBA) taking the lead – define ESG factors as follows: " ESG factors are environmental, social or governance matters that may have a positive or negative impact on the financial performance or solvency of an entity, sovereign or individual" (EBA 2021, 31). The EBA then differentiates: " While ESG factors can have positive or negative impacts on institutions through their core business activities, this report focuses more on the latter, in line with the prudential approach to risk management. On the negative side, ESG factors may impact institutions' financial performance by materializing through financial risk categories, such as credit, market, operational, liquidity and funding risks, which are primarily affected by an institution's exposure to its counterparties and invested assets." (EBA 2021, 32)

And further:

"From a prudential perspective, ESG risks for institutions can thus be defined as the negative materialization of ESG factors through their counterparties or invested assets." (EBA 2021, 32)

In the context of the EBA report, ESG risks are therefore:

- the risks of any negative financial impact on the bank,
- arising from the current or anticipated impact of ESG factors on its counterparties
- or invested assets.

Thus, to be considered an ESG risk, an ESG issue must have significant economic impact that affects the bank/savings institution. It should be noted that the risks do not represent a new risk category in addition to, for example, market or credit risks. Instead, they are to be understood as cross risks that act as drivers of other risks and can cause or intensify them. Thus, credit defaults due to flooding are still credit risks, but their cause is ESG.

Due to its relevance, in most countries the topic is highly placed on the agenda of central banks, banking supervision and financial market regulators.

3. The Risk Radar Methodology

In its publication „Principles for the effective management and supervision of climate-related financial risks “, the Basel Committee on Banking Supervision (BIS 2022) states that “Climate change may result in physical and transition risks that could affect the safety and soundness of individual banking institutions and have broader financial stability implications for the banking system” (BIS 2022, 1). Therefore, they recommend “a principles-based approach to improving risk management and supervisory practices related to climate-related financial risks” (BSI 2022, 1).

The roll-out and detailing of this approach often rests on the shoulders of the regional Central Banks and Supervisory activities. As all central banks address the same topics, their approaches are often rather similar. The challenge, then, lies in the implementation process on bank-level. Here, in addition to the formulation of requirements (especially concerning ESG-risk management), banks and MFI’s often need more than just a sensitization and definition of regulatory rules: As data for ESG assessment is scarce and experience needs to be built, it is advisable and helpful to offer pragmatic tools and methods to get acquainted with the topic and receive relevant information without the need of investing too many resources.

This is where the tried and tested tool “Risk Radar” can offer great benefits. As knowledge-based, qualitative scoring approach aligned with international ESG regulations, it offers banks a quick access into ESG risk assessment on sector level with options for portfolio-risk assessment and visualization (heat maps). Using the sector data and a set of sector-specific questions, this information can further be extended to a risk management on loan level, offering banks all options for an ESG-based loan giving process.

Designed in partnership with Kempten University, the tool uses a scoring-based approach to assess the specific conditions of the economic sectors within a country and defines a data base with ESG risk assessments accordingly. The tool has been implemented over 100 times in Germany for savings and cooperative banks as well as with DSIK for many banks and central banks across five continents.

3.1 Closing the Data-Gap

In its practical application, for most banks the influence of ESG risks on credit risk is most relevant (for this and the following also see NBG 2022). In contrast, the availability of practitioners’ instruments and the focus of most publications is focused on big companies listed on the capital markets and hence the influence of ESG factors on stock prices and

bond ratings instead. This focus is not helpful for most banks, as for their customers ESG information is neither published nor even known, and there are no ESG ratings or even assessments available.

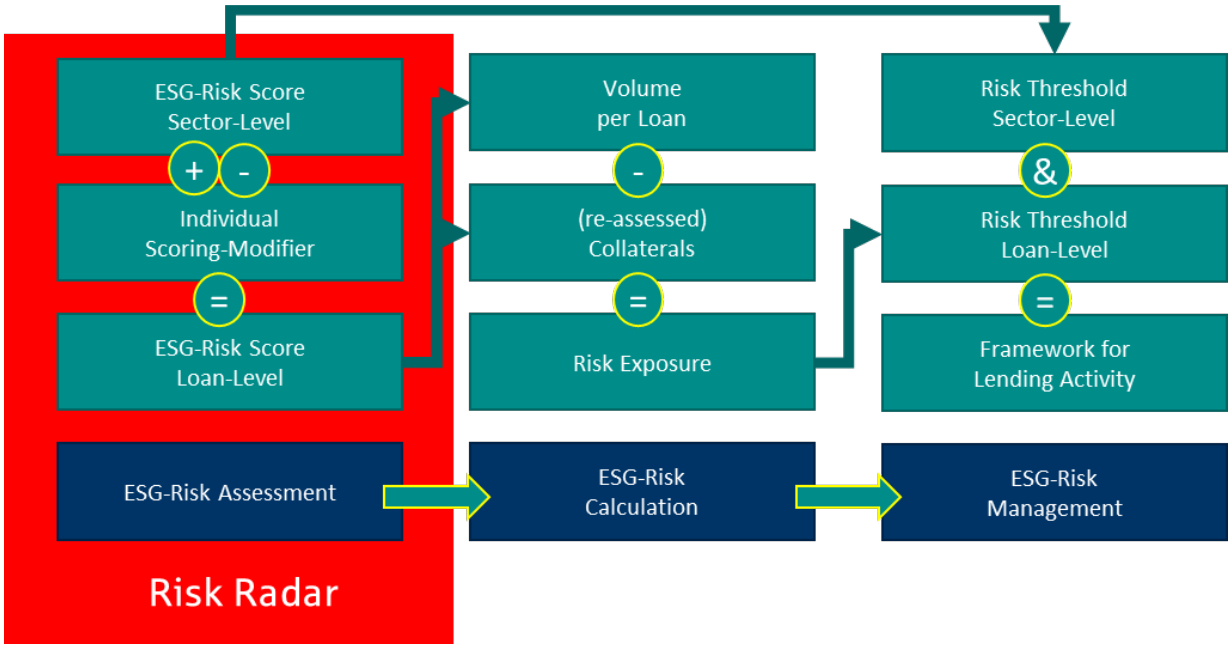
Concerning methodologies, in its discussion paper the EBA gives a short overview over the practical approaches to ESG risk management (EBA 2020, 68). While the Alignment Method and Risk Framework Method are both interesting and full of potential, they require data that is not yet widely available. Hence, the Exposure Method comes into focus. Here the EBA states: "The third approach is a tool that banks can apply directly to the assessment of individual clients and individual exposures […] This can then be used to complement the standard assessment of financial risk categories. […] This method can be described as the possibly most practical method and the most straight-forward to implement amongst the three approaches."

The Exposure Method is a scoring methodology applied to assess the relevant influence of ESG factors on the counterparty providing an indication of the potentially harmful consequences on the banks (e.g., via credit defaults). It is this method that is used with the Risk Radar. Using a scoring approach, it offers an assessment whether and to which extend the client (through his location, business model or activities) is in danger of negative impacts of ESG-factors, impeding the ability to pay back the loan and thus causing an ESG risk for the bank/MFI.

All scoring methodologies use one of two different approaches: A bottom-up approach would mean to collect relevant data from the client – as is common practice in credit risk management to assess the credit worthiness. However, as already stated above, in the context of ESG and climate risk assessment this would require information on part of the client which often is not available for the time being.

Hence, the Risk Radar is a scoring methodology that chooses the top-down approach: Using available data to assess the potential ESG risk of a sector, the data problem at the loan-level is largely solved. After identifying and assessing the sector risk, only a few simple questions are needed to conclude from the industry level to the client/counterparty level.

Figure 1: The Scope of the Risk Radar within ESG risk management



3.2 A transparent Knowledge-based Approach

Based on the information of this assessment, banks can then proceed with the ESG risk management process by first quantifying the risk and then devising management consequences like thresholds, additional collateral-requirements, or consequences on pricing of loans.

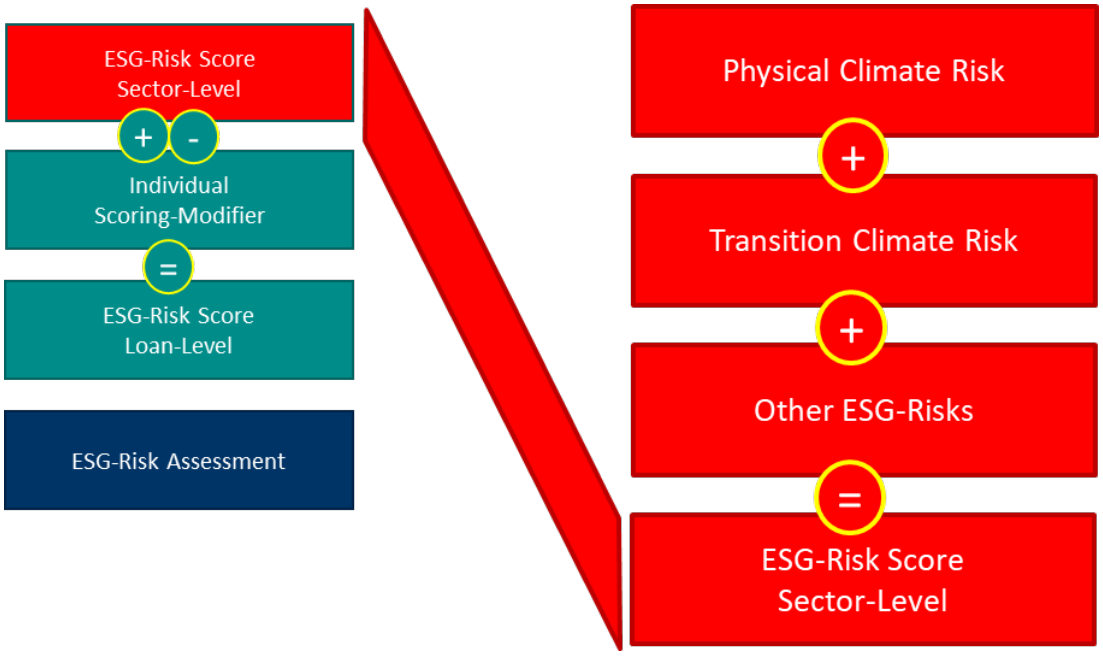
At its core, managing risks means to identify and assess potential threats to understand them and consider them in an informed decision making. “But risk management is not, and will never be, a magic formula that will always give you the right answer. It is a way of thinking that will give you better answers to better questions and by doing so helps you to shift the odds in your favor” (Borge 2001).

In many risk categories, this is achieved by the analysis of past data. Being both future-oriented and unprecedented, for ESG the necessary data for the use of complex mathematical models is yet missing. As a pragmatic compromise, the qualitative analysis combined with a structured, thorough consideration of all relevant aspects is an important first step on the learning journey of ESG risk management.

Therefore, the Risk Radar has been deliberately kept pragmatic, comprehensible and explainable. By fully disclosing the mechanics, there is no "black box": The risk assessment via the sector scoring scheme is transparently available to the users and can be adapted if necessary. As a result, it is designed as an understanding-based and yet lean risk management tool, that is adaptable to the individual context and needs of the bank.

To implement a thorough and systematic assessment of ESG risks, all relevant aspects (as highlighted in figure 2) need to be considered.

Figure 2: Determination of the ESG-Risk Score on Sector-Level



For each individual sector, the assessment process starts with physical climate risks where both acute and chronic forms are considered. For both, many sources are available both on an international and national level giving an informed view over scientific findings and practitioners estimations concerning the extent and the way that climate change will affect the economic system.

The crucial aspect of this analysis is to determine how different sectors are affected. While some companies in some sectors are close to nature and directly affected even by relatively moderate weather events or -changes (e.g., fruit farmers in the sector of Agriculture), others are less vulnerable to, e.g., storms but still affected by temperature (e.g., power plants with their need for cool water within the cooling progress of reactors) or the availability of natural resources like water (e.g., the paper industry).

The next important aspect is to model transition risks. Transition risk breaks down into the question of how fast and vehement the transformation is happening for a given sector – and, consequently, how likely it is for a given company to not be able to keep up with it and suffer economic damage accordingly.

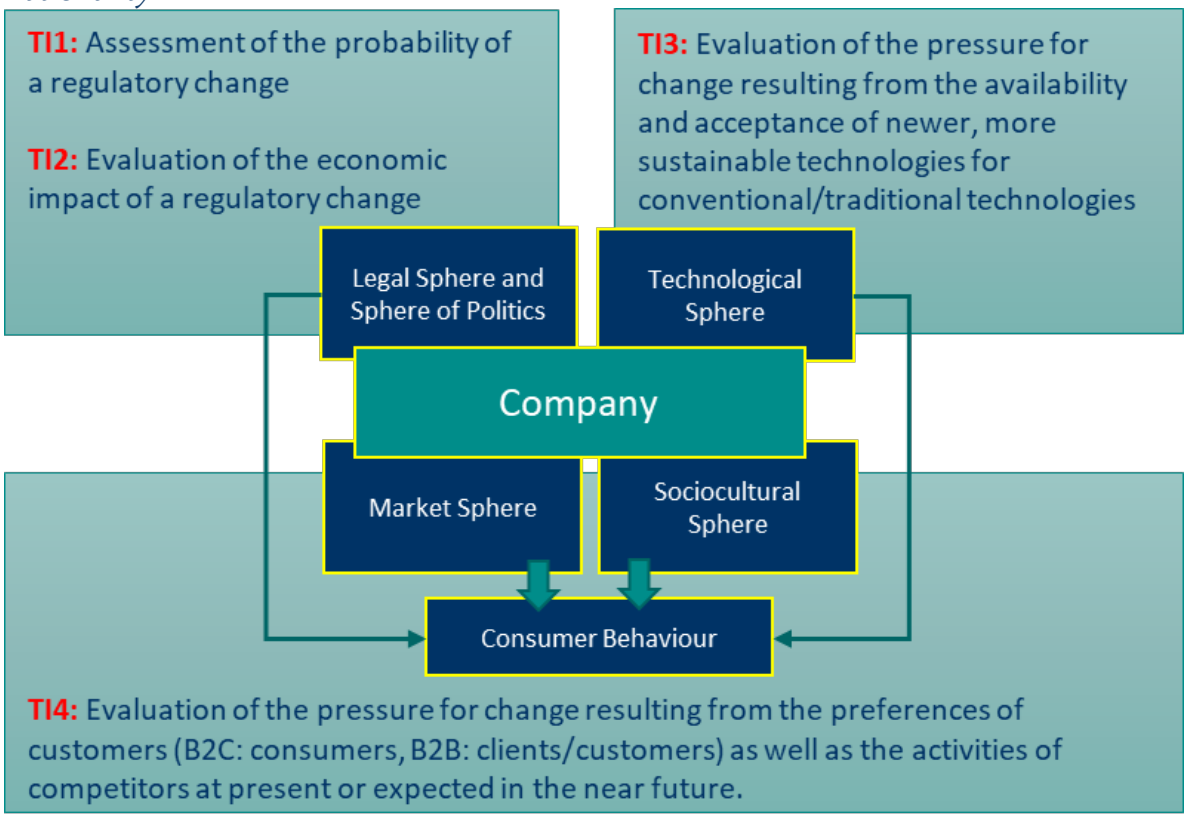
Here, two aspects are of equal importance: The GHG contribution and the Transitional Intensity of each sector. The first is the consideration of an industry's contribution to global emissions. This is important, as for highly emitting industries, there often is increasing regulatory pressure. The second is the currently perceptible pressure that manifests as

regulatory developments, the availability of new and alternative technologies as well as the perception of the public in general and especially the relevant customers/consumers.

To model the transitional intensity, the stakeholder-model of Socio-Economic Rationality (Schaltegger et al. 2003, 36 following) is used: This describes the company's framing conditions as a set of spheres in which different kinds of relevant stakeholders are active, contributing to a company's success or failure consequently the company's action.

The legal sphere does comprise all aspects of compliance towards all kind of legal or regulatory requirements. The technological sphere represents the availability and acceptance of new technologies, enabling or hindering the pace of transformation. the market sphere with all stakeholders associated to belonging to the processes of service creation service provision: Lastly, the sociocultural sphere as a home to the general public as a stakeholder group of major importance influences (together with both spheres described above) the behavior of consumers/customers and hence the change of demand in the markets. Accordingly, four Transitional Indicators (TI) can be identified as is highlighted in figure 3.

Figure 3: Modeling Transitional Intensity based on the concept of Socio-Economic Rationality



Finally, after considering physical climate risks and transition risks, other ESG risks need to be included as well, namely contributions to the loss of biodiversity, other environmental risks, human rights issues, and other social risks.

To assess the extent and severity of ESG risks, the Risk Radar uses a scoring scheme of a total of 5 levels ranging between 0 and 4:

0. A development/risk is **theoretical** and will only in very isolated cases cause damage
1. A development/risk is already **perceptible** and will cause some damage in individual cases (which, as a mean, can be minor)
2. A development/risk is **obvious** and must be harmful to business
3. A development/risk is **significant**, causing serious and extensive damage
4. A development/risk is **existential**, the potential damage is very high and can be fatal for many companies within the sector

For both *physical climate risks* and *transition risks* this scoring is applied, rating the individual relevance to the given sector. It results in a 0-4 score which is calculated as a mean of the different components, each of which is generated by a differentiated sub-scoring (as will be described in detail in chapter 3.3).

For *other ESG risks*, a more global approach is chosen with no sub-scorings. Here, each risk category can add a penalty between 0 and 1, where the keywords described above remain the same but are translated into 0.25 steps (via division by 4). For example, if there are perceptible problems in the area of biodiversity for a sector, the rating would be 0.25. If the problems are significant, 0.75 would be the appropriate score.

With each of the three pillars of ESG-risk – physical climate risk, transition risk and other ESG risks –contributing up to 4 score points, each can make up for up to a third of the total score which has a maximum of 12 score points as shown below.

Figure 4: The Scoring Table of the Risk Radar

NACE Code	Sector Name			Scoring			Reference
	Physical Climate Risk	Acute		0-4, Weight 50%		0-4	1
		Chronic		0-4, Weight 50%			2
	Transition Climate Risk	GHG-Emission Contribution		0-4, Weight 50%		0-4	3
		Transitional Intensity	Probability of regulatory Change	0-4, Weight 25%	0-4, Weight 50%		4
			Economic Impact of regulatory Change	0-4, Weight 25%			5
			Technological Change	0-4, Weight 25%			6
			Customer Behavior	0-4, Weight 25%			7
	Other ESG Risks	Loss of Biodiversity		Add-on Factor	0-1	0-4	8
		Other Environmental Risks		Add-on Factor	0-1		9
		Possible Human Rights Issues		Add-on Factor	0-1		10
		Other Social Risks		Add-on Factor	0-1		11
	ESG-Risk Score at Sector-Level:					0-12	

This scoring is applied for all economic sectors of a country. Here, the sector classification scheme NACE is used as are the corresponding sector codes (Eurostat 2008). Wile for the most part the assessment is focused on the parental sector, for high-risk sectors such as “A Agriculture” and “C Manufacturing” also some subsectors are assessed.

The assessment is conducted in a knowledge-based approach, starting with an initial desk research followed by a review of local experts. For those sectors that have been identified as critical (risk sector scores of 6 and higher), more detailed sector profiles are provided using the reference on the right of the scoring scheme to give more detailed explanations and sources for the assessment.

For the first version of the Risk Radar, the explanation above is a comprehensive outline of the process and its results. To add depth and reduce subjectivity, however, a second version of the concept now uses sub-scorings which are described below.

3.3 Introduction of Sub-Scorings

For the first version of the Risk Radar, every item on the scoring table (see figure 4 above) was researched and then – using the 5 levels – assessed based on the identified sources. This process has required a considerable level of expertise and, at the same time, still has remained somewhat arbitrary: In fact, the assessment of the significance of a criterion and the degree of influence was not always objective. Thus, two independent observers would not necessarily come to the same conclusion every time. Since this agreement between independent researchers is an important criterion for a tool that meets scientific requirements, the methodology of the Risk Radar was now fundamentally expanded to achieve a greater degree of objectivity and precision.

