



# CSA Guide - RobecoSAM's Corporate Sustainability Assessment Methodology

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## 1. RobecoSAM

As an investment boutique focused exclusively on sustainability investing, RobecoSAM has always believed that financial analysis is incomplete if it ignores material extra-financial factors. Sustainability trends such as resource scarcity, climate change or an aging population continuously reshape a company's competitive environment. RobecoSAM is convinced that companies that can adapt to such challenges through innovation, quality and productivity enhance their ability to generate long-term shareholder value. For this reason, RobecoSAM developed the annual Corporate Sustainability Assessment (CSA) in 1999 in order to identify companies that are better equipped to recognize and respond to emerging sustainability opportunities and challenges presented by global and industry trends.

RobecoSAM pursues a truly integrated approach to analyzing sustainability performance. An interdisciplinary team of analysts designs, monitors and refines the CSA with the purpose of generating additional insights into the value creating and risk mitigating potential of companies, ensuring that the assessment focuses on sustainability criteria that are financially relevant to corporate performance, valuation and security selection. Not only does this make the results of the CSA assessment particularly relevant for investors, but it also helps companies to focus on sustainability issues that are more directly linked to their success as a business. RobecoSAM's approach is also unique in that it is based on information provided by the companies directly through the online questionnaire. This allows RobecoSAM to analyze sustainability at a much deeper level than frameworks based on public disclosure alone. RobecoSAM is often asked how the CSA works and how a company's Total Sustainability Score is calculated. This paper seeks to offer some insights into how the questionnaire is structured, how the score is calculated, and by using examples from three different industries, how specific questions can have an impact on a company's Total Sustainability Score.



# 2. The Sustainability Indices

Since the launch of the DJSI World in 1999, several other indices and index families that use RobecoSAM's Corporate Sustainability Assessment (CSA) results have followed to meet a range of investor specific needs. As a result of the various objectives of these index families, index component selection rules as well as scoring methodology have had to be adapted. This document aims to address some of the key differences between the two main sustainability index families in terms of assessment methodology. The document also aims to provide further insight into how the Media & Stakeholder Analysis (MSA) affects scores and clarify how RobecoSAM determines which companies will be assessed in any given year.

RobecoSAM and S&P Dow Jones Indices offer a range of sustainability indices that investors can chose from depending on their sustainability objectives versus their diversification requirements. Currently, two different index families use the RobecoSAM CSA data: DJSI and DJSI Diversified.

The DJSI are a family of benchmarks that uses a best-in-class approach to select sustainability leaders from each of the 59 RobecoSAM industries. RobecoSAM has observed that industry leaders are most likely to make the effort to fill out the questionnaire and make sustainability information available in the public domain. The DJSI is for investors who have a strong sustainability conviction and are willing to accept certain regional/size biases to gain exposure to sustainability leaders.

The DJSI Diversified family seeks to provide a benchmark consisting of a balanced allocation of sustainable companies derived from standard market benchmarks, closely tracking their respective benchmark in terms of risk-return profile while also ensuring high sustainability standards. The DJSI Diversified targets investors who want to gain exposure to sustainability leaders, but have certain risk control guidelines that they cannot breach.

Due to the different objectives that they are trying to meet, each of the two sustainability index families uses a different version of a sustainability score, although still all derived from the CSA. The DJSI family uses the Total Sustainability Score resulting from the CSA without further adjustment as described in the DJSI Guidebooks. For the DJSI Diversified, the Total Sustainability Scores are adjusted for sector and size bias as described in the DJSI Diversified Guidebook.



# 3. The Corporate Sustainability Assessment

#### 3.1 A Structured Approach

Each year, RobecoSAM invites the world's largest 2,500¹ publicly traded companies, measured by float adjusted market capitalization based on the S&P Global BMI Index, to participate in the annual CSA. An industry specific questionnaire featuring approximately 80 – 120 questions (depending on the industry) on financially relevant economic, environmental and social factors is the starting point for RobecoSAM's annual assessment.

Because this information is also integrated into financial analysis for asset management products, RobecoSAM focuses on sustainability factors that can have an impact on companies' long-term value creation potential. Based on the sustainability data collected through the CSA, RobecoSAM identifies companies