Hence, for every mayor item on the scoring table a sub-scoring was defined. This sub-scoring replaces the necessity to individually assess and evaluate the parameter value of an item by checking a sequence of indicators. The basic principle is to pose and answer a question that comprises the essence of the topic at hand and from there to specify the result further by the comparison with a predefined set of indicators.

On the example of the sub-scoring for the assessment of physical climate risks in their acute form, the essential question is “Are acute climate events in the country/region already relevant for the sector under consideration?”. If the answer is “no”, then a second question is used to further grade this outcome: “Is it likely that this relevance will be given in the future?” defines whether the total outcome of this item in the main scoring table is “0” (“no”), 0.5 (“yes”) or “1.0” (yes, very likely”).

However, if the answer to the essential question is “yes”, the result is further specified by checking a set of indicators. The fact that these indicators are predefined makes it easier for the assessor in that she/he does not have to come up with the relevant criteria to consider the important aspects of the topic on their own. At the same time, the standardization leads to better objectivity and standardization if different assessors consider the same sector. To achieve this, it was very important in the design process to identify all the relevant aspects so that no important criterion is omitted.

The impact of each criterion on the scoring results has been reconsidered as well, it now depends on two drivers: The quality of the source and the predefined weight. The former is another important consideration that was introduced in version 2 of the Risk Radar. It follows the logic that not all sources that come up in the research process have the same credibility. It is self-explanatory that a source like the official statement of a ministry has a completely different implication on the evaluation of a topic then a blog-entry of a private person has. However, even a blog-entry can shed light on a topic that for some reasons may not be covered in official sources for the time being. So, both sources should be considered, but with a different impact on the final score.

Hence, a new approach used in the sub-scorings first differentiates between the nature and quality of the source and then the message it conveys regarding the presence of the respective indicator (see figure 5).

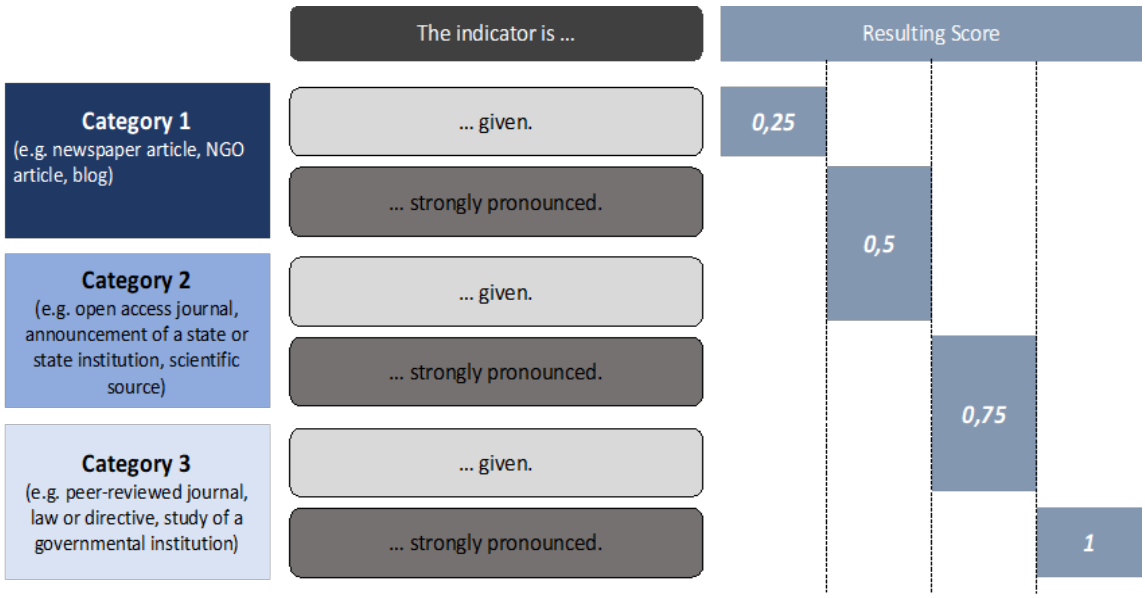
As for the nature of the source, 3 categories are defined:

- Category 1 comprises newspaper articles, NGO-sources, private blogs and other publications that are not subject to reliable quality control.
- Category 2 comprise sources with a high level of acceptance and quality control, e.g., official announcements and scientific sources.
- Category 3 now is the highest level of credibility that can only be found in laws or directives, studies of governmental institutions or peer reviewed scientific sources.

In all these cases, it is further distinguished whether the indicator at hand is just confirmed in the source or whether its relevance is strongly pronounced.

The combination of both aspects leads to the following methodology in which each item on the scoring list can receive a value between 0.5 and 1:

Figure 5: Scoring Values for the Indicators in the Sub-Scoring



This scoring result is then further weighted, because not every indicator can be considered equally important for the overall result. For example, a certain fact should always have a higher weight for the assessment if it is given within the country of consideration than if it would happen in another country.

For the weighting, a total multiplier value of 6 (for 6 indicators) is distributed individually to the indicators. If for instance, indicator 1 is assigned a weight of 2, for the remaining 5 indicators only a total value of 4 can be assigned. Please note that weightings are only used if there are strong arguments for an increased or reduced importance of an indicator, otherwise an equal weighting will be applied.

In addition to the 6 indicators, a "Local expert grading" can adjust the score by 0.5 (subtracting or adding) to consider local knowledge that may not have been sufficiently covered in the sources.

PLEASE NOTE: Even if the sum of all indicators and gradings exceed the value of 4, **the maximum scoring result of the sub-scoring remains 4**. With reference to the scoring scheme, 4 means "A development/risk is existential, the potential damage is very high and can be fatal for many companies within the sector". This is the highest value and cannot be exceeded, neither in the total score nor on the level of the sub-scorings.

Based on these considerations, sub-scorings for the following items of the main scoring table (figure 4) have been defined:

- Physical Climate Risk: Acute
- Physical Climate Risk: Chronic
- Transition Climate Risk: GHG-Emission Contribution
- Transition Climate Risk: Transitional Intensity; Probability of Regulatory Change
- Transition Climate Risk: Transitional Intensity; Impact of Regulatory Change
- Transition Climate Risk: Transitional Intensity; Technological Change
- Transition Climate Risk: Transitional Intensity; Customer-Behavior

3.4 Sub-Scoring for Physical Climate Risk: Acute

As has been mentioned in the example above, the assessment of the physical climate risk in its acute form follows the essential question "Are acute climate events in the country/region already relevant for the sector under consideration?". The grading of the "no" answer is guided by the question "Is it likely that this relevance will be given in the future?".

The differentiation of the "yes" answer is achieved by the consideration of the following six indicators:

1. Observed loss of assets/property
2. Expected impact on revenue

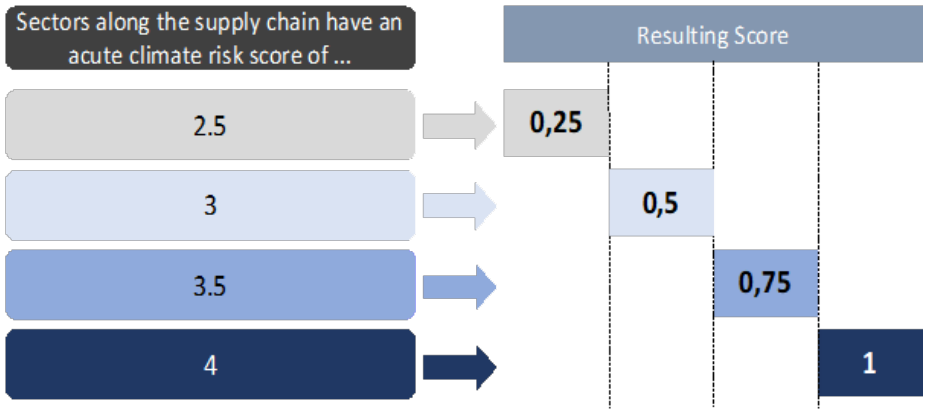
3. Expected impact on costs
4. Indicators 1-3 expected to increase in the future
5. Lack of adaptability of the business model
6. Sectors in the supply chain have a score >2.5 for acute climate risks

All indicators are considered to have the same impact on the total result und thus receive an equal weight of 1.

With regard to indicator number 6, additional explanation is required. While in the scoring logic of the Risk Radar each sector is essentially considered on its own, there are nevertheless aspects of climate-related risks and ESG risks where influencing factors can be "contagious". For example, in the past events have occurred when nuclear power plants had to be temporarily shut down because – due to climatic reasons – the water required of the cooling of the reactor was either lacking or too hot. This in turn has affected other energy-intense sectors via increases of the electricity price. Likewise, when low river levels hinder inland navigation, manufacturing industries, e.g., in the chemical sector, may be affected as well.

This "risk contagion" between sectors is considered with the following systematic: If other sectors along the supply chain (upstream or downstream), that have a strong connection with the sector under consideration, have a high score for the same risk category (in this case acute climate risk), the sector under consideration receives a malus depending on the level of the risk score of the connected sector:

Figure 6: Consideration of Sectors along the Supply Chain



This logic of mutual influence between sectors is also a new feature of version 2 of the Risk Radar. It introduces a more networked and systematic perspective which is a strong feature of climate-related and ESG risk.

Using the reference numbers on the sidebar of the scoring table, the value of the indicators is further detailed. For example, the indicator with the reference number 5 could be detailed

in the following manner, both indicating the source quality/ category and the level of pronunciation of the indicator at hand:

Figure 7: Example of Indicator Reference

5	Indicator is given	x	Source Category	2	Whitt, J.; Gordon, S. (2023): This is the economic cost of extreme weather. https://www.weforum.org/agenda/2023/01/extreme-weather-economic-cost-wef23/		
	Indicator is strongly pronounced						

Please note that this level of detail is only given for the high-risk sectors, for which individual scoring sheets are provided.

Combining all of these aspects, the sub-scoring for "Physical Climate Risk: Acute" reads as follows:

Figure 8: Physical Climate Risk: Acute

NACE Code	Sector Name					Scoring			Reference
	Are acute climate events in the country/region already relevant for the sector under consideration?					Score	Weight	Total	
	"No"		Is it likely that this relevance will be given in the future?		"No"				
					"Yes"	+0,5	1,00		1
					"Yes, very likely"	+1	1,00		
	"Yes"		Observed loss of assets/property			see score mechanics	1,00		2
			Expected impact on revenue			see score mechanics	1,00		3
			Expected impact on costs			see score mechanics	1,00		4
			1-3 expected to increase in the future			see score mechanics	1,00		5
			Lack of adaptability of the business model			see score mechanics	1,00		6
			Sectors in the supply chain have a score >2.5 for acute climate risks (see table below)			see score mechanics	1,00		7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			see score mechanics	+/-		8
	Acute Climate Risk Score at Sector-Level:							0,0	Max. 4

As can be seen in the sub-scoring above that after the six indicators there is an additional item reserved for a "fine tune" of local expertise. In the first version of the Risk Radar, evaluation workshops involving local experts have been used to evaluate and, if necessary, correct the assessment of the desk research. This was especially important, as the subjectivity embedded in the process could easily lend to the omission of important aspects.

Now in the new version, the combination of predefined indicators with the consideration of quality and pronunciation of the sources has significantly reduced the level of subjectivity. Nevertheless, local expertise is an important factor as it enriches the written sources by experience. Thus, this item on the scoring table should be used to modify the total score if the result is deemed too low or too high in the opinion of the expert. This grading option is offered in every sub-scoring.

3.5 Sub-Scoring for Physical Climate Risk: Chronic

Likewise, the assessment of this item follows the essential question "Are chronic climate developments in the country/region already relevant for the sector under consideration?". The grading of the "no" answer is again guided by the question "Is it likely that this relevance will be given in the future?". The differentiation of the "yes" answer considers the same six indicators:

1. Observed loss of assets/property
2. Expected impact on revenue
3. Expected impact on costs
4. Indicators 1-3 expected to increase in the future
5. Lack of adaptability of the business model
6. Sectors in the supply chain have a score >2.5 for acute climate risks

Again, all indicators are considered to have the same impact on the total result und thus receive a weight of 1.

Figure 9: Physical Climate Risk: Chronic

NACE Code	Sector Name					Scoring			Reference
	Are chronic climate developments in the country/region already relevant for the sector under consideration?					Score	Weight	Total	
	"No"		Is it likely that this relevance will be given in the future?		"No"				
					"Yes"	+0,5	1,00	0,00	1
					"Yes, very likely"	+1	1,00		
	"Yes"		Observed loss of assets/property			see score mechanics	1,00		2
			Expected impact on revenue			see score mechanics	1,00		3
			Expected impact on costs			see score mechanics	1,00		4
			1-3 expected to increase in the future			see score mechanics	1,00		5
			Lack of adaptability of the business model			see score mechanics	1,00		6
			Sectors in the supply chain have a score >2.5 for acute climate risks (see table below)			see score mechanics	1,00		7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			see score mechanics	+/-		8
	Chronic Climate Risk Score at Sector-Level:							0,0	Max. 4

3.6 Sub-Scoring for Transition Climate Risk: GHG-Emission Contribution

This sub-scoring is unique in the scoring tables, as it does not rely on indicators. Instead, it uses the percentage of the sector emissions (X) of the total emissions of the country as essential question.

PLEASE NOTE: Instead of the use of a relative share of the countries emissions alone, this could be relativized based on the contribution of the respective sector to the country's Gross Domestic Product (GDP). This would offer an additional perspective as it includes the importance of the sector to the country's economy.

Figure 10: Transition Climate Risk: GHG-Emission Contribution

NACE Code	Sector Name			Scoring		Reference
	Assignment of a score depending on the percentage of the sector emissions (X) of the total emissions of the country			Percentage-Range	Total	
	X ≥ 10%				4.0	
	10% > X ≥ 7.5%				3.5	
	7.5% > X ≥ 5%				3.0	
	5% > X ≥ 1%				2.5	
	1% > X ≥ 0.5%				2.0	
	0.5% > X ≥ 0.25%				1.5	
	Do sector activities have a negative impact on carbon sinks?	"No"	Add-on Factor 0		0.0	
		"Yes"	Add-on Factor 0.5		0.5	
		"Yes, severely"	Add-on Factor 1		1.0	
	Are sectors in the supply chain assessed with significant or existential emissions?	"No"	Add-on Factor 0		0.0	
		"Yes, score 3 emissions"	Add-on Factor 0.25		0.25	
		"Yes, score 4 emissions"	Add-on Factor 0.5		0.5	
	GHG-Emission Contribution Score at Sector-Level:				0,0	Max. 4

In addition to the emission contribution, in this sub-scoring there are two additional questions. The first reads: "Do sector activities have a negative impact on carbon sinks?" and it refers to the change of land use and the destruction of carbon sinks that goes along with it. Accordingly, there is a malus between 0 and 1 for this aspect.

The second question is: "Are sectors in the supply chain assessed with significant or existential emissions?". In a manner similar to the consideration of sectors along the supply chain (see above figure 6) but reduced to a more compact form, there is a malus of 0.25 to

0.5 for a connection with sectors that have been assessed with results of 3 or 4 in this sub-scoring. This reflects the consideration of scope 3 emissions.

3.7 Sub-scoring for Transition Climate Risk: Transitional Intensity; Probability of Regulatory Change

Here, the scheme of the sub-scoring returns to its standard form. The essential question reads "Is the business case of the sector under consideration likely to be affected by regulatory change (now/ near future)?". In this sense, "affected" comprises all positive or negative consequences that a company may have in the wake of an ESG-related regulation.

The grading question for the "no" answer is: "Is this kind of regulation already present in other relevant countries?". Please note that for this and the following sub-scorings there are 4 grading questions for the "no" answer, resulting in an outcome between 0 and 1.5. The reason for this greater differentiation is: Within the field of transition risks not only events and situations in the country under consideration are contributing towards change and transformation, but events in other relevant countries as well. Here, the question whether another country should be considered as a "relevant" country depends on a combination of political, cultural, and economic ties between countries. Hence, more important than the geographical distance is the level of influence and connectivity between the countries.

The indicators for the "yes" answer to the essential question are defined as follows:

1. Announced in the country under consideration

   Please note: The term "announced" refers to the formal public communication of a proposed or newly enacted law or regulation. This announcement is typically made by the government, legislative body, or relevant authority responsible for creating and implementing the legislation. The purpose of announcing new legislation is to inform the public, stakeholders, and relevant organizations about the changes in the law and its implications.

2. Established in the country under consideration
3. Further extension of this very regulation announced
4. Announced in other relevant countries
5. Established in other relevant countries
6. Perceived pressure of the population i.e. in the context of catastrophes or severe economic losses

Figure 11: Transition Climate Risk: Transitional Intensity; Probability of Regulatory Change

NACE Code	Sector Name					Scoring			Reference
	Is the business case of the sector under consideration likely to be affected by regulatory change (now/ near future)?					Score	Weight	Total	
	"No"		Is this kind of regulation already present in other relevant countries?		"No"				
					"Yes, it is planned"	+0.5	1,00		1
					"Yes, it is established"	+1.0	1,00		
					"Yes, it is established and a further extention is planned"	+1.5	1,00		
	"Yes"		Announced in the country under consideration			see score mechanics	1,00		2
			Established in the country under consideration			see score mechanics	2,00		3
			Further extension of this very regulation announced			see score mechanics	0,50		4
			Announced in other relevant countries			see score mechanics	0,50		5
			Established in other relevant countries			see score mechanics	1,00		6
			Perceived pressure of the population i.e. in the context of catstrophes or economic losses			see score mechanics	1,00		7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			see score mechanics	+/-		8
	Probability of regulatory Change Risk Score at Sector-Level:							0,0	Max. 4

As a difference to the preceding sub-scoring, not all indicators are assigned the same weight. An established legislation weights higher than an announced one, and these weights should further be differentiated whether they are happening in the country under consideration or other relevant countries. Please note that the total of the weights remains at 6 for all 6 indicators.

3.8 Sub-scoring for Transition Climate Risk: Transitional Intensity; Impact of Regulatory Change

Following the assessment of the probability of regulatory change, the sub-scoring to assess its impact answers the essential question “Is it likely that the regulatory change will have an ESG-impact (in the form of opportunities, risks, costs) on the sector?”.

Here, the grading question for the “no” answer combines two aspects: “Is the assessed score for “Probability of Regulatory Change” > 1.5 AND is an ESG-impact observed in other relevant countries?” If any of both are denied, the influence is assessed as 0. If both are given, depending on their level of ESG-impact (between impact assumed, impact perceived and heigh impact perceived) the grading results in a value between 0.5 and 1.5 respectively. Here, as with the term “affected”, the term “ESG impact” refers to all positive or negative consequences that a company may have in the wake of an ESG-related regulation.

The first two indicators for the “yes” answer are of special importance:

1. Effect on the business model
2. Strong effect on the business model

   In both cases, the "effect on the business model" refers to the impact or changes that a regulatory change may have on the fundamental structure, operations, and profitability of a business. It reflects how various internal and external elements influence the way a company conducts its activities, generates revenue, and sustains its operations. Understanding the effect on the business model is essential for assessing the consequences of transition risk. The “strong” effect includes the evaluation that effect under consideration is of particular intensity. In this context, it might come as a surprise that the weighting of the indicator “effect” is twice the weight of the “strong effect”. This is because both are considered cumulative: If there is a strong effect, both indicators are given and checked, and to prevent an inflation of scores the “strong” effect was weighted to a lesser extent. Similar aspects referring to the cumulative scores are visible below with other indicators as well.

The remaining indicators are:

3. 1-2 expected to increase in the future (referring to the first and second indicator respectively)
4. 1 or 2 obvious in other relevant countries (again referring to the first and second indicator)
5. Impact on the value chain (i.e. the sector is a node point in the value chain and crucial for other sectors that rely on its products or services)
6. Lack of adaptability of the business model

Figure 12: Transition Climate Risk: Transitional Intensity; Impact of Regulatory Change

NACE Code	Sector Name					Scoring			Reference
	Is it likely that the regulatory change will have an ESG-impact (in the form of opportunities, risks, costs) on the sector?					Score	Weight	Total	
	"No"		Is probability of regulatory change > 1.5 AND an ESG-impact is observed in other relevant countries?		"No, probability score < 1.5 or no ESG impact assumed"				
					"Yes, score > 1.5 and an ESG impact is assumed"	+0.5	1,00		1
					"Yes, score > 1.5 and an ESG impact is perceived"	+1.0	1,00		
					"Yes, score > 1.5 and a high ESG impact is perceived"	+1.5	1,00		
	"Yes"		Effect on the business model			see score mechanics	2,00		2
			Strong effect on the business model			see score mechanics	1,00		3
			1-2 expected to increase in the future			see score mechanics	0,50		4
			1 or 2 obvious in other relevant countries			see score mechanics	1,00		5
			Impact on the value chain			see score mechanics	0,50		6
			Lack of adaptability of the business model			see score mechanics	1,00		7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			see score mechanics	+/-		8
	Probability of regulatory Change Risk Score at Sector-Level:							0,0	Max. 4

3.9 Sub-scoring for Transition Climate Risk: Technological Change

Without technical alternatives, no transformation is possible. For example, the abolishment of the combustion engine is only conceivable because electric mobility offers an alternative within the scope of personal transport.

The alternatives considered in this sub-scoring, however, do not always have to be strictly technical. They can also refer to processes and approaches that offer a more sustainable alternative to the conventional status quo, as is the case for example in organic farming (as an alternative to conventional farming) or in hydrogen-powered steel manufacturing.

Sometimes, however, the only sustainable alternative is to quit a certain practice or technology completely: In the tobacco-sector, for example, e-cigarettes are not a sustainable alternative. Hence, the only sustainable alternative here is to quit smoking completely. Thus, the technological change threatening that sector is an increase of the number of non-smokers.

So, this sub-scoring is based on the essential question "Is an alternative technology/methodology with sustainability-related advantages available/ used in this sector in the country under consideration?".

As with the previous indicator, the grading question for the "no" answer refers to other relevant countries; it reads: "Is this technology available/ used in this sector in other relevant countries?"

Accordingly, the indicators for the "yes" answer also include this differentiation:

1. Use in the country under consideration
2. Heavy use in the country under consideration
3. Use in other relevant countries
4. Heavy use in other relevant countries
5. Accepted economic benefit of technology (lower costs and/or higher yields)
6. Accepted strong economic benefit of technology (much lower costs and/or much higher yields)

Figure 13: Transition Climate Risk: Technological Change

NACE Code	Sector Name					Scoring			Reference
	Is an alternative technology/methodology with sustainability-related advantages available/used in this sector in the country under consideration?					Score	Weight	Total	
	"No"		Is this technology available/ used in this sector in other relevant countries?		"No"				
					"No, to date it is just at theory/ study-level"	+0.5	1,00		1
					"Yes, it is available and used in other relevant countries"	+1.0	1,00		
					"Yes, it is heavily used in other relevant countries"	+1.5	1,00		
	"Yes"		Use in the country under consideration			see score mechanics	1,00		2
			Heavy use in the country under consideration			see score mechanics	1,00		3
			Use in other relevant countries			see score mechanics	0,50		4
			Heavy use in other relevant countries			see score mechanics	1,00		5
			Accepted economic benefit of technology (lower costs and/or higher yields)			see score mechanics	1,50		6
			Accepted strong economic benefit of technology (much lower costs and/or much higher yields)			see score mechanics	1,00		7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			see score mechanics	+/-		8
	Probability of regulatory Change Risk Score at Sector-Level:							0,0	Max. 4

3.10 Sub-scoring for Transition Climate Risk: Customer Behavior

The last indicator to consider is the level of acceptance of the new technology (or the willingness to adapt one's own behavior as explained as has been discussed on the example of the tobacco sector) by the customers. This is based on the essential question “Are customers accepting/demanding the new technology (see above assessment of technological change) in the country under consideration?”.

Accordingly, the grading question for the “no” answer is: “Are customers accepting/ demanding this very technology in other, export-relevant countries?”. Here, instead of referring to various ways of cultural or political connections between countries, the focus is an economic one: If countries are connected in trade, the demand of new technologies/ approaches can greatly be accelerated by the demand/ preferences in the customer-country.

Figure 14: Transition Climate Risk: Customer Behavior

NACE Code	Sector Name					Scoring			Reference
	Are customers accepting/demanding the new technology (see above assessment of technological change) in the country under consideration?					Score	Weight	Total	
	"No"		Are customers accepting/ demanding this very technology in other, export-relevant countries?		"No"				
					"Yes, the use can be recognised in its beginnings"	+0.5	1,00		1
					"Yes, the use can be clearly recognised"	+1.0	1,00		
					"Yes, the strong use can be clearly recognised"	+1.5	1,00		
	"Yes"		Perceived benefits in costs/maintenance from the user's perspective			see score mechanics	2,00		2
			Perceived benefits in health from the user's perspective			see score mechanics	1,00		3
			Perceived benefits in quality/durability from the user's perspective			see score mechanics	1,00		4
			Perceived benefits to society and ecosystems			see score mechanics	0,50		5
			Mass Media presence conveying a positive image			see score mechanics	1,00		6
			VIP-Advocates			see score mechanics	0,50		7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			see score mechanics	+/-		8
	Probability of regulatory Change Risk Score at Sector-Level:							0,0	Max. 4

The indicators for the "yes" answer focus on the different aspects that may act as a driver for customer demand:

1. Perceived benefits in costs/maintenance
2. Perceived benefits in health
3. Perceived benefits in quality/durability
4. Perceived benefits to society and ecosystems
5. Mass Media presence conveying a positive image
6. VIP-Advocates

The weighting emphasizes the fact that economic-based arguments often play a major role in customer decisions and dominate other benefit categories (summed up in the statement of a market-analyzer “ego-benefit always tops eco-benefit”).

4. Overview of the Risk Radar for Armenian Economic Sectors

The ESG risk score of each economic sector is represented in Appendix 1. The figure below shows economic sectors with high risk only. The assessments and scorings of each high-risk sector is represented in Appendix 2.

Figure 15: High-risk Economic Sectors

High risk (9 points)	High risk (8 points)	High risk (7 points)
A. Agriculture, forestry and fishing	A 1.4. Animal production	A 3. Fishing and aquaculture
A 1.1. Growing of non-perennial crops	C 12. Manufacture of tobacco products	C 20. Manufacture of chemicals and chemical products
A 1.2. Growing of perennial crops	C 19. Manufacture of coke and refined petroleum products	E. Water supply;sewerage, waste management and remediation activities
A 2. Forestry and logging	D. Electricity, gas, steam and air conditioning supply	F. Construction
	H. Transportation and storage	

5. Heat Map Assessment

In passage number 36, the Basle Committee recommends: “Banks should also identify, measure, evaluate, monitor, report and manage the concentrations within and between risk types associated with climate-related financial risks. For example, banks could use metrics or heatmaps to assess and monitor concentration of exposure to geographies and sectors with higher climate-related risk” (BIS 2022, 6).

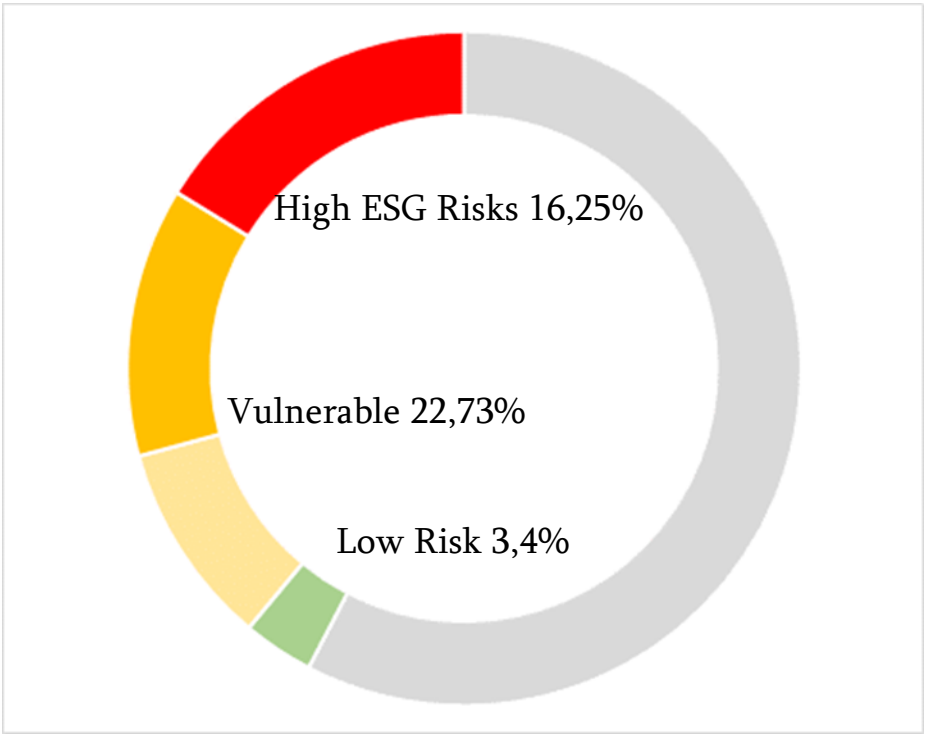
With the results of the sectors scores, it is possible to formulate such a heat map. It gives an overview over the concentrations of climate-related and other ESG risks in the loan portfolio of the bank. Such a Heat Map can be formulated for individual financial institutions or on an aggregated level for a whole country.

The heatmap enables the use of Risk Radar results (identified sectoral risks) for the assessment of risks to the financial system, particularly the credit risk. The heatmap was developed based on the volumes of loans granted to residents in Armenia, as of March 2024.

The findings indicate that approximately 15.38% of the banking system’s loans are allocated to sectors at high risk (see Figure 31). These loans are directed to economic sectors with high-risk scores of 7, 8, and 9. Nearly 40% of loans are distributed to sectors that encompass not only high-risk categories (scores 7, 8, and 9) but also vulnerable sectors (scores 5 and 6). Heatmaps can be utilized by financial organizations with both small and large portfolios. This tool offers an initial overview of the extent to which financial organizations are exposed to climate risks. For a more detailed risk assessment at the client level, specific assessment modifiers can be defined for each sector, using a short questionnaire. This approach allows for analyzing the degree to which a given company is exposed to the same risk as its sector, and whether this risk exposure is equivalent. Consequently, both restrictions and implications for pricing and collateral requirements can be established for borrowers, further enhancing the comprehensiveness of the ESG risk management process.

Figure 16: RISK RADAR AND HEATMAP

7-9	Construction Agriculture. Growing of non-perennial crops Agriculture. Growing of perennial crops	5,33% 3,96% 2,95%	**16,25%**
5-6	Financial and insurance activities Manufacture of food products Accommodation and food service activities	6,91% 1,7% 1,75%	**12,94%**
3-4	Wholesale and retail trade Real estate activities Information and communication	8,02% 0.41% 0.33%	**9,79%**
1-2	Professional, scientific and technical activities Education Other service activities	0.52% 0.12% 2,76%	**3,4%**
	Unrated (Retail)	57,63%	57,63%



Loan Portfolio Volume
2,289,929,232 thousand AMD

Appendix 1

NACE-Code	Sector	ESG-Risk Sector-Score														
		Physical Climate Risk			Transition Climate Risk						Other ESG-Risks					Total
						Transitional Intensity										
		Acute	Chronic	Σ	GHG-Emission Contribution	Probability of regulatory Change	Economic Impact of regulatory Change	Technology Squeeze-out	Customer/ Consumer Behavior	Σ	Loss of Biodiversity	Other Environmental Risks	Possible Violation of Human Rights	Other Social Risks	Σ	Σ
A	Agriculture, Forestry and Fishing	3.0	3.5	3.25	4.0	2.0	2.0	1.5	1.0	2.81	1.00	0.75	0.50	0.50	2.8	9
A 1.1	Growing of non-perennial Crops	3.0	3.5	3.25	4.0	2.0	2.0	1.5	1.0	2.81	1.00	0.50	0.50	0.50	2.5	9
A 1.2	Growing of perennial Crops	3.0	3.5	3.25	4.0	2.0	2.0	1.5	1.0	2.81	1.00	0.75	0.50	0.50	2.8	9
A 1.4	Animal Production	3.0	3.5	3.25	4.0	2.0	2.0	1.5	1.0	2.81	0.75	0.50	0.50	0.50	2.3	8
A 2	Forestry and Logging	3.0	3.5	3.25	4.0	2.0	2.5	1.5	0.5	2.81	1.00	0.75	0.50	0.50	2.8	9
A 3	Fishing and Aquaculture	2.5	3.0	2.75	4.0	1.0	0.0	1.0	0.5	2.31	0.75	0.50	0.50	0.50	2.3	7
B	Mining and Quarrying	3.0	2.5	2.75	3.5	2.5	1.5	0.5	0.0	2.31	1.00	0.75	0.75	0.75	3.3	8
C	Manufacturing															
C 10	Manufacture of Food Products	2.0	2.5	2.25	2.0	2.0	1.0	1.0	1.0	1.63	0.75	0.50	0.50	0.50	2.3	6
C 11	Manufacture of Beverages	1.5	2.0	1.75	2.0	2.0	1.0	1.0	1.0	1.63	0.75	0.50	0.00	0.50	1.8	5
C 12	Manufacture of Tobacco Products	2.0	2.5	2.25	3.0	2.5	2.5	2.0	3.0	2.75	1.00	0.50	0.75	1.00	3.3	8
C 13	Manufacture of Textiles	1.5	1.5	1.50	2.5	2.0	1.0	0.5	0.5	1.75	0.75	0.50	0.50	0.50	2.3	6
C 14	Manufacture of wearing Apparel	1.0	1.5	1.25	2.0	1.0	1.0	0.5	0.5	1.38	0.75	0.50	0.50	0.50	2.3	5
C 15	Manufacture of Leather and related Products	1.0	1.5	1.25	2.0	2.0	1.0	0.5	0.5	1.50	0.25	0.50	0.50	0.50	1.8	5
C 16	Manufacture of Wood and of Products of Wood and Cork, except Furniture; Manufacture of Articles of Straw and Plaiting Material	1.5	1.5	1.50	2.0	1.0	1.0	0.0	0.0	1.25	1.00	0.50	0.00	0.50	2.0	5

C 17	Manufacture of Paper and Paper Products	1.5	2.0	1.75	2.5	2.0	1.5	1.0	1.0	1.94	0.75	0.50	0.00	0.50	1.8	5
C 18	Printing and Reproduction of Recorded Media	1.0	1.0	1.00	1.0	1.0	1.0	1.0	1.0	1.00	0.75	0.00	0.00	0.00	0.8	3
C 19	Manufacture of Coke and refined Petroleum Products	2.5	2.5	2.50	3.5	3.0	2.5	3.0	2.0	3.06	0.50	0.75	0.50	0.50	2.3	8
C 20	Manufacture of Chemicals and chemical Products	3.0	2.5	2.75	3.5	2.5	1.0	1.0	1.0	2.44	0.50	0.75	0.50	0.50	2.3	7
C 21	Manufacture of basic pharmaceutical Products and pharmaceutical Preparations	2.0	2.5	2.25	2.0	2.0	1.0	0.0	0.5	1.44	0.50	0.50	0.00	0.50	1.5	5
C 22	Manufacture of Rubber and plastic Products	1.0	1.0	1.00	4.0	2.0	1.0	0.5	1.0	2.56	0.50	0.50	0.00	0.50	1.5	5
C 23	Manufacture of other non-metallic mineral Products	1.5	1.5	1.50	3.0	2.0	1.0	0.5	0.5	2.00	0.50	0.50	0.00	0.50	1.5	5
C 24	Manufacture of basic Metals	1.0	1.0	1.00	4.0	2.0	1.5	0.0	0.5	2.50	0.75	0.50	0.00	0.50	1.8	5
C 25	Manufacture of fabricated metal Products, except Machinery and Equipment	1.0	1.0	1.00	4.0	2.0	1.5	0.5	0.5	2.56	0.75	0.50	0.00	0.50	1.8	5
C 26	Manufacture of Computer, electronic and optical Products	1.0	1.0	1.00	2.0	1.0	1.0	0.0	0.5	1.31	0.75	0.50	0.00	0.00	1.3	4
C 27	Manufacture of electrical Equipment	1.0	1.0	1.00	2.0	1.0	1.0	0.0	0.5	1.31	0.50	0.50	0.00	0.00	1.0	3
C 28	Manufacture of Machinery and Equipment	1.5	1.5	1.50	2.0	2.0	1.0	0.0	0.0	1.38	0.50	0.50	0.00	0.50	1.5	4
C 29	Manufacture of Motor Vehicles, Trailers and semi-Trailers	2.0	1.5	1.75	2.0	2.0	2.5	2.0	2.0	2.06	0.50	0.75	0.50	0.75	2.5	6
C 30	Manufacture of other Transport Equipment	1.5	1.5	1.50	2.0	2.0	1.0	0.0	0.5	1.44	0.50	0.50	0.50	0.50	2.0	5
C 31	Manufacture of Furniture	1.0	1.0	1.00	2.0	1.0	1.0	0.0	0.0	1.25	0.50	0.25	0.00	0.00	0.8	3
C 32	Other manufacturing	1.0	1.0	1.00	2.0	2.0	1.0	0.0	0.5	1.44	0.75	0.50	0.00	0.00	1.3	4
C 33	Repair and installation of Machinery and Equipment	1.0	1.0	1.00	1.0	1.5	1.5	0.0	0.0	###	0.50	0.50	0.00	0.00	1.0	3
D	Electricity, Gas, Steam and Air Conditioning Supply	2.5	2.5	2.50	4.0	3.5	2.5	3.0	2.5	3.44	0.75	0.75	0.50	0.50	2.5	8
E	Water Supply, Sewerage, Waste Management and Remediation Activities	1.5	2.5	2.00	3.0	3.5	2.0	1.5	2.0	2.63	0.50	0.75	0.50	0.50	2.3	7

F	Construction	2.0	2.0	2.00	3.0	2.5	1.5	1.5	2.0	2.44	0.75	0.50	0.75	0.75	2.8	7
G	Wholesale and Retail Trade	1.0	1.0	1.00	1.0	0.5	0.25	0.0	1.0	0.72	0.75	0.00	0.00	0.50	1.3	3
H	Transportation and Storage	3.0	3.0	3.00	4.0	2.0	1.50	1.0	0.5	2.63	0.75	0.75	0.50	0.75	2.8	8
I	Accommodation and Food Service Activities	2.0	2.0	2.00	1.5	1.0	1.0	1.0	1.0	1.25	0.50	0.50	0.00	0.50	1.5	5
J	Information and Communication	2.0	1.0	1.50	1.0	0.0	0.0	0.0	0.0	0.50	0.25	0.50	0.00	0.25	1.0	3
K	Financial and Insurance Activities	2.0	2.0	2.00	2.0	2.0	2.5	1.0	1.0	1.81	0.25	0.50	0.00	0.50	1.3	5
L	Real Estate Activities	1.5	1.5	1.50	1.5	1.5	1.0	1.0	0.5	1.25	0.50	0.00	0.00	0.25	0.8	4
M	Professional, Scientific and Technical Activities	1.0	1.0	1.00	1.0	0.0	0.0	0.5	0.5	0.63	0.50	0.00	0.00	0.00	0.5	2
N	Administrative and Support Service Activities	1.0	1.0	1.00	1.0	0.0	0.0	0.0	0.0	0.50	0.50	0.00	0.00	0.00	0.5	2
O	Public Administration and Defence, Compulsory Social Security	1.0	1.0	1.00	1.0	0.0	0.0	0.0	0.0	0.50	0.25	0.00	0.00	0.00	0.3	2
P	Education	1.0	1.0	1.00	1.0	1.0	0.0	0.0	0.0	0.63	0.25	0.00	0.00	0.00	0.3	2
Q	Human Health and Social Work Activities	2.0	2.0	2.00	1.0	0.0	0.0	0.0	0.25	0.53	0.25	0.50	0.25	0.50	1.5	4
R	Arts, Entertainment and Recreation	1.0	1.0	1.00	1.0	0.0	0.0	0.0	0.0	0.50	0.75	0.50	0.00	0.50	1.8	3
S	Other Service Activities	1.0	1.0	1.00	1.0	0.0	0.0	0.0	0.0	0.50	0.25	0.00	0.00	0.00	0.3	2
T	Activities of Households as Employers	1.0	1.0	1.00	1.0	0.0	0.0	0.0	0.0	0.50	0.75	0.25	0.00	0.50	1.5	3
U	Activities of Extraterritorial Organisations and Bodies	1.0	1.0	1.00	1.0	0.0	0.0	0.0	0.0	0.50	0.25	0.00	0.00	0.00	0.3	2

Appendix 2

A. Agriculture, Forestry and Fishing

Growing of non-perennial crops

Total Score

A 1.1	Agriculture, Forestry and Fishing - growing of non-perennial crops			Scoring			Reference
	Physical Climate Risk	Acute		3.0		3.3	1
		Chronic		3.5			2
	Transition Climate Risk	GHG-Emission Contribution		4.0		2.81	3
		Transitional Intensity	Probability of regulatory Change	2.0	1.6		4
			Economic Impact of regulatory Change	2.0			5
			Technological Change	1.5			6
			Customer Behavior	1.0			7
	Other ESG Risks	Loss of Biodiversity		Add-on Factor	1.00	2.5	8
		Other Environmental Risks		Add-on Factor	0.5		9
		Possible Human Rights Issues		Add-on Factor	0.5		10
		Other Social Risks		Add-on Factor	0.5		11
	ESG-Risk Score at Sector-Level:					9	8.56

Acute Climate Risk

A 1.1	Agriculture, Forestry and Fishing - growing of non-perennial crops				Scoring			Reference
	Are acute climate events in the country/region already relevant for the sector under consideration?				Score	Weight	Total	
	"No"		Is it likely that this relevance will be given in the future?	"No"				
				"Yes"		1.00	0.00	1
				"Yes, very likely"		1.00		
	"Yes"	x	Observed loss of assets/property		0.50	1.00	0.50	2
			Expected impact on revenue		0.50	1.00	0.50	3
			Expected impact on costs		0.75	1.00	0.75	4
			1-3 expected to increase in the future		0.50	1.00	0.50	5
			Lack of adaptability of the business model		0.75	1.00	0.75	6
			Sectors in the supply chain have a score >2.5 for acute climate risks (see table below)		0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Acute Climate Risk Score at Sector-Level:						3.0	Max. 4

Chronic Climate Risk

A 1.1	Agriculture, Forestry and Fishing - growing of non-perennial crops					Scoring			Reference
	Are chronic climate developments in the country/region already relevant for the sector under consideration?					Score	Weight	Total	
	"No"		Is it likely that this relevance will be given in the future?		"No"				
					"Yes"		1.00	0.00	1
					"Yes, very likely"		1.00		
	"Yes"	x	Observed loss of assets/property			0.50	1.00	0.50	2
			Expected impact on revenue			0.75	1.00	0.75	3
			Expected impact on costs			0.50	1.00	0.50	4
			1-3 expected to increase in the future			0.75	1.00	0.75	5
			Lack of adaptability of the business model			0.75	1.00	0.75	6
			Sectors in the supply chain have a score >2.5 for acute climate risks (see table below)			0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)				+/-	0.00	8
	Chronic Climate Risk Score at Sector-Level:							3.5	Max. 4

GHG Emissions

A 1.1	Agriculture, Forestry and Fishing - growing of non-perennial crops			Scoring		Reference
	Assignment of a score depending on the percentage of the sector emissions (X) of the total emissions of the country			Percentage-Range	Total	
	X ≥ 10%			x	4.00	
	10% > X ≥ 7.5%					
	7.5% > X ≥ 5%					
	5% > X ≥ 1%					
	1% > X ≥ 0.5%					
	0.5% > X ≥ 0.25%					
	Do sector activities have a negative impact on carbon sinks?	"No"		Add-on Factor 0		
		"Yes"		Add-on Factor 0.5		
		"Yes, severely"	x	Add-on Factor 1	1.00	
	Are sectors in the supply chain assessed with significant or existential emissions?	"No"		Add-on Factor 0		
		"Yes, score 3 emissions"		Add-on Factor 0.25		
		"Yes, score 4 emissions"		Add-on Factor 0.5		
	GHG-Emission Contribution Score at Sector-Level:				4.0	Max. 4

Probability of Regulatory Change

A 1.1	Agriculture, Forestry and Fishing - growing of non-perennial crops				Scoring			Reference
	Is the business case of the sector under consideration likely to be affected by regulatory change (now/ near future)?				Score	Weight	Total	
	"No"		Is this kind of regulation already present in other relevant countries?	"No"				
				"Yes, it is planned"		1.00		
				"Yes, it is established"		1.00	0.00	1
				"Yes, it is established and a further extention is planned"		1.00		
	"Yes"	x	Announced in the country under consideration		0.75	1.00	0.75	2
			Established in the country under consideration			2.00	0.00	3
			Further extension of this very regulation announced		0.00	0.50	0.00	4
			Announced in other relevant countries		0.50	0.50	0.25	5
			Established in other relevant countries		0.75	1.00	0.75	6
			Perceived pressure of the population i.e. in the context of catastrophes or severe economic losses			1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Probability of regulatory Change Risk Score at Sector-Level:						2.0	Max. 4

Economic Impact of Regulatory Change

A 1.1	Agriculture, Forestry and Fishing - growing of non-perennial crops				Scoring			Reference
	Is it likely that the regulatory change will have an ESG-impact (in the form of opportunities, risks, costs) on the sector?				Score	Weight	Total	
	"No"		Is the assessed score for "Probability of Regulatory Change" > 1.5 AND is an ESG-impact observed in other relevant countries?	"No, probability score < 1.5 or no ESG impact assumed"				
				"Yes, score > 1.5 and an ESG impact is assumed"		1.00	0.00	1
				"Yes, score > 1.5 and an ESG impact is perceived"		1.00		
				"Yes, score > 1.5 and a high ESG impact is perceived"		1.00		
	"Yes"	x	Effect on the business model		0.75	2.00	1.50	2
			Strong effect on the business model		0.00	1.00	0.00	3
			1-2 expected to increase in the future		0.00	0.50	0.00	4
			1 or 2 obvious in other relevant countries		0.50	1.00	0.50	5
			Impact on the value chain		0.00	0.50	0.00	6
			Lack of adaptability of the business model		0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)		0.00	+/-	0.00	8
	Impact of regulatory Change Risk Score at Sector-Level:						2.0	Max. 4

Technological Change

A 1.1	Agriculture, Forestry and Fishing - growing of non-perennial crops				Scoring			Reference
	Is an alternative technology/methodology with sustainability-related advantages available/used in this sector in the country under consideration?				Score	Weight	Total	
	"No"		Is this technology available/ used in this sector in other relevant countries?	"No"				
				"No, to date it is just at theory/ study-level"		1.00	0.00	1
				"Yes, it is available and used in other relevant countries"		1.00		
				"Yes, it is heavily used in other relevant countries"		1.00		
	"Yes"	x	Use in the country under consideration		0.50	1.00	0.50	2
			Heavy use in the country under consideration		0.00	1.00	0.00	3
			Use in other relevant countries		0.50	0.50	0.25	4
			Heavy use in other relevant countries		0.00	1.00	0.00	5
			Accepted economic benefit of technology (lower costs and/or higher yields)		0.50	1.50	0.75	6
			Accepted strong economic benefit of technology (much lower costs and/or much higher yields)		0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)		0.00	+/-	0.00	8
	Technological Change Risk Score at Sector-Level:						1.5	Max. 4

Customer Behavior

A 1.1	Agriculture, Forestry and Fishing - growing of non-perennial crops				Scoring			Reference
	Are customers accepting/demanding the new technology (see above assessment of technological change) in the country under consideration?				Score	Weight	Total	
	"No"		Are customers accepting/ demanding this very technology in other, export-relevant countries?	"No"				
				"Yes, the use can be recognised in its beginnings"		1.00		
				"Yes, the use can be clearly recognised"		1.00	0.00	1
				"Yes, the strong use can be clearly recognised"		1.00		
	"Yes"	x	Perceived benefits in costs/maintenance from the user's perspective		0.00	2.00	0.00	2
			Perceived benefits in health from the user's perspective		0.50	1.00	0.50	3
			Perceived benefits in quality/durability from the user's perspective		0.00	1.00	0.00	4
			Perceived benefits to society and ecosystems		0.75	0.50	0.38	5
			Mass Media presence conveying a positive image		0.00	1.00	0.00	6
			VIP-Advocates		0.00	0.50	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Customer Behavior Risk Score at Sector-Level:						1.0	Max. 4

Growing of perennial crops

Total

A 1.2	Agriculture, Forestry and Fishing - growing of perennial crops			Scoring			Reference
	Physical Climate Risk	Acute		3.0		3.3	1
		Chronic		3.5			2
	Transition Climate Risk	GHG-Emission Contribution		4.0		2.81	3
		Transitional Intensity	Probability of regulatory Change	2.0	1.6		4
			Economic Impact of regulatory Change	2.0			5
			Technological Change	1.5			6
			Customer Behavior	1.0			7
	Other ESG Risks	Loss of Biodiversity		Add-on Factor	1.0	2.8	8
		Other Environmental Risks		Add-on Factor	0.75		9
		Possible Human Rights Issues		Add-on Factor	0.5		10
		Other Social Risks		Add-on Factor	0.5		11
	ESG-Risk Score at Sector-Level:					9	8.81

Acute Climate Risk

A 1.2	Agriculture, Forestry and Fishing - growing of perennial crops				Scoring			Reference
	Are acute climate events in the country/region already relevant for the sector under consideration?				Score	Weight	Total	
	"No"		Is it likely that this relevance will be given in the future?	"No"				
				"Yes"		1.00	0.00	1
				"Yes, very likely"		1.00		
	"Yes"	x	Observed loss of assets/property		0.50	1.00	0.50	2
			Expected impact on revenue		0.75	1.00	0.75	3
			Expected impact on costs		0.50	1.00	0.50	4
			1-3 expected to increase in the future		0.50	1.00	0.50	5
			Lack of adaptability of the business model		0.75	1.00	0.75	6
			Sectors in the supply chain have a score >2.5 for acute climate risks (see table below)			1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Acute Climate Risk Score at Sector-Level:						3.0	Max. 4

Chronic Climate Risk

A 1.2	Agriculture, Forestry and Fishing - growing of perennial crops				Scoring			Reference
	Are chronic climate developments in the country/region already relevant for the sector under consideration?				Score	Weight	Total	
	"No"		Is it likely that this relevance will be given in the future?	"No"				
				"Yes"		1.00	0.00	1
				"Yes, very likely"		1.00		
	"Yes"	x	Observed loss of assets/property		0.75	1.00	0.75	2
			Expected impact on revenue		0.75	1.00	0.75	3
			Expected impact on costs		0.50	1.00	0.50	4
			1-3 expected to increase in the future		0.75	1.00	0.75	5
			Lack of adaptability of the business model		0.75	1.00	0.75	6
			Sectors in the supply chain have a score >2.5 for acute climate risks (see table below)		0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Chronic Climate Risk Score at Sector-Level:						3.5	Max. 4

GHG Emissions

A 1.2	Agriculture, Forestry and Fishing - growing of perennial crops				Scoring		Reference
	Assignment of a score depending on the percentage of the sector emissions (X) of the total emissions of the country				Percentage-Range	Total	
	X ≥ 10%				x	4.00	
	10% > X ≥ 7.5%						
	7.5% > X ≥ 5%						
	5% > X ≥ 1%						
	1% > X ≥ 0.5%						
	0.5% > X ≥ 0.25%						
	Do sector activities have a negative impact on carbon sinks?	"No"		Add-on Factor 0			
		"Yes"		Add-on Factor 0.5			
		"Yes, severely"	x	Add-on Factor 1		1.00	
	Are sectors in the supply chain assessed with significant or existential emissions?	"No"		Add-on Factor 0			
		"Yes, score 3 emissions"		Add-on Factor 0.25			
		"Yes, score 4 emissions"		Add-on Factor 0.5			
	GHG-Emission Contribution Score at Sector-Level:					4.0	Max. 4

Probability of Regulatory Change

A 1.2	Agriculture, Forestry and Fishing - growing of perennial crops				Scoring			Reference
	Is the business case of the sector under consideration likely to be affected by regulatory change (now/ near future)?				Score	Weight	Total	
"No"		Is this kind of regulation already present in other relevant countries?		"No"				
				"Yes, it is planned"		1.00	0.00	1
				"Yes, it is established"		1.00		
				"Yes, it is established and a further extention is planned"		1.00		
"Yes"	x	Announced in the country under consideration			0.75	1.00	0.75	2
		Established in the country under consideration			0.00	2.00	0.00	3
		Further extension of this very regulation announced			0.00	0.50	0.00	4
		Announced in other relevant countries			0.50	0.50	0.25	5
		Established in other relevant countries			0.75	1.00	0.75	6
		Perceived pressure of the population i.e. in the context of catastrophes or severe economic losses				1.00	0.00	7
		Local expert grading (score-modification between -0.5 and +0.5, see commentary below)				+/-	0.00	8
	Probability of regulatory Change Risk Score at Sector-Level:						2.0	Max. 4

Impact of Regulatory Change

A 1.2	Agriculture, Forestry and Fishing - growing of perennial crops				Scoring			Reference
	Is it likely that the regulatory change will have an ESG-impact (in the form of opportunities, risks, costs) on the sector?				Score	Weight	Total	
	"No"		Is the assessed score for "Probability of Regulatory Change" > 1.5 AND is an ESG-impact observed in other relevant countries?	"No, probability score < 1.5 or no ESG impact assumed"				
				"Yes, score > 1.5 and an ESG impact is assumed"		1.00	0.00	1
				"Yes, score > 1.5 and an ESG impact is perceived"		1.00		
				"Yes, score > 1.5 and a high ESG impact is perceived"		1.00		
	"Yes"	x	Effect on the business model		0.75	2.00	1.50	2
			Strong effect on the business model		0.00	1.00	0.00	3
			1-2 expected to increase in the future			0.50	0.00	4
			1 or 2 obvious in other relevant countries		0.50	1.00	0.50	5
			Impact on the value chain		0.00	0.50	0.00	6
			Lack of adaptability of the business model		0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Impact of regulatory Change Risk Score at Sector-Level:						2.0	Max. 4

Technological Change

A 1.2	Agriculture, Forestry and Fishing - growing of perennial crops				Scoring			Reference
	Is an alternative technology/methodology with sustainability-related advantages available/used in this sector in the country under consideration?				Score	Weight	Total	
	"No"		Is this technology available/ used in this sector in other relevant countries?	"No"				
				"No, to date it is just at theory/ study-level"		1.00	0.00	1
				"Yes, it is available and used in other relevant countries"		1.00		
				"Yes, it is heavily used in other relevant countries"		1.00		
	"Yes"	x	Use in the country under consideration		0.50	1.00	0.50	2
			Heavy use in the country under consideration		0.00	1.00	0.00	3
			Use in other relevant countries		0.50	0.50	0.25	4
			Heavy use in other relevant countries		0.00	1.00	0.00	5
			Accepted economic benefit of technology (lower costs and/or higher yields)		0.50	1.50	0.75	6
			Accepted strong economic benefit of technology (much lower costs and/or much higher yields)		0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Technological Change Risk Score at Sector-Level:						1.5	Max. 4

Customer Behavior

A 1.2	Agriculture, Forestry and Fishing - growing of perennial crops				Scoring			Reference
	Are customers accepting/demanding the new technology (see above assessment of technological change) in the country under consideration?				Score	Weight	Total	
"No"		Are customers accepting/ demanding this very technology in other, export-relevant countries?		"No"				
				"Yes, the use can be recognised in its beginnings"		1.00	0.00	1
				"Yes, the use can be clearly recognised"		1.00		
				"Yes, the strong use can be clearly recognised"		1.00		
"Yes"	x	Perceived benefits in costs/maintenance from the user's perspective			0.00	2.00	0.00	2
		Perceived benefits in health from the user's perspective			0.50	1.00	0.50	3
		Perceived benefits in quality/durability from the user's perspective			0.00	1.00	0.00	4
		Perceived benefits to society and ecosystems			0.75	0.50	0.38	5
		Mass Media presence conveying a positive image			0.00	1.00	0.00	6
		VIP-Advocates			0.00	0.50	0.00	7
		Local expert grading (score-modification between -0.5 and +0.5, see commentary below)				+/-	0.00	8
	Customer Behavior Risk Score at Sector-Level:						1.0	Max. 4

Animal Production

Total

A 01.4	Agriculture, Forestry and Fishing - Animal Production			Scoring			Reference
	Physical Climate Risk	Acute		3.0		3.3	1
		Chronic		3.5			2
	Transition Climate Risk	GHG-Emission Contribution		4.0		2.81	3
		Transitional Intensity	Probability of regulatory Change	2.0	1.6		4
			Economic Impact of regulatory Change	2.0			5
			Technological Change	1.5			6
			Customer Behavior	1.0			7
	Other ESG Risks	Loss of Biodiversity		Add-on Factor	0.75	2.3	8
		Other Environmental Risks		Add-on Factor	0.5		9
		Possible Human Rights Issues		Add-on Factor	0.5		10
		Other Social Risks		Add-on Factor	0.5		11
	ESG-Risk Score at Sector-Level:					**8**	8.31

Acute Climate Risk

A 01.4	Agriculture, Forestry and Fishing - Animal Production					Scoring			Reference
	Are acute climate events in the country/region already relevant for the sector under consideration?					Score	Weight	Total	
	"No"		Is it likely that this relevance will be given in the future?		"No"				
					"Yes"		1.00	0.00	1
					"Yes, very likely"		1.00		
	"Yes"	x	Observed loss of assets/property			0.75	1.00	0.75	2
			Expected impact on revenue			0.50	1.00	0.50	3
			Expected impact on costs			0.50	1.00	0.50	4
			1-3 expected to increase in the future			0.50	1.00	0.50	5
			Lack of adaptability of the business model			0.50	1.00	0.50	6
			Sectors in the supply chain have a score >2.5 for acute climate risks (see table below)			0.50	1.00	0.50	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			-0.50	+/-	-0.50	8
	Acute Climate Risk Score at Sector-Level:							3.0	Max. 4

Chronic Climate Risk

A 01.4	Agriculture, Forestry and Fishing - Animal Production				Scoring			Reference
	Are chronic climate developments in the country/region already relevant for the sector under consideration?				Score	Weight	Total	
	"No"		Is it likely that this relevance will be given in the future?	"No"				
				"Yes"		1.00	0.00	1
				"Yes, very likely"		1.00		
	"Yes"	x	Observed loss of assets/property		0.75	1.00	0.75	2
			Expected impact on revenue		0.50	1.00	0.50	3
			Expected impact on costs		0.75	1.00	0.75	4
			1-3 expected to increase in the future		0.75	1.00	0.75	5
			Lack of adaptability of the business model		0.75	1.00	0.75	6
			Sectors in the supply chain have a score >2.5 for acute climate risks (see table below)		0.75	1.00	0.75	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)		-0.75	+/-	-0.75	8
	Chronic Climate Risk Score at Sector-Level:						3.5	Max. 4

GHG Emissions

A 01.4	Agriculture, Forestry and Fishing - Animal Production			Scoring		Reference
	Assignment of a score depending on the percentage of the sector emissions (X) of the total emissions of the country			Percentage-Range	Total	
	X ≥ 10%			x	4.00	
	10% > X ≥ 7.5%					
	7.5% > X ≥ 5%					
	5% > X ≥ 1%					
	1% > X ≥ 0.5%					
	0.5% > X ≥ 0.25%					
	Do sector activities have a negative impact on carbon sinks?	"No"		Add-on Factor 0		
		"Yes"		Add-on Factor 0.5		
		"Yes, severely"	x	Add-on Factor 1	1.00	
	Are sectors in the supply chain assessed with significant or existential emissions?	"No"		Add-on Factor 0		
		"Yes, score 3 emissions"		Add-on Factor 0.25		
		"Yes, score 4 emissions"		Add-on Factor 0.5		
	GHG-Emission Contribution Score at Sector-Level:				4.0	Max. 4

Probability of Regulatory Change

A 01.4	Agriculture, Forestry and Fishing - Animal Production				Scoring			Reference
	Is the business case of the sector under consideration likely to be affected by regulatory change (now/ near future)?				Score	Weight	Total	
	"No"		Is this kind of regulation already present in other relevant countries?	"No"				
				"Yes, it is planned"		1.00	0.00	1
				"Yes, it is established"		1.00		
				"Yes, it is established and a further extention is planned"		1.00		
	"Yes"	x	Announced in the country under consideration		0.75	1.00	0.75	2
			Established in the country under consideration		0.00	2.00	0.00	3
			Further extension of this very regulation announced		0.00	0.50	0.00	4
			Announced in other relevant countries		0.50	0.50	0.25	5
			Established in other relevant countries		0.75	1.00	0.75	6
			Perceived pressure of the population i.e. in the context of catastrophes or severe economic losses		0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Probability of regulatory Change Risk Score at Sector-Level:						2.0	Max. 4

Impact of Regulatory Change

A 01.4	Agriculture, Forestry and Fishing - Animal Production				Scoring			Reference
	Is it likely that the regulatory change will have an ESG-impact (in the form of opportunities, risks, costs) on the sector?				Score	Weight	Total	
	"No"		Is the assessed score for "Probability of Regulatory Change" > 1.5 AND is an ESG-impact observed in other relevant countries?	"No, probability score < 1.5 or no ESG impact assumed"				
				"Yes, score > 1.5 and an ESG impact is assumed"		1.00	0.00	1
				"Yes, score > 1.5 and an ESG impact is perceived"		1.00		
				"Yes, score > 1.5 and a high ESG impact is perceived"		1.00		
	"Yes"	x	Effect on the business model		0.75	2.00	1.50	2
			Strong effect on the business model		0.00	1.00	0.00	3
			1-2 expected to increase in the future		0.00	0.50	0.00	4
			1 or 2 obvious in other relevant countries		0.50	1.00	0.50	5
			Impact on the value chain		0.00	0.50	0.00	6
			Lack of adaptability of the business model		0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Impact of regulatory Change Risk Score at Sector-Level:						2.0	Max. 4

Technological Change

A 01.4	Agriculture, Forestry and Fishing - Animal Production				Scoring			Reference
	Is an alternative technology/methodology with sustainability-related advantages available/used in this sector in the country under consideration?				Score	Weight	Total	
	"No"		Is this technology available/ used in this sector in other relevant countries?	"No"				
				"No, to date it is just at theory/ study-level"		1.00	0.00	1
				"Yes, it is available and used in other relevant countries"		1.00		
				"Yes, it is heavily used in other relevant countries"		1.00		
	"Yes"	x	Use in the country under consideration		0.50	1.00	0.50	2
			Heavy use in the country under consideration		0.00	1.00	0.00	3
			Use in other relevant countries		0.50	0.50	0.25	4
			Heavy use in other relevant countries		0.00	1.00	0.00	5
			Accepted economic benefit of technology (lower costs and/or higher yields)		0.50	1.50	0.75	6
			Accepted strong economic benefit of technology (much lower costs and/or much higher yields)		0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Technological Change Risk Score at Sector-Level:						1.5	Max. 4

Customer Behavior

A 01.4	Agriculture, Forestry and Fishing - Animal Production				Scoring			Reference
	Are customers accepting/demanding the new technology (see above assessment of technological change) in the country under consideration?				Score	Weight	Total	
	"No"		Are customers accepting/ demanding this very technology in other, export-relevant countries?	"No"				
				"Yes, the use can be recognised in its beginnings"		1.00	0.00	1
				"Yes, the use can be clearly recognised"		1.00		
				"Yes, the strong use can be clearly recognised"		1.00		
	"Yes"	x	Perceived benefits in costs/maintenance from the user's perspective		0.00	2.00	0.00	2
			Perceived benefits in health from the user's perspective		0.50	1.00	0.50	3
			Perceived benefits in quality/durability from the user's perspective		0.00	1.00	0.00	4
			Perceived benefits to society and ecosystems		0.75	0.50	0.38	5
			Mass Media presence conveying a positive image		0.00	1.00	0.00	6
			VIP-Advocates		0.00	0.50	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Customer Behavior Risk Score at Sector-Level:						1.0	Max. 4

Forestry and Logging

Total

A 2	Agriculture, Forestry and Fishing - Forestry and Logging			Scoring			Reference
	Physical Climate Risk	Acute		3.0		3.3	1
		Chronic		3.5			2
	Transition Climate Risk	GHG-Emission Contribution		4.0		2.81	3
		Transitional Intensity	Probability of regulatory Change	2.0	1.6		4
			Economic Impact of regulatory Change	2.5			5
			Technological Change	1.5			6
			Customer Behavior	0.5			7
	Other ESG Risks	Loss of Biodiversity		Add-on Factor	1.00	2.8	8
		Other Environmental Risks		Add-on Factor	0.75		9
		Possible Human Rights Issues		Add-on Factor	0.5		10
		Other Social Risks		Add-on Factor	0.5		11
	ESG-Risk Score at Sector-Level:					**9**	8.81

Acute Climate Risk

A 2	Agriculture, Forestry and Fishing - Forestry and Logging				Scoring			Reference
	Are acute climate events in the country/region already relevant for the sector under consideration?				Score	Weight	Total	
	"No"		Is it likely that this relevance will be given in the future?	"No"				
				"Yes"		1.00	0.00	1
				"Yes, very likely"		1.00		
	"Yes"	x	Observed loss of assets/property		0.75	1.00	0.75	2
			Expected impact on revenue		0.50	1.00	0.50	3
			Expected impact on costs		0.75	1.00	0.75	4
			1-3 expected to increase in the future		0.50	1.00	0.50	5
			Lack of adaptability of the business model		0.50	1.00	0.50	6
			Sectors in the supply chain have a score >2.5 for acute climate risks (see table below)		0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Acute Climate Risk Score at Sector-Level:						3.0	Max. 4

Chronic Climate Risk

A 2	Agriculture, Forestry and Fishing - Forestry and Logging					Scoring			Reference
	Are chronic climate developments in the country/region already relevant for the sector under consideration?					Score	Weight	Total	
	"No"		Is it likely that this relevance will be given in the future?		"No"				
					"Yes"		1.00	0.00	1
					"Yes, very likely"		1.00		
	"Yes"	x	Observed loss of assets/property			0.75	1.00	0.75	2
			Expected impact on revenue			0.75	1.00	0.75	3
			Expected impact on costs			0.50	1.00	0.50	4
			1-3 expected to increase in the future			0.75	1.00	0.75	5
			Lack of adaptability of the business model			0.50	1.00	0.50	6
			Sectors in the supply chain have a score >2.5 for acute climate risks (see table below)			0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)				+/-	0.00	8
	Chronic Climate Risk Score at Sector-Level:							3.5	Max. 4

GHG Emissions

A 2	Agriculture, Forestry and Fishing - Forestry and Logging			Scoring		Reference
	Assignment of a score depending on the percentage of the sector emissions (X) of the total emissions of the country			Percentage-Range	Total	
	X ≥ 10%			x	4.00	
	10% > X ≥ 7.5%					
	7.5% > X ≥ 5%					
	5% > X ≥ 1%					
	1% > X ≥ 0.5%					
	0.5% > X ≥ 0.25%					
	Do sector activities have a negative impact on carbon sinks?	"No"		Add-on Factor 0		
		"Yes"		Add-on Factor 0.5		
		"Yes, severely"	x	Add-on Factor 1	1.00	
	Are sectors in the supply chain assessed with significant or existential emissions?	"No"		Add-on Factor 0		
		"Yes, score 3 emissions"		Add-on Factor 0.25		
		"Yes, score 4 emissions"		Add-on Factor 0.5		
	GHG-Emission Contribution Score at Sector-Level:				4.0	Max. 4

Probability of Regulatory Change

A 2	Agriculture, Forestry and Fishing - Forestry and Logging				Scoring			Reference
	Is the business case of the sector under consideration likely to be affected by regulatory change (now/ near future)?				Score	Weight	Total	
	"No"		Is this kind of regulation already present in other relevant countries?	"No"				
				"Yes, it is planned"		1.00	0.00	1
				"Yes, it is established"		1.00		
				"Yes, it is established and a further extention is planned"		1.00		
	"Yes"	x	Announced in the country under consideration		0.75	1.00	0.75	2
			Established in the country under consideration			2.00	0.00	3
			Further extension of this very regulation announced		0.00	0.50	0.00	4
			Announced in other relevant countries		0.50	0.50	0.25	5
			Established in other relevant countries		0.75	1.00	0.75	6
			Perceived pressure of the population i.e. in the context of catastrophes or severe economic losses			1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Probability of regulatory Change Risk Score at Sector-Level:						2.0	Max. 4

Impact of Regulatory Change

A 2	Agriculture, Forestry and Fishing - Forestry and Logging				Scoring			Reference
	Is it likely that the regulatory change will have an ESG-impact (in the form of opportunities, risks, costs) on the sector?				Score	Weight	Total	
	"No"		Is the assessed score for "Probability of Regulatory Change" > 1.5 AND is an ESG-impact observed in other relevant countries?	"No, probability score < 1.5 or no ESG impact assumed"				
				"Yes, score > 1.5 and an ESG impact is assumed"		1.00	0.00	1
				"Yes, score > 1.5 and an ESG impact is perceived"		1.00		
				"Yes, score > 1.5 and a high ESG impact is perceived"		1.00		
	"Yes"	x	Effect on the business model		0.75	2.00	1.50	2
			Strong effect on the business model		0.00	1.00	0.00	3
			1-2 expected to increase in the future			0.50	0.00	4
			1 or 2 obvious in other relevant countries		0.50	1.00	0.50	5
			Impact on the value chain		0.50	0.50	0.25	6
			Lack of adaptability of the business model		0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Impact of regulatory Change Risk Score at Sector-Level:						2.5	Max. 4

Technological Change

A 2	Agriculture, Forestry and Fishing - Forestry and Logging				Scoring			Reference
	Is an alternative technology/methodology with sustainability-related advantages available/used in this sector in the country under consideration?				Score	Weight	Total	
	"No"		Is this technology available/ used in this sector in other relevant countries?	"No"				
				"No, to date it is just at theory/ study-level"		1.00	0.00	1
				"Yes, it is available and used in other relevant countries"		1.00		
				"Yes, it is heavily used in other relevant countries"		1.00		
	"Yes"	x	Use in the country under consideration		0.50	1.00	0.50	2
			Heavy use in the country under consideration		0.00	1.00	0.00	3
			Use in other relevant countries		0.25	0.50	0.13	4
			Heavy use in other relevant countries		0.00	1.00	0.00	5
			Accepted economic benefit of technology (lower costs and/or higher yields)		0.50	1.50	0.75	6
			Accepted strong economic benefit of technology (much lower costs and/or much higher yields)		0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Technological Change Risk Score at Sector-Level:						1.5	Max. 4

Customer Behavior

A 2	Agriculture, Forestry and Fishing - Forestry and Logging				Scoring			Reference
	Are customers accepting/demanding the new technology (see above assessment of technological change) in the country under consideration?				Score	Weight	Total	
	"No"		Are customers accepting/ demanding this very technology in other, export-relevant countries?	"No"				
				"Yes, the use can be recognised in its beginnings"		1.00		
				"Yes, the use can be clearly recognised"		1.00	0.00	1
				"Yes, the strong use can be clearly recognised"		1.00		
	"Yes"	x	Perceived benefits in costs/maintenance from the user's perspective		0.00	2.00	0.00	2
			Perceived benefits in health from the user's perspective		0.00	1.00	0.00	3
			Perceived benefits in quality/durability from the user's perspective		0.00	1.00	0.00	4
			Perceived benefits to society and ecosystems		0.75	0.50	0.38	5
			Mass Media presence conveying a positive image		0.00	1.00	0.00	6
			VIP-Advocates		0.00	0.50	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Customer Behavior Risk Score at Sector-Level:						0.5	Max. 4

Fishing and Aquaculture

Total

A 3	Agriculture, Forestry and Fishing - Fishing and Aquaculture			Scoring			Reference
	Physical Climate Risk	Acute		2.5		2.8	1
		Chronic		3.0			2
	Transition Climate Risk	GHG-Emission Contribution		4.0		2.31	3
		Transitional Intensity	Probability of regulatory Change	1.0	0.6		4
			Economic Impact of regulatory Change	0.0			5
			Technological Change	1.0			6
			Customer Behavior	0.5			7
	Other ESG Risks	Loss of Biodiversity		Add-on Factor	0.75	2.3	8
		Other Environmental Risks		Add-on Factor	0.5		9
		Possible Human Rights Issues		Add-on Factor	0.5		10
		Other Social Risks		Add-on Factor	0.5		11
	ESG-Risk Score at Sector-Level:					7	7.31

Acute Climate Risk

A 3	Agriculture, Forestry and Fishing - Fishing and Aquaculture				Scoring			Reference
	Are acute climate events in the country/region already relevant for the sector under consideration?				Score	Weight	Total	
	"No"		Is it likely that this relevance will be given in the future?	"No"				
				"Yes"		1.00	0.00	1
				"Yes, very likely"		1.00		
	"Yes"	x	Observed loss of assets/property		0.50	1.00	0.50	2
			Expected impact on revenue		0.50	1.00	0.50	3
			Expected impact on costs		0.50	1.00	0.50	4
			1-3 expected to increase in the future		0.50	1.00	0.50	5
			Lack of adaptability of the business model		0.50	1.00	0.50	6
			Sectors in the supply chain have a score >2.5 for acute climate risks (see table below)			1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Acute Climate Risk Score at Sector-Level:						2.5	Max. 4

Chronic Climate Risk

A 3	Agriculture, Forestry and Fishing - Fishing and Aquaculture					Scoring			Reference
	Are chronic climate developments in the country/region already relevant for the sector under consideration?					Score	Weight	Total	
	"No"		Is it likely that this relevance will be given in the future?		"No"				
					"Yes"		1.00	0.00	1
					"Yes, very likely"		1.00		
	"Yes"	x	Observed loss of assets/property			0.75	1.00	0.75	2
			Expected impact on revenue			0.75	1.00	0.75	3
			Expected impact on costs			0.50	1.00	0.50	4
			1-3 expected to increase in the future			0.50	1.00	0.50	5
			Lack of adaptability of the business model			0.50	1.00	0.50	6
			Sectors in the supply chain have a score >2.5 for acute climate risks (see table below)				1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)				+/-	0.00	8
	Chronic Climate Risk Score at Sector-Level:							3.0	Max. 4

GHG Emissions

A 3	Agriculture, Forestry and Fishing - Fishing and Aquaculture				Scoring		Reference
	Assignment of a score depending on the percentage of the sector emissions (X) of the total emissions of the country				Percentage-Range	Total	
	X ≥ 10%				x	4.00	
	10% > X ≥ 7.5%						
	7.5% > X ≥ 5%						
	5% > X ≥ 1%						
	1% > X ≥ 0.5%						
	0.5% > X ≥ 0.25%						
	Do sector activities have a negative impact on carbon sinks?	"No"		Add-on Factor 0			
		"Yes"		Add-on Factor 0.5			
		"Yes, severely"	x	Add-on Factor 1		1.00	
	Are sectors in the supply chain assessed with significant or existential emissions?	"No"		Add-on Factor 0			
		"Yes, score 3 emissions"		Add-on Factor 0.25			
		"Yes, score 4 emissions"		Add-on Factor 0.5			
	GHG-Emission Contribution Score at Sector-Level:					4.0	Max. 4

Probability of Regulatory Change

A 3	Agriculture, Forestry and Fishing - Fishing and Aquaculture				Scoring			Reference
	Is the business case of the sector under consideration likely to be affected by regulatory change (now/ near future)?				Score	Weight	Total	
	"No"		Is this kind of regulation already present in other relevant countries?	"No"				
				"Yes, it is planned"		1.00	0.00	1
				"Yes, it is established"		1.00		
				"Yes, it is established and a further extention is planned"		1.00		
	"Yes"	x	Announced in the country under consideration		0.50	1.00	0.50	2
			Established in the country under consideration			2.00	0.00	3
			Further extension of this very regulation announced		0.00	0.50	0.00	4
			Announced in other relevant countries		0.50	0.50	0.25	5
			Established in other relevant countries		0.00	1.00	0.00	6
			Perceived pressure of the population i.e. in the context of catastrophes or severe economic losses		0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Probability of regulatory Change Risk Score at Sector-Level:						1.0	Max. 4

Impact of Regulatory Change

A 3	Agriculture, Forestry and Fishing - Fishing and Aquaculture					Scoring			Reference
	Is it likely that the regulatory change will have an ESG-impact (in the form of opportunities, risks, costs) on the sector?					Score	Weight	Total	
	"No"	x	Is the assessed score for "Probability of Regulatory Change" > 1.5 AND is an ESG-impact observed in other relevant countries?	x	"No, probability score < 1.5 or no ESG impact assumed"				
					"Yes, score > 1.5 and an ESG impact is assumed"		1.00		
					"Yes, score > 1.5 and an ESG impact is perceived"		1.00	0.00	1
					"Yes, score > 1.5 and a high ESG impact is perceived"		1.00		
	"Yes"		Effect on the business model			0.00	2.00	0.00	2
			Strong effect on the business model			0.00	1.00	0.00	3
			1-2 expected to increase in the future			0.00	0.50	0.00	4
			1 or 2 obvious in other relevant countries			0.00	1.00	0.00	5
			Impact on the value chain			0.00	0.50	0.00	6
			Lack of adaptability of the business model			0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)				+/-	0.00	8
	Impact of regulatory Change Risk Score at Sector-Level:							0.0	Max. 4

Technological Change

A 3	Agriculture, Forestry and Fishing - Fishing and Aquaculture				Scoring			Reference
	Is an alternative technology/methodology with sustainability-related advantages available/used in this sector in the country under consideration?				Score	Weight	Total	
	"No"		Is this technology available/ used in this sector in other relevant countries?	"No"				
				"No, to date it is just at theory/ study-level"		1.00	0.00	1
				"Yes, it is available and used in other relevant countries"		1.00		
				"Yes, it is heavily used in other relevant countries"		1.00		
	"Yes"	x	Use in the country under consideration		0.50	1.00	0.50	2
			Heavy use in the country under consideration		0.00	1.00	0.00	3
			Use in other relevant countries		0.50	0.50	0.25	4
			Heavy use in other relevant countries		0.00	1.00	0.00	5
			Accepted economic benefit of technology (lower costs and/or higher yields)		0.00	1.50	0.00	6
			Accepted strong economic benefit of technology (much lower costs and/or much higher yields)		0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Technological Change Risk Score at Sector-Level:						1.0	Max. 4

Customer Behavior

A 3	Agriculture, Forestry and Fishing - Fishing and Aquaculture				Scoring			Reference
	Are customers accepting/demanding the new technology (see above assessment of technological change) in the country under consideration?				Score	Weight	Total	
	"No"		Are customers accepting/ demanding this very technology in other, export-relevant countries?	"No"				
				"Yes, the use can be recognised in its beginnings"		1.00	0.00	1
				"Yes, the use can be clearly recognised"		1.00		
				"Yes, the strong use can be clearly recognised"		1.00		
	"Yes"	x	Perceived benefits in costs/maintenance from the user's perspective		0.00	2.00	0.00	2
			Perceived benefits in health from the user's perspective		0.00	1.00	0.00	3
			Perceived benefits in quality/durability from the user's perspective		0.00	1.00	0.00	4
			Perceived benefits to society and ecosystems		0.75	0.50	0.38	5
			Mass Media presence conveying a positive image		0.00	1.00	0.00	6
			VIP-Advocates		0.00	0.50	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Customer Behavior Risk Score at Sector-Level:						0.5	Max. 4

B. Mining and Quarrying

Total

B	Mining and Quarrying			Scoring			Reference
	Physical Climate Risk	Acute		3.0		2.8	1
		Chronic		2.5			2
	Transition Climate Risk	GHG-Emission Contribution		3.5		2.31	3
		Transitional Intensity	Probability of regulatory Change	2.5	1.1		4
			Economic Impact of regulatory Change	1.5			5
			Technological Change	0.5			6
			Customer Behavior	0.0			7
	Other ESG Risks	Loss of Biodiversity		Add-on Factor	1.00	3.3	8
		Other Environmental Risks		Add-on Factor	0.75		9
		Possible Human Rights Issues		Add-on Factor	0.75		10
		Other Social Risks		Add-on Factor	0.75		11
	ESG-Risk Score at Sector-Level:					**8**	8.31

Acute Climate Risk

B	Mining and Quarrying					Scoring			Reference
	Are acute climate events in the country/region already relevant for the sector under consideration?					Score	Weight	Total	
	"No"		Is it likely that this relevance will be given in the future?		"No"				
					"Yes"		1.00	0.00	1
					"Yes, very likely"		1.00		
	"Yes"	x	Observed loss of assets/property			0.75	1.00	0.75	2
			Expected impact on revenue			0.50	1.00	0.50	3
			Expected impact on costs			0.50	1.00	0.50	4
			1-3 expected to increase in the future			0.50	1.00	0.50	5
			Lack of adaptability of the business model			0.50	1.00	0.50	6
			Sectors in the supply chain have a score >2.5 for acute climate risks (see table below)			0.25	1.00	0.25	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)				+/-	0.00	8
	Acute Climate Risk Score at Sector-Level:							3.0	Max. 4

Chronic Climate Risk

B	Mining and Quarrying					Scoring			Reference
	Are chronic climate developments in the country/region already relevant for the sector under consideration?					Score	Weight	Total	
	"No"		Is it likely that this relevance will be given in the future?		"No"				
					"Yes"		1.00	0.00	1
					"Yes, very likely"		1.00		
	"Yes"	x	Observed loss of assets/property			0.25	1.00	0.25	2
			Expected impact on revenue			0.50	1.00	0.50	3
			Expected impact on costs			0.50	1.00	0.50	4
			1-3 expected to increase in the future			0.50	1.00	0.50	5
			Lack of adaptability of the business model			0.50	1.00	0.50	6
			Sectors in the supply chain have a score >2.5 for acute climate risks (see table below)			0.25	1.00	0.25	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)				+/-	0.00	8
	Chronic Climate Risk Score at Sector-Level:							2.5	Max. 4

GHG Emissions

B	Mining and Quarrying			Scoring		Reference
	Assignment of a score depending on the percentage of the sector emissions (X) of the total emissions of the country			Percentage-Range	Total	
	X ≥ 10%					
	10% > X ≥ 7.5%					
	7.5% > X ≥ 5%					
	5% > X ≥ 1%			x	2.50	
	1% > X ≥ 0.5%					
	0.5% > X ≥ 0.25%					
	Do sector activities have a negative impact on carbon sinks?	"No"		Add-on Factor 0		
		"Yes"	x	Add-on Factor 0.5	0.50	
		"Yes, severely"		Add-on Factor 1		
	Are sectors in the supply chain assessed with significant or existential emissions?	"No"		Add-on Factor 0		
		"Yes, score 3 emissions"		Add-on Factor 0.25		
		"Yes, score 4 emissions"	x	Add-on Factor 0.5	0.50	
	GHG-Emission Contribution Score at Sector-Level:				3.5	Max. 4

Probability of Regulatory Change

B	Mining and Quarrying					Scoring			Reference
	Is the business case of the sector under consideration likely to be affected by regulatory change (now/ near future)?					Score	Weight	Total	
	"No"		Is this kind of regulation already present in other relevant countries?		"No"				
					"Yes, it is planned"		1.00	0.00	1
					"Yes, it is established"		1.00		
					"Yes, it is established and a further extention is planned"		1.00		
	"Yes"	x	Announced in the country under consideration			0.75	1.00	0.75	2
			Established in the country under consideration			0.50	2.00	1.00	3
			Further extension of this very regulation announced				0.50	0.00	4
			Announced in other relevant countries				0.50	0.00	5
			Established in other relevant countries			0.75	1.00	0.75	6
			Perceived pressure of the population i.e. in the context of catastrophes or severe economic losses				1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)				+/-	0.00	8
	Probability of regulatory Change Risk Score at Sector-Level:							2.5	Max. 4

Impact of Regulatory Change

B	Mining and Quarrying				Scoring			Reference
	Is it likely that the regulatory change will have an ESG-impact (in the form of opportunities, risks, costs) on the sector?				Score	Weight	Total	
	"No"		Is probability of regulatory change > 1.5 AND an ESG-impact is observed in other relevant countries?	"No, probability score < 1.5 or no ESG impact assumed"				
				"Yes, score > 1.5 and an ESG impact is assumed"		1.00	0.00	1
				"Yes, score > 1.5 and an ESG impact is perceived"		1.00		
				"Yes, score > 1.5 and a high ESG impact is perceived"		1.00		
	"Yes"	x	Effect on the business model		0.75	2.00	1.50	2
			Strong effect on the business model			1.00	0.00	3
			1-2 expected to increase in the future			0.50	0.00	4
			1 or 2 obvious in other relevant countries			1.00	0.00	5
			Impact on the value chain			0.50	0.00	6
			Lack of adaptability of the business model			1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Impact of regulatory Change Risk Score at Sector-Level:						1.5	Max. 4

Technological Change

B	Mining and Quarrying					Scoring			Reference
	Is an alternative technology/methodology with sustainability-related advantages available/used in this sector in the country under consideration?					Score	Weight	Total	
	"No"		Is this technology available/ used in this sector in other relevant countries?		"No"				
					"No, to date it is just at theory/ study-level"		1.00	0.00	1
					"Yes, it is available and used in other relevant countries"		1.00		
					"Yes, it is heavily used in other relevant countries"		1.00		
	"Yes"	x	Use in the country under consideration				1.00	0.00	2
			Heavy use in the country under consideration				1.00	0.00	3
			Use in other relevant countries			0.50	0.50	0.25	4
			Heavy use in other relevant countries				1.00	0.00	5
			Accepted economic benefit of technology (lower costs and/or higher yields)				1.50	0.00	6
			Accepted strong economic benefit of technology (much lower costs and/or much higher yields)				1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)				+/-	0.00	8
	Technological Change Risk Score at Sector-Level:							0.5	Max. 4

C. Manufacturing

Manufacturing of Tobacco Products

Total

C 12	Manufacture of Tobacco Products			Scoring			Reference
	Physical Climate Risk	Acute		2.0		2.3	1
		Chronic		2.5			2
	Transition Climate Risk	GHG-Emission Contribution		3.0		2.75	3
		Transitional Intensity	Probability of regulatory Change	2.5	2.5		4
			Economic Impact of regulatory Change	2.5			5
			Technological Change	2.0			6
			Customer Behavior	3.0			7
	Other ESG Risks	Loss of Biodiversity		Add-on Factor	1.00	3.3	8
		Other Environmental Risks		Add-on Factor	0.5		9
		Possible Human Rights Issues		Add-on Factor	0.75		10
		Other Social Risks		Add-on Factor	1.0		11
	ESG-Risk Score at Sector-Level:					8	8.25

Acute Climate Risk

C 12	Manufacture of Tobacco Products				Scoring			Reference
	Are acute climate events in the country/region already relevant for the sector under consideration?				Score	Weight	Total	
	"No"		Is it likely that this relevance will be given in the future?	"No"				
				"Yes"		1.00	0.00	1
				"Yes, very likely"		1.00		
	"Yes"	x	Observed loss of assets/property		0.50	1.00	0.50	2
			Expected impact on revenue		0.50	1.00	0.50	3
			Expected impact on costs		0.00	1.00	0.00	4
			1-3 expected to increase in the future		0.00	1.00	0.00	5
			Lack of adaptability of the business model		0.50	1.00	0.50	6
			Sectors in the supply chain have a score >2.5 for acute climate risks (see table below)		0.50	1.00	0.50	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Acute Climate Risk Score at Sector-Level:						2.0	Max. 4

Chronic Climate Risk

C 12	Manufacture of Tobacco Products				Scoring			Reference
	Are chronic climate developments in the country/region already relevant for the sector under consideration?				Score	Weight	Total	
	"No"		Is it likely that this relevance will be given in the future?	"No"				
				"Yes"		1.00	0.00	1
				"Yes, very likely"		1.00		
	"Yes"	x	Observed loss of assets/property		0.50	1.00	0.50	2
			Expected impact on revenue		0.50	1.00	0.50	3
			Expected impact on costs		0.00	1.00	0.00	4
			1-3 expected to increase in the future		0.00	1.00	0.00	5
			Lack of adaptability of the business model		0.50	1.00	0.50	6
			Sectors in the supply chain have a score >2.5 for chronic climate risks (see table below)		0.75	1.00	0.75	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Chronic Climate Risk Score at Sector-Level:						2.5	Max. 4

GHG Emissions

C 12	Manufacture of Tobacco Products			Scoring		Reference
	Assignment of a score depending on the percentage of the sector emissions (X) of the total emissions of the country			Percentage-Range	Total	
	X ≥ 10%					
	10% > X ≥ 7.5%					
	7.5% > X ≥ 5%					
	5% > X ≥ 1%					
	1% > X ≥ 0.5%					
	0.5% > X ≥ 0.25%			x	1.50	
	Do sector activities have a negative impact on carbon sinks?	"No"		Add-on Factor 0		
		"Yes"		Add-on Factor 0.5		
		"Yes, severely"	x	Add-on Factor 1	1.00	
	Are sectors in the supply chain assessed with significant or existential emissions?	"No"		Add-on Factor 0		
		"Yes, score 3 emissions"		Add-on Factor 0.25		
		"Yes, score 4 emissions"	x	Add-on Factor 0.5	0.50	
	GHG-Emission Contribution Score at Sector-Level:				3.0	Max. 4

Probability of Regulatory Change

C 12	Manufacture of Tobacco Products					Scoring			Reference
	Is the business case of the sector under consideration likely to be affected by regulatory change (now/ near future)?					Score	Weight	Total	
	"No"		Is this kind of regulation already present in other relevant countries?		"No"				
					"Yes, it is planned"		1.00	0.00	1
					"Yes, it is established"		1.00		
					"Yes, it is established and a further extention is planned"		1.00		
	"Yes"	x	Announced in the country under consideration			0.00	1.00	0.00	2
			Established in the country under consideration			0.75	2.00	1.50	3
			Further extension of this very regulation announced			0.00	0.50	0.00	4
			Announced in other relevant countries			0.50	0.50	0.25	5
			Established in other relevant countries			0.75	1.00	0.75	6
			Perceived pressure of the population i.e. in the context of catastrophes or severe economic losses			0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)				+/-	0.00	8
	Probability of regulatory Change Risk Score at Sector-Level:							2.5	Max. 4

Impact of Regulatory Changes

C 12	Manufacture of Tobacco Products				Scoring			Reference
	Is it likely that the regulatory change will have an ESG-impact (in the form of opportunities, risks, costs) on the sector?				Score	Weight	Total	
	"No"		Is the assessed score for "Probability of Regulatory Change" > 1.5 AND is an ESG-impact observed in other relevant countries?	"No, probability score < 1.5 or no ESG impact assumed"				
				"Yes, score > 1.5 and an ESG impact is assumed"		1.00	0.00	1
				"Yes, score > 1.5 and an ESG impact is perceived"		1.00		
				"Yes, score > 1.5 and a high ESG impact is perceived"		1.00		
	"Yes"	x	Effect on the business model		0.75	2.00	1.50	2
			Strong effect on the business model		0.00	1.00	0.00	3
			1-2 expected to increase in the future		0.00	0.50	0.00	4
			1 or 2 obvious in other relevant countries		0.75	1.00	0.75	5
			Impact on the value chain		0.00	0.50	0.00	6
			Lack of adaptability of the business model		0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Impact of regulatory Change Risk Score at Sector-Level:						2.5	Max. 4

Technological Change

C 12	Manufacture of Tobacco Products				Scoring			Reference
	Is an alternative technology/methodology with sustainability-related advantages available/used in this sector in the country under consideration?				Score	Weight	Total	
	"No"		Is this technology available/ used in this sector in other relevant countries?	"No"				
				"No, to date it is just at theory/ study-level"		1.00		
				"Yes, it is available and used in other relevant countries"		1.00	0.00	1
				"Yes, it is heavily used in other relevant countries"		1.00		
	"Yes"	x	Use in the country under consideration		0.50	1.00	0.50	2
			Heavy use in the country under consideration		0.00	1.00	0.00	3
			Use in other relevant countries		0.50	0.50	0.25	4
			Heavy use in other relevant countries		0.00	1.00	0.00	5
			Accepted economic benefit of technology (lower costs and/or higher yields)		0.75	1.50	1.13	6
			Accepted strong economic benefit of technology (much lower costs and/or much higher yields)		0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Technological Change Risk Score at Sector-Level:						2.0	Max. 4

Customer Behavior

C 12	Manufacture of Tobacco Products					Scoring			Reference
	Are customers accepting/demanding the new technology (see above assessment of technological change) in the country under consideration?					Score	Weight	Total	
	"No"		Are customers accepting/ demanding this very technology in other, export-relevant countries?		"No"				
					"Yes, the use can be recognised in its beginnings"		1.00	0.00	1
					"Yes, the use can be clearly recognised"		1.00		
					"Yes, the strong use can be clearly recognised"		1.00		
	"Yes"	x	Perceived benefits in costs/maintenance from the user's perspective			0.75	2.00	1.50	2
			Perceived benefits in health from the user's perspective			0.75	1.00	0.75	3
			Perceived benefits in quality/durability from the user's perspective			0.00	1.00	0.00	4
			Perceived benefits to society and ecosystems			0.75	0.50	0.38	5
			Mass Media presence conveying a positive image			0.25	1.00	0.25	6
			VIP-Advocates			0.00	0.50	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)				+/-	0.00	8
	Customer Behavior Risk Score at Sector-Level:							3.0	Max. 4

Manufacture of Coke and Refined Petroleum Products

Total

C 19	Manufacture of Coke and refined Petroleum Products			Scoring			Reference
	Physical Climate Risk	Acute		2.5		2.5	1
		Chronic		2.5			2
	Transition Climate Risk	GHG-Emission Contribution		3.5		3.06	3
		Transitional Intensity	Probability of regulatory Change	3.0	2.6		4
			Economic Impact of regulatory Change	2.5			5
			Technological Change	2.0			6
			Customer Behavior	3.0			7
	Other ESG Risks	Loss of Biodiversity		Add-on Factor	0.5	2.3	8
		Other Environmental Risks		Add-on Factor	0.75		9
		Possible Human Rights Issues		Add-on Factor	0.5		10
		Other Social Risks		Add-on Factor	0.5		11
	ESG-Risk Score at Sector-Level:					**8**	7.81

Acute Climate Risk

C 19	Manufacture of Coke and refined Petroleum Products				Scoring			Reference
	Are acute climate events in the country/region already relevant for the sector under consideration?				Score	Weight	Total	
	"No"		Is it likely that this relevance will be given in the future?	"No"				
				"Yes"		1.00	0.00	1
				"Yes, very likely"		1.00		
	"Yes"	x	Observed loss of assets/property		0.50	1.00	0.50	2
			Expected impact on revenue		0.50	1.00	0.50	3
			Expected impact on costs		0.50	1.00	0.50	4
			1-3 expected to increase in the future		0.50	1.00	0.50	5
			Lack of adaptability of the business model		0.50	1.00	0.50	6
			Sectors in the supply chain have a score >2.5 for acute climate risks (see table below)			1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Acute Climate Risk Score at Sector-Level:						2.5	Max. 4

Chronic Climate Risk

C 19	Manufacture of Coke and refined Petroleum Products					Scoring			Reference
	Are chronic climate developments in the country/region already relevant for the sector under consideration?					Score	Weight	Total	
	"No"		Is it likely that this relevance will be given in the future?		"No"				
					"Yes"		1.00	0.00	1
					"Yes, very likely"		1.00		
	"Yes"	x	Observed loss of assets/property			0.50	1.00	0.50	2
			Expected impact on revenue			0.50	1.00	0.50	3
			Expected impact on costs			0.50	1.00	0.50	4
			1-3 expected to increase in the future			0.50	1.00	0.50	5
			Lack of adaptability of the business model			0.50	1.00	0.50	6
			Sectors in the supply chain have a score >2.5 for acute climate risks (see table below)				1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)				+/-	0.00	8
	Chronic Climate Risk Score at Sector-Level:							2.5	Max. 4

GHG Emissions

C 19	Manufacture of Coke and refined Petroleum Products			Scoring		Reference
	Assignment of a score depending on the percentage of the sector emissions (X) of the total emissions of the country			Percentage-Range	Total	
	X ≥ 10%					
	10% > X ≥ 7.5%					
	7.5% > X ≥ 5%					
	5% > X ≥ 1%					
	1% > X ≥ 0.5%			x	2.00	
	0.5% > X ≥ 0.25%					
	Do sector activities have a negative impact on carbon sinks?	"No"		Add-on Factor 0		
		"Yes"		Add-on Factor 0.5		
		"Yes, severely"	x	Add-on Factor 1	1.00	
	Are sectors in the supply chain assessed with significant or existential emissions?	"No"		Add-on Factor 0		
		"Yes, score 3 emissions"	x	Add-on Factor 0.25	0.25	
		"Yes, score 4 emissions"		Add-on Factor 0.5		
	GHG-Emission Contribution Score at Sector-Level:				3.5	Max. 4

Probability of Regulatory Change

C 19	Manufacture of Coke and refined Petroleum Products				Scoring			Reference
	Is the business case of the sector under consideration likely to be affected by regulatory change (now/ near future)?				Score	Weight	Total	
	"No"		Is this kind of regulation already present in other relevant countries?	"No"				
				"Yes, it is planned"		1.00		
				"Yes, it is established"		1.00	0.00	1
				"Yes, it is established and a further extention is planned"		1.00		
	"Yes"	x	Announced in the country under consideration		0.75	1.00	0.75	2
			Established in the country under consideration		0.50	2.00	1.00	3
			Further extension of this very regulation announced		0.00	0.50	0.00	4
			Announced in other relevant countries		0.50	0.50	0.25	5
			Established in other relevant countries		0.75	1.00	0.75	6
			Perceived pressure of the population i.e. in the context of catastrophes or severe economic losses		0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Probability of regulatory Change Risk Score at Sector-Level:						3.0	Max. 4

Impact of Regulatory Change

C 19	Manufacture of Coke and refined Petroleum Products				Scoring			Reference
	Is it likely that the regulatory change will have an ESG-impact (in the form of opportunities, risks, costs) on the sector?				Score	Weight	Total	
	"No"		Is the assessed score for "Probability of Regulatory Change" > 1.5 AND is an ESG-impact observed in other relevant countries?	"No, probability score < 1.5 or no ESG impact assumed"				
				"Yes, score > 1.5 and an ESG impact is assumed"		1.00		
				"Yes, score > 1.5 and an ESG impact is perceived"		1.00	0.00	1
				"Yes, score > 1.5 and a high ESG impact is perceived"		1.00		
	"Yes"	x	Effect on the business model		0.75	2.00	1.50	2
			Strong effect on the business model		0.00	1.00	0.00	3
			1-2 expected to increase in the future		0.00	0.50	0.00	4
			1 or 2 obvious in other relevant countries		0.75	1.00	0.75	5
			Impact on the value chain		0.75	0.50	0.38	6
			Lack of adaptability of the business model		0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Impact of regulatory Change Risk Score at Sector-Level:						2.5	Max. 4

Technological Change

C 19	Manufacture of Coke and refined Petroleum Products				Scoring			Reference
	Is an alternative technology/methodology with sustainability-related advantages available/used in this sector in the country under consideration?				Score	Weight	Total	
	"No"		Is this technology available/ used in this sector in other relevant countries?	"No"				
				"No, to date it is just at theory/ study-level"		1.00	0.00	1
				"Yes, it is available and used in other relevant countries"		1.00		
				"Yes, it is heavily used in other relevant countries"		1.00		
	"Yes"	x	Use in the country under consideration		0.50	1.00	0.50	2
			Heavy use in the country under consideration		0.00	1.00	0.00	3
			Use in other relevant countries		0.75	0.50	0.38	4
			Heavy use in other relevant countries		0.00	1.00	0.00	5
			Accepted economic benefit of technology (lower costs and/or higher yields)		0.75	1.50	1.13	6
			Accepted strong economic benefit of technology (much lower costs and/or much higher yields)		0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Technological Change Risk Score at Sector-Level:						2.0	Max. 4

Customer Behavior

C 19	Manufacture of Coke and refined Petroleum Products				Scoring			Reference
	Are customers accepting/demanding the new technology (see above assessment of technological change) in the country under consideration?				Score	Weight	Total	
"No"		Are customers accepting/ demanding this very technology in other, export-relevant countries?		"No"				
				"Yes, the use can be recognised in its beginnings"		1.00	0.00	1
				"Yes, the use can be clearly recognised"		1.00		
				"Yes, the strong use can be clearly recognised"		1.00		
"Yes"	x	Perceived benefits in costs/maintenance from the user's perspective			0.75	2.00	1.50	2
		Perceived benefits in health from the user's perspective			0.75	1.00	0.75	3
		Perceived benefits in quality/durability from the user's perspective			0.50	1.00	0.50	4
		Perceived benefits to society and ecosystems			0.50	0.50	0.25	5
		Mass Media presence conveying a positive image			0.00	1.00	0.00	6
		VIP-Advocates			0.00	0.50	0.00	7
		Local expert grading (score-modification between -0.5 and +0.5, see commentary below)				+/-	0.00	8
	Customer Behavior Risk Score at Sector-Level:						3.0	Max. 4

Manufacture of Chemicals and Chemical Products

Total

C 20	Manufacture of Chemicals and chemical Products			Scoring			Reference
	Physical Climate Risk	Acute		3.0		2.8	1
		Chronic		2.5			2
	Transition Climate Risk	GHG-Emission Contribution		3.5		2.44	3
		Transitional Intensity	Probability of regulatory Change	2.5	1.4		4
			Economic Impact of regulatory Change	1.0			5
			Technological Change	1.0			6
			Customer Behavior	1.0			7
	Other ESG Risks	Loss of Biodiversity		Add-on Factor	0.5	2.3	8
		Other Environmental Risks		Add-on Factor	0.75		9
		Possible Human Rights Issues		Add-on Factor	0.5		10
		Other Social Risks		Add-on Factor	0.5		11
	ESG-Risk Score at Sector-Level:					7	7.44

Acute Climate Risk

C 20	Manufacture of Chemicals and chemical Products				Scoring			Reference
	Are acute climate events in the country/region already relevant for the sector under consideration?				Score	Weight	Total	
	"No"		Is it likely that this relevance will be given in the future?	"No"				
				"Yes"		1.00	0.00	1
				"Yes, very likely"		1.00		
	"Yes"	x	Observed loss of assets/property		0.50	1.00	0.50	2
			Expected impact on revenue		0.50	1.00	0.50	3
			Expected impact on costs		0.50	1.00	0.50	4
			1-3 expected to increase in the future		0.50	1.00	0.50	5
			Lack of adaptability of the business model		0.50	1.00	0.50	6
			Sectors in the supply chain have a score >2.5 for acute climate risks (see table below)		0.25	1.00	0.25	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Acute Climate Risk Score at Sector-Level:						3.0	Max. 4

Chronic Climate Risk

C 20	Manufacture of Chemicals and chemical Products				Scoring			Reference
	Are chronic climate developments in the country/region already relevant for the sector under consideration?				Score	Weight	Total	
	"No"		Is it likely that this relevance will be given in the future?	"No"				
				"Yes"		1.00	0.00	1
				"Yes, very likely"		1.00		
	"Yes"	x	Observed loss of assets/property		0.00	1.00	0.00	2
			Expected impact on revenue		0.50	1.00	0.50	3
			Expected impact on costs		0.50	1.00	0.50	4
			1-3 expected to increase in the future		0.75	1.00	0.75	5
			Lack of adaptability of the business model		0.50	1.00	0.50	6
			Sectors in the supply chain have a score >2.5 for acute climate risks (see table below)		0.25	1.00	0.25	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Chronic Climate Risk Score at Sector-Level:						2.5	Max. 4

GHG Emissions

C 20	Manufacture of Chemicals and chemical Products				Scoring		Reference
	Assignment of a score depending on the percentage of the sector emissions (X) of the total emissions of the country				Percentage-Range	Total	
	X ≥ 10%						
	10% > X ≥ 7.5%						
	7.5% > X ≥ 5%				x	3.00	
	5% > X ≥ 1%						
	1% > X ≥ 0.5%						
	0.5% > X ≥ 0.25%						
	Do sector activities have a negative impact on carbon sinks?	"No"		Add-on Factor 0			
		"Yes"		Add-on Factor 0.5			
		"Yes, severely"		Add-on Factor 1			
	Are sectors in the supply chain assessed with significant or existential emissions?	"No"		Add-on Factor 0			
		"Yes, score 3 emissions"	x	Add-on Factor 0.25		0.25	
		"Yes, score 4 emissions"		Add-on Factor 0.5			
	GHG-Emission Contribution Score at Sector-Level:					3.5	Max. 4

Probability of Regulatory Change

C 20	Manufacture of Chemicals and chemical Products					Scoring			Reference
	Is the business case of the sector under consideration likely to be affected by regulatory change (now/ near future)?					Score	Weight	Total	
	"No"		Is this kind of regulation already present in other relevant countries?		"No"				
					"Yes, it is planned"		1.00	0.00	1
					"Yes, it is established"		1.00		
					"Yes, it is established and a further extention is planned"		1.00		
	"Yes"	x	Announced in the country under consideration			0.00	1.00	0.00	2
			Established in the country under consideration			0.50	2.00	1.00	3
			Further extension of this very regulation announced			0.50	0.50	0.25	4
			Announced in other relevant countries			0.50	0.50	0.25	5
			Established in other relevant countries			0.75	1.00	0.75	6
			Perceived pressure of the population i.e. in the context of catastrophes or severe economic losses			0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)				+/-	0.00	8
	Probability of regulatory Change Risk Score at Sector-Level:							2.5	Max. 4

Impact of Regulatory Change

C 20	Manufacture of Chemicals and chemical Products				Scoring			Reference
	Is it likely that the regulatory change will have an ESG-impact (in the form of opportunities, risks, costs) on the sector?				Score	Weight	Total	
	"No"		Is the assessed score for "Probability of Regulatory Change" > 1.5 AND is an ESG-impact observed in other relevant countries?	"No, probability score < 1.5 or no ESG impact assumed"				
				"Yes, score > 1.5 and an ESG impact is assumed"		1.00	0.00	1
				"Yes, score > 1.5 and an ESG impact is perceived"		1.00		
				"Yes, score > 1.5 and a high ESG impact is perceived"		1.00		
	"Yes"	x	Effect on the business model		0.00	2.00	0.00	2
			Strong effect on the business model		0.00	1.00	0.00	3
			1-2 expected to increase in the future		0.00	0.50	0.00	4
			1 or 2 obvious in other relevant countries		0.75	1.00	0.75	5
			Impact on the value chain		0.00	0.50	0.00	6
			Lack of adaptability of the business model		0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Impact of regulatory Change Risk Score at Sector-Level:						1.0	Max. 4

Technological Change

C 20	Manufacture of Chemicals and chemical Products					Scoring			Reference
	Is an alternative technology/methodology with sustainability-related advantages available/used in this sector in the country under consideration?					Score	Weight	Total	
	"No"		Is this technology available/ used in this sector in other relevant countries?		"No"				
					"No, to date it is just at theory/ study-level"		1.00	0.00	1
					"Yes, it is available and used in other relevant countries"		1.00		
					"Yes, it is heavily used in other relevant countries"		1.00		
	"Yes"	x	Use in the country under consideration			0.50	1.00	0.50	2
			Heavy use in the country under consideration			0.00	1.00	0.00	3
			Use in other relevant countries			0.50	0.50	0.25	4
			Heavy use in other relevant countries			0.00	1.00	0.00	5
			Accepted economic benefit of technology (lower costs and/or higher yields)			0.00	1.50	0.00	6
			Accepted strong economic benefit of technology (much lower costs and/or much higher yields)			0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)				+/-	0.00	8
	Technological Change Risk Score at Sector-Level:							1.0	Max. 4

Customer Behavior

C 20	Manufacture of Chemicals and chemical Products				Scoring			Reference
	Are customers accepting/demanding the new technology (see above assessment of technological change) in the country under consideration?				Score	Weight	Total	
	"No"		Are customers accepting/ demanding this very technology in other, export-relevant countries?	"No"				
				"Yes, the use can be recognised in its beginnings"		1.00	0.00	1
				"Yes, the use can be clearly recognised"		1.00		
				"Yes, the strong use can be clearly recognised"		1.00		
	"Yes"	x	Perceived benefits in costs/maintenance from the user's perspective		0.00	2.00	0.00	2
			Perceived benefits in health from the user's perspective		0.75	1.00	0.75	3
			Perceived benefits in quality/durability from the user's perspective		0.00	1.00	0.00	4
			Perceived benefits to society and ecosystems		0.75	0.50	0.38	5
			Mass Media presence conveying a positive image		0.00	1.00	0.00	6
			VIP-Advocates		0.00	0.50	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Customer Behavior Risk Score at Sector-Level:						1.0	Max. 4

D. Electricity, Gas, Stream and Air Conditioning Supply

Total

D	Electricity, Gas, Steam and Air Conditioning Supply			Scoring			Reference
	Physical Climate Risk	Acute		2.5		2.5	1
		Chronic		2.5			2
	Transition Climate Risk	GHG-Emission Contribution		4.0		3.31	3
		Transitional Intensity	Probability of regulatory Change	3.5	2.6		4
			Economic Impact of regulatory Change	2.5			5
			Technological Change	2.0			6
			Customer Behavior	2.5			7
	Other ESG Risks	Loss of Biodiversity		Add-on Factor	0.75	2.5	8
		Other Environmental Risks		Add-on Factor	0.75		9
		Possible Human Rights Issues		Add-on Factor	0.5		10
		Other Social Risks		Add-on Factor	0.5		11
	ESG-Risk Score at Sector-Level:					**8**	8.31

Acute Climate Risk

D	Electricity, Gas, Steam and Air Conditioning Supply					Scoring			Reference
	Are acute climate events in the country/region already relevant for the sector under consideration?					Score	Weight	Total	
	"No"		Is it likely that this relevance will be given in the future?		"No"				
					"Yes"		1.00	0.00	1
					"Yes, very likely"		1.00		
	"Yes"	x	Observed loss of assets/property			0.50	1.00	0.50	2
			Expected impact on revenue			0.50	1.00	0.50	3
			Expected impact on costs			0.50	1.00	0.50	4
			1-3 expected to increase in the future			0.50	1.00	0.50	5
			Lack of adaptability of the business model			0.50	1.00	0.50	6
			Sectors in the supply chain have a score >2.5 for acute climate risks (see table below)				1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)				+/-	0.00	8
	Acute Climate Risk Score at Sector-Level:							2.5	Max. 4

Chronic Climate Risk

D	Electricity, Gas, Steam and Air Conditioning Supply				Scoring			Reference
	Are chronic climate developments in the country/region already relevant for the sector under consideration?				Score	Weight	Total	
	"No"		Is it likely that this relevance will be given in the future?	"No"				
				"Yes"		1.00	0.00	1
				"Yes, very likely"		1.00		
	"Yes"	x	Observed loss of assets/property		0.50	1.00	0.50	2
			Expected impact on revenue		0.50	1.00	0.50	3
			Expected impact on costs		0.50	1.00	0.50	4
			1-3 expected to increase in the future		0.50	1.00	0.50	5
			Lack of adaptability of the business model		0.50	1.00	0.50	6
			Sectors in the supply chain have a score >2.5 for acute climate risks (see table below)			1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Chronic Climate Risk Score at Sector-Level:						2.5	Max. 4

GHG Emissions

D	Electricity, Gas, Steam and Air Conditioning Supply			Scoring		Reference
	Assignment of a score depending on the percentage of the sector emissions (X) of the total emissions of the country			Percentage-Range	Total	
	X ≥ 10%			x	4.00	
	10% > X ≥ 7.5%					
	7.5% > X ≥ 5%					
	5% > X ≥ 1%					
	1% > X ≥ 0.5%					
	0.5% > X ≥ 0.25%					
	Do sector activities have a negative impact on carbon sinks?	"No"		Add-on Factor 0		
		"Yes"		Add-on Factor 0.5		
		"Yes, severely"		Add-on Factor 1		
	Are sectors in the supply chain assessed with significant or existential emissions?	"No"		Add-on Factor 0		
		"Yes, score 3 emissions"		Add-on Factor 0.25		
		"Yes, score 4 emissions"		Add-on Factor 0.5		
	GHG-Emission Contribution Score at Sector-Level:				4.0	Max. 4

Probability of Regulatory Change

D	Electricity, Gas, Steam and Air Conditioning Supply				Scoring			Reference
	Is the business case of the sector under consideration likely to be affected by regulatory change (now/ near future)?				Score	Weight	Total	
	"No"		Is this kind of regulation already present in other relevant countries?	"No"				
				"Yes, it is planned"		1.00	0.00	1
				"Yes, it is established"		1.00		
				"Yes, it is established and a further extention is planned"		1.00		
	"Yes"	x	Announced in the country under consideration		0.75	1.00	0.75	2
			Established in the country under consideration		0.75	2.00	1.50	3
			Further extension of this very regulation announced		0.00	0.50	0.00	4
			Announced in other relevant countries		0.50	0.50	0.25	5
			Established in other relevant countries		0.75	1.00	0.75	6
			Perceived pressure of the population i.e. in the context of catastrophes or severe economic losses		0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Probability of regulatory Change Risk Score at Sector-Level:						3.5	Max. 4

Impact of Regulatory Change

D	Electricity, Gas, Steam and Air Conditioning Supply				Scoring			Reference
	Is it likely that the regulatory change will have an ESG-impact (in the form of opportunities, risks, costs) on the sector?				Score	Weight	Total	
	"No"		Is the assessed score for "Probability of Regulatory Change" > 1.5 AND is an ESG-impact observed in other relevant countries?	"No, probability score < 1.5 or no ESG impact assumed"				
				"Yes, score > 1.5 and an ESG impact is assumed"		1.00	0.00	1
				"Yes, score > 1.5 and an ESG impact is perceived"		1.00		
				"Yes, score > 1.5 and a high ESG impact is perceived"		1.00		
	"Yes"	x	Effect on the business model		0.75	2.00	1.50	2
			Strong effect on the business model		0.00	1.00	0.00	3
			1-2 expected to increase in the future		0.00	0.50	0.00	4
			1 or 2 obvious in other relevant countries		0.75	1.00	0.75	5
			Impact on the value chain		0.00	0.50	0.00	6
			Lack of adaptability of the business model		0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Impact of regulatory Change Risk Score at Sector-Level:						2.5	Max. 4

Technological Change

D	Electricity, Gas, Steam and Air Conditioning Supply					Scoring			Reference
	Is an alternative technology/methodology with sustainability-related advantages available/used in this sector in the country under consideration?					Score	Weight	Total	
	"No"		Is this technology available/ used in this sector in other relevant countries?		"No"				
					"No, to date it is just at theory/ study-level"		1.00		
					"Yes, it is available and used in other relevant countries"		1.00	0.00	1
					"Yes, it is heavily used in other relevant countries"		1.00		
	"Yes"	x	Use in the country under consideration			0.50	1.00	0.50	2
			Heavy use in the country under consideration			0.00	1.00	0.00	3
			Use in other relevant countries			0.75	0.50	0.38	4
			Heavy use in other relevant countries			0.00	1.00	0.00	5
			Accepted economic benefit of technology (lower costs and/or higher yields)			0.75	1.50	1.13	6
			Accepted strong economic benefit of technology (much lower costs and/or much higher yields)			0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)				+/-	0.00	8
	Technological Change Risk Score at Sector-Level:							2.0	Max. 4

Customer Behavior

D	Electricity, Gas, Steam and Air Conditioning Supply				Scoring			Reference
	Are customers accepting/demanding the new technology (see above assessment of technological change) in the country under consideration?				Score	Weight	Total	
	"No"		Are customers accepting/ demanding this very technology in other, export-relevant countries?	"No"				
				"Yes, the use can be recognised in its beginnings"		1.00		
				"Yes, the use can be clearly recognised"		1.00	0.00	1
				"Yes, the strong use can be clearly recognised"		1.00		
	"Yes"	x	Perceived benefits in costs/maintenance from the user's perspective		0.75	2.00	1.50	2
			Perceived benefits in health from the user's perspective		0.75	1.00	0.75	3
			Perceived benefits in quality/durability from the user's perspective		0.50	1.00	0.50	4
			Perceived benefits to society and ecosystems		0.50	0.50	0.25	5
			Mass Media presence conveying a positive image		0.00	1.00	0.00	6
			VIP-Advocates		0.00	0.50	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)		-0.50	+/-	-0.50	8
	Customer Behavior Risk Score at Sector-Level:						2.5	Max. 4

E. Water Supply, Sewerage, Waste Management and Remediation Activities

Total

0	Water Supply, Sewerage, Waste Management and Remediation Activities			Scoring			Reference
	Physical Climate Risk	Acute		1.5		2.0	1
		Chronic		2.5			2
	Transition Climate Risk	GHG-Emission Contribution		3.0		2.63	3
		Transitional Intensity	Probability of regulatory Change	3.5	2.3		4
			Economic Impact of regulatory Change	2.0			5
			Technological Change	1.5			6
			Customer Behavior	2.0			7
	Other ESG Risks	Loss of Biodiversity		Add-on Factor	0.5	2.3	8
		Other Environmental Risks		Add-on Factor	0.75		9
		Possible Human Rights Issues		Add-on Factor	0.5		10
		Other Social Risks		Add-on Factor	0.5		11
	ESG-Risk Score at Sector-Level:					7	6.88

Acute Climate Risk

E	Water Supply, Sewerage, Waste Management and Remediation Activities					Scoring			Reference
	Are acute climate events in the country/region already relevant for the sector under consideration?					Score	Weight	Total	
	"No"		Is it likely that this relevance will be given in the future?		"No"				
					"Yes"		1.00	0.00	1
					"Yes, very likely"		1.00		
	"Yes"	x	Observed loss of assets/property			0.50	1.00	0.50	2
			Expected impact on revenue			0.00	1.00	0.00	3
			Expected impact on costs			0.50	1.00	0.50	4
			1-3 expected to increase in the future			0.00	1.00	0.00	5
			Lack of adaptability of the business model			0.50	1.00	0.50	6
			Sectors in the supply chain have a score >2.5 for acute climate risks (see table below)			0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)				+/-	0.00	8
	Acute Climate Risk Score at Sector-Level:							1.5	Max. 4

Chronic Climate Risk

E	Water Supply, Sewerage, Waste Management and Remediation Activities					Scoring			Reference
	Are chronic climate developments in the country/region already relevant for the sector under consideration?					Score	Weight	Total	
	"No"		Is it likely that this relevance will be given in the future?		"No"				
					"Yes"		1.00	0.00	1
					"Yes, very likely"		1.00		
	"Yes"	x	Observed loss of assets/property			0.50	1.00	0.50	2
			Expected impact on revenue			0.00	1.00	0.00	3
			Expected impact on costs			0.50	1.00	0.50	4
			1-3 expected to increase in the future			0.75	1.00	0.75	5
			Lack of adaptability of the business model			0.50	1.00	0.50	6
			Sectors in the supply chain have a score >2.5 for acute climate risks (see table below)			0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)				+/-	0.00	8
	Chronic Climate Risk Score at Sector-Level:							2.5	Max. 4

GHG Emissions

E	Water Supply, Sewerage, Waste Management and Remediation Activities			Scoring		Reference
	Assignment of a score depending on the percentage of the sector emissions (X) of the total emissions of the country			Percentage-Range	Total	
	X ≥ 10%					
	10% > X ≥ 7.5%					
	7.5% > X ≥ 5%			x	3.00	
	5% > X ≥ 1%					
	1% > X ≥ 0.5%					
	0.5% > X ≥ 0.25%					
	Do sector activities have a negative impact on carbon sinks?	"No"		Add-on Factor 0		
		"Yes"		Add-on Factor 0.5		
		"Yes, severely"		Add-on Factor 1		
	Are sectors in the supply chain assessed with significant or existential emissions?	"No"		Add-on Factor 0		
		"Yes, score 3 emissions"		Add-on Factor 0.25		
		"Yes, score 4 emissions"		Add-on Factor 0.5		
	GHG-Emission Contribution Score at Sector-Level:				3.0	Max. 4

Probability of Regulatory Change

E	Water Supply, Sewerage, Waste Management and Remediation Activities				Scoring			Reference
	Is the business case of the sector under consideration likely to be affected by regulatory change (now/ near future)?				Score	Weight	Total	
	"No"		Is this kind of regulation already present in other relevant countries?	"No"				
				"Yes, it is planned"		1.00	0.00	1
				"Yes, it is established"		1.00		
				"Yes, it is established and a further extention is planned"		1.00		
	"Yes"	x	Announced in the country under consideration		0.75	1.00	0.75	2
			Established in the country under consideration		0.75	2.00	1.50	3
			Further extension of this very regulation announced		0.50	0.50	0.25	4
			Announced in other relevant countries		0.50	0.50	0.25	5
			Established in other relevant countries		0.75	1.00	0.75	6
			Perceived pressure of the population i.e. in the context of catastrophes or severe economic losses		0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Probability of regulatory Change Risk Score at Sector-Level:						3.5	Max. 4

Impact of Regulatory Change

E	Water Supply, Sewerage, Waste Management and Remediation Activities				Scoring			Reference
	Is it likely that the regulatory change will have an ESG-impact (in the form of opportunities, risks, costs) on the sector?				Score	Weight	Total	
	"No"		Is the assessed score for "Probability of Regulatory Change" > 1.5 AND is an ESG-impact observed in other relevant countries?	"No, probability score < 1.5 or no ESG impact assumed"				
				"Yes, score > 1.5 and an ESG impact is assumed"		1.00	0.00	1
				"Yes, score > 1.5 and an ESG impact is perceived"		1.00		
				"Yes, score > 1.5 and a high ESG impact is perceived"		1.00		
	"Yes"	x	Effect on the business model		0.75	2.00	1.50	2
			Strong effect on the business model		0.00	1.00	0.00	3
			1-2 expected to increase in the future		0.00	0.50	0.00	4
			1 or 2 obvious in other relevant countries		0.00	1.00	0.00	5
			Impact on the value chain		0.50	0.50	0.25	6
			Lack of adaptability of the business model		0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Impact of regulatory Change Risk Score at Sector-Level:						2.0	Max. 4

Technological Change

E	Water Supply, Sewerage, Waste Management and Remediation Activities				Scoring			Reference
	Is an alternative technology/methodology with sustainability-related advantages available/used in this sector in the country under consideration?				Score	Weight	Total	
	"No"		Is this technology available/ used in this sector in other relevant countries?	"No"				
				"No, to date it is just at theory/ study-level"		1.00	0.00	1
				"Yes, it is available and used in other relevant countries"		1.00		
				"Yes, it is heavily used in other relevant countries"		1.00		
	"Yes"		Use in the country under consideration		0.50	1.00	0.50	2
			Heavy use in the country under consideration		0.00	1.00	0.00	3
			Use in other relevant countries		0.50	0.50	0.25	4
		x	Heavy use in other relevant countries		0.00	1.00	0.00	5
			Accepted economic benefit of technology (lower costs and/or higher yields)		0.50	1.50	0.75	6
			Accepted strong economic benefit of technology (much lower costs and/or much higher yields)		0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Technological Change Risk Score at Sector-Level:						1.5	Max. 4

Customer Behavior

E	Water Supply, Sewerage, Waste Management and Remediation Activities					Scoring			Reference
	Are customers accepting/demanding the new technology (see above assessment of technological change) in the country under consideration?					Score	Weight	Total	
	"No"		Are customers accepting/ demanding this very technology in other, export-relevant countries?		"No"				
					"Yes, the use can be recognised in its beginnings"		1.00		
					"Yes, the use can be clearly recognised"		1.00	0.00	1
					"Yes, the strong use can be clearly recognised"		1.00		
	"Yes"	x	Perceived benefits in costs/maintenance from the user's perspective			0.50	2.00	1.00	2
			Perceived benefits in health from the user's perspective			0.50	1.00	0.50	3
			Perceived benefits in quality/durability from the user's perspective			0.00	1.00	0.00	4
			Perceived benefits to society and ecosystems			0.50	0.50	0.25	5
			Mass Media presence conveying a positive image			0.00	1.00	0.00	6
			VIP-Advocates			0.00	0.50	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)				+/-	0.00	8
	Customer Behavior Risk Score at Sector-Level:							2.0	Max. 4

F. Construction

Total

F	Construction			Scoring			Reference
	Physical Climate Risk	Acute		2.0		2.0	1
		Chronic		2.0			2
	Transition Climate Risk	GHG-Emission Contribution		3.0		2.44	3
		Transitional Intensity	Probability of regulatory Change	2.5	1.9		4
			Economic Impact of regulatory Change	1.5			5
			Technological Change	1.5			6
			Customer Behavior	2.0			7
	Other ESG Risks	Loss of Biodiversity		Add-on Factor	0.75	2.8	8
		Other Environmental Risks		Add-on Factor	0.5		9
		Possible Human Rights Issues		Add-on Factor	0.75		10
		Other Social Risks		Add-on Factor	0.75		11
	ESG-Risk Score at Sector-Level:					7	7.19

Acute Climate Risk

F	Construction					Scoring			Reference
	Are acute climate events in the country/region already relevant for the sector under consideration?					Score	Weight	Total	
	"No"		Is it likely that this relevance will be given in the future?		"No"				
					"Yes"		1.00	0.00	1
					"Yes, very likely"		1.00		
	"Yes"	x	Observed loss of assets/property			0.00	1.00	0.00	2
			Expected impact on revenue			0.50	1.00	0.50	3
			Expected impact on costs			0.50	1.00	0.50	4
			1-3 expected to increase in the future			0.00	1.00	0.00	5
			Lack of adaptability of the business model			0.50	1.00	0.50	6
			Sectors in the supply chain have a score >2.5 for acute climate risks (see table below)			0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			0.50	+/-	0.50	8
	Acute Climate Risk Score at Sector-Level:							2.0	Max. 4

Chronic Climate Risk

F	Construction					Scoring			Reference
	Are chronic climate developments in the country/region already relevant for the sector under consideration?					Score	Weight	Total	
	"No"		Is it likely that this relevance will be given in the future?		"No"				
					"Yes"		1.00	0.00	1
					"Yes, very likely"		1.00		
	"Yes"	x	Observed loss of assets/property			0.00	1.00	0.00	2
			Expected impact on revenue			0.50	1.00	0.50	3
			Expected impact on costs			0.50	1.00	0.50	4
			1-3 expected to increase in the future			0.00	1.00	0.00	5
			Lack of adaptability of the business model			0.50	1.00	0.50	6
			Sectors in the supply chain have a score >2.5 for acute climate risks (see table below)			0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			0.50	+/-	0.50	8
	Chronic Climate Risk Score at Sector-Level:							2.0	Max. 4

GHG Emissions

F	Construction				Scoring		Reference
	Assignment of a score depending on the percentage of the sector emissions (X) of the total emissions of the country				Percentage-Range	Total	
	X ≥ 10%						
	10% > X ≥ 7.5%						
	7.5% > X ≥ 5%						
	5% > X ≥ 1%				x	2.50	
	1% > X ≥ 0.5%						
	0.5% > X ≥ 0.25%						
	Do sector activities have a negative impact on carbon sinks?	"No"		Add-on Factor 0			
		"Yes"	x	Add-on Factor 0.5		0.25	
		"Yes, severely"		Add-on Factor 1			
	Are sectors in the supply chain assessed with significant or existential emissions?	"No"		Add-on Factor 0			
		"Yes, score 3 emissions"	x	Add-on Factor 0.25		0.25	
		"Yes, score 4 emissions"		Add-on Factor 0.5			
	GHG-Emission Contribution Score at Sector-Level:					3.0	Max. 4

Probability of Regulatory Change

F	Construction					Scoring			Reference
	Is the business case of the sector under consideration likely to be affected by regulatory change (now/ near future)?					Score	Weight	Total	
	"No"		Is this kind of regulation already present in other relevant countries?		"No"				
					"Yes, it is planned"		1.00	0.00	1
					"Yes, it is established"		1.00		
					"Yes, it is established and a further extention is planned"		1.00		
	"Yes"	x	Announced in the country under consideration			0.00	1.00	0.00	2
			Established in the country under consideration			0.75	2.00	1.50	3
			Further extension of this very regulation announced			0.00	0.50	0.00	4
			Announced in other relevant countries			0.25	0.50	0.13	5
			Established in other relevant countries			0.75	1.00	0.75	6
			Perceived pressure of the population i.e. in the context of catastrophes or severe economic losses			0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)				+/-	0.00	8
	Probability of regulatory Change Risk Score at Sector-Level:							2.5	Max. 4

Impact of Regulatory Change

F	Construction				Scoring			Reference
	Is it likely that the regulatory change will have an ESG-impact (in the form of opportunities, risks, costs) on the sector?				Score	Weight	Total	
	"No"		Is the assessed score for "Probability of Regulatory Change" > 1.5 AND is an ESG-impact observed in other relevant countries?	"No, probability score < 1.5 or no ESG impact assumed"				
				"Yes, score > 1.5 and an ESG impact is assumed"		1.00		
				"Yes, score > 1.5 and an ESG impact is perceived"		1.00	0.00	1
				"Yes, score > 1.5 and a high ESG impact is perceived"		1.00		
	"Yes"	x	Effect on the business model		0.75	2.00	1.50	2
			Strong effect on the business model		0.00	1.00	0.00	3
			1-2 expected to increase in the future		0.00	0.50	0.00	4
			1 or 2 obvious in other relevant countries		0.00	1.00	0.00	5
			Impact on the value chain		0.00	0.50	0.00	6
			Lack of adaptability of the business model		0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Impact of regulatory Change Risk Score at Sector-Level:						1.5	Max. 4

Technological Change

F	Construction					Scoring			Reference
	Is an alternative technology/methodology with sustainability-related advantages available/used in this sector in the country under consideration?					Score	Weight	Total	
	"No"		Is this technology available/ used in this sector in other relevant countries?		"No"				
					"No, to date it is just at theory/ study-level"		1.00	0.00	1
					"Yes, it is available and used in other relevant countries"		1.00		
					"Yes, it is heavily used in other relevant countries"		1.00		
	"Yes"	x	Use in the country under consideration			0.25	1.00	0.25	2
			Heavy use in the country under consideration			0.00	1.00	0.00	3
			Use in other relevant countries			0.50	0.50	0.25	4
			Heavy use in other relevant countries			0.00	1.00	0.00	5
			Accepted economic benefit of technology (lower costs and/or higher yields)			0.50	1.50	0.75	6
			Accepted strong economic benefit of technology (much lower costs and/or much higher yields)			0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)				+/-	0.00	8
	Technological Change Risk Score at Sector-Level:							1.5	Max. 4

Customer Behavior

F	Construction					Scoring			Reference
	Are customers accepting/demanding the new technology (see above assessment of technological change) in the country under consideration?					Score	Weight	Total	
	"No"		Are customers accepting/ demanding this very technology in other, export-relevant countries?		"No"				
					"Yes, the use can be recognised in its beginnings"		1.00		
					"Yes, the use can be clearly recognised"		1.00	0.00	1
					"Yes, the strong use can be clearly recognised"		1.00		
	"Yes"	x	Perceived benefits in costs/maintenance from the user's perspective			0.50	2.00	1.00	2
			Perceived benefits in health from the user's perspective			0.50	1.00	0.50	3
			Perceived benefits in quality/durability from the user's perspective			0.50	1.00	0.50	4
			Perceived benefits to society and ecosystems			0.50	0.50	0.25	5
			Mass Media presence conveying a positive image			0.00	1.00	0.00	6
			VIP-Advocates			0.00	0.50	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			-0.50	+/-	-0.50	8
	Customer Behavior Risk Score at Sector-Level:							2.0	Max. 4

G. Transportation and Storage

Total

H	Transportation and Storage			Scoring			Reference
	Physical Climate Risk	Acute		3.0		3.0	1
		Chronic		3.0			2
	Transition Climate Risk	GHG-Emission Contribution		4.0		2.63	3
		Transitional Intensity	Probability of regulatory Change	2.0	1.3		4
			Economic Impact of regulatory Change	1.5			5
			Technological Change	1.0			6
			Customer Behavior	0.5			7
	Other ESG Risks	Loss of Biodiversity		Add-on Factor	0.75	2.75	8
		Other Environmental Risks		Add-on Factor	0.75		9
		Possible Human Rights Issues		Add-on Factor	0.5		10
		Other Social Risks		Add-on Factor	0.75		11
	ESG-Risk Score at Sector-Level:					**8**	8.38

Acute Climate Risk

H	Transportation and Storage					Scoring			Reference
	Are acute climate events in the country/region already relevant for the sector under consideration?					Score	Weight	Total	
	"No"		Is it likely that this relevance will be given in the future?		"No"				
					"Yes"		1.00	0.00	1
					"Yes, very likely"		1.00		
	"Yes"	x	Observed loss of assets/property			0.75	1.00	0.75	2
			Expected impact on revenue			0.50	1.00	0.50	3
			Expected impact on costs			0.75	1.00	0.75	4
			1-3 expected to increase in the future			0.50	1.00	0.50	5
			Lack of adaptability of the business model			0.50	1.00	0.50	6
			Sectors in the supply chain have a score >2.5 for acute climate risks (see table below)				1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)				+/-	0.00	8
	Acute Climate Risk Score at Sector-Level:							3.0	Max. 4

Chronic Climate Risk

H	Transportation and Storage				Scoring			Reference
	Are chronic climate developments in the country/region already relevant for the sector under consideration?				Score	Weight	Total	
	"No"		Is it likely that this relevance will be given in the future?	"No"				
				"Yes"		1.00	0.00	1
				"Yes, very likely"		1.00		
	"Yes"	x	Observed loss of assets/property		0.50	1.00	0.50	2
			Expected impact on revenue		0.50	1.00	0.50	3
			Expected impact on costs		0.75	1.00	0.75	4
			1-3 expected to increase in the future		0.50	1.00	0.50	5
			Lack of adaptability of the business model		0.50	1.00	0.50	6
			Sectors in the supply chain have a score >2.5 for acute climate risks (see table below)			1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Chronic Climate Risk Score at Sector-Level:						3.0	Max. 4

GHG Emissions

H	Transportation and Storage				Scoring		Reference
	Assignment of a score depending on the percentage of the sector emissions (X) of the total emissions of the country				Percentage-Range	Total	
	X ≥ 10%				x	4.00	
	10% > X ≥ 7.5%						
	7.5% > X ≥ 5%						
	5% > X ≥ 1%						
	1% > X ≥ 0.5%						
	0.5% > X ≥ 0.25%						
	Do sector activities have a negative impact on carbon sinks?	"No"		Add-on Factor 0			
		"Yes"		Add-on Factor 0.5			
		"Yes, severely"		Add-on Factor 1			
	Are sectors in the supply chain assessed with significant or existential emissions?	"No"		Add-on Factor 0			
		"Yes, score 3 emissions"		Add-on Factor 0.25			
		"Yes, score 4 emissions"		Add-on Factor 0.5			
	GHG-Emission Contribution Score at Sector-Level:					4.0	Max. 4

Probability of Regulatory Change

H	Transportation and Storage					Scoring			Reference
	Is the business case of the sector under consideration likely to be affected by regulatory change (now/ near future)?					Score	Weight	Total	
	"No"		Is this kind of regulation already present in other relevant countries?		"No"				
					"Yes, it is planned"		1.00	0.00	1
					"Yes, it is established"		1.00		
					"Yes, it is established and a further extention is planned"		1.00		
	"Yes"	x	Announced in the country under consideration			0.75	1.00	0.75	2
			Established in the country under consideration			0.00	2.00	0.00	3
			Further extension of this very regulation announced			0.00	0.50	0.00	4
			Announced in other relevant countries			0.50	0.50	0.25	5
			Established in other relevant countries			0.75	1.00	0.75	6
			Perceived pressure of the population i.e. in the context of catastrophes or severe economic losses			0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)				+/-	0.00	8
	Probability of regulatory Change Risk Score at Sector-Level:							2.0	Max. 4

Impact of Regulatory Change

H	Transportation and Storage				Scoring			Reference
	Is it likely that the regulatory change will have an ESG-impact (in the form of opportunities, risks, costs) on the sector?				Score	Weight	Total	
	"No"		Is the assessed score for "Probability of Regulatory Change" > 1.5 AND is an ESG-impact observed in other relevant countries?	"No, probability score < 1.5 or no ESG impact assumed"				
				"Yes, score > 1.5 and an ESG impact is assumed"		1.00	0.00	1
				"Yes, score > 1.5 and an ESG impact is perceived"		1.00		
				"Yes, score > 1.5 and a high ESG impact is perceived"		1.00		
	"Yes"	x	Effect on the business model		0.00	2.00	0.00	2
			Strong effect on the business model		0.00	1.00	0.00	3
			1-2 expected to increase in the future		0.50	0.50	0.25	4
			1 or 2 obvious in other relevant countries		0.75	1.00	0.75	5
			Impact on the value chain		0.75	0.50	0.38	6
			Lack of adaptability of the business model		0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			+/-	0.00	8
	Impact of regulatory Change Risk Score at Sector-Level:						1.5	Max. 4

Technological Change

H	Transportation and Storage					Scoring			Reference
	Is an alternative technology/methodology with sustainability-related advantages available/used in this sector in the country under consideration?					Score	Weight	Total	
	"No"		Is this technology available/ used in this sector in other relevant countries?		"No"				
					"No, to date it is just at theory/ study-level"		1.00	0.00	1
					"Yes, it is available and used in other relevant countries"		1.00		
					"Yes, it is heavily used in other relevant countries"		1.00		
	"Yes"	x	Use in the country under consideration			0.75	1.00	0.75	2
			Heavy use in the country under consideration			0.00	1.00	0.00	3
			Use in other relevant countries			0.50	0.50	0.25	4
			Heavy use in other relevant countries			0.00	1.00	0.00	5
			Accepted economic benefit of technology (lower costs and/or higher yields)			0.00	1.50	0.00	6
			Accepted strong economic benefit of technology (much lower costs and/or much higher yields)			0.00	1.00	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)				+/-	0.00	8
	Technological Change Risk Score at Sector-Level:							1.0	Max. 4

Customer Behavior

H	Transportation and Storage					Scoring			Reference
	Are customers accepting/demanding the new technology (see above assessment of technological change) in the country under consideration?					Score	Weight	Total	
	"No"		Are customers accepting/ demanding this very technology in other, export-relevant countries?		"No"				
					"Yes, the use can be recognised in its beginnings"		1.00	0.00	1
					"Yes, the use can be clearly recognised"		1.00		
					"Yes, the strong use can be clearly recognised"		1.00		
	"Yes"	x	Perceived benefits in costs/maintenance from the user's perspective			0.00	2.00	0.00	2
			Perceived benefits in health from the user's perspective			0.50	1.00	0.50	3
			Perceived benefits in quality/durability from the user's perspective			0.00	1.00	0.00	4
			Perceived benefits to society and ecosystems			0.50	0.50	0.25	5
			Mass Media presence conveying a positive image			0.00	1.00	0.00	6
			VIP-Advocates			0.00	0.50	0.00	7
			Local expert grading (score-modification between -0.5 and +0.5, see commentary below)			-0.50	+/-	-0.50	8
	Customer Behavior Risk Score at Sector-Level:							0.5	Max. 4

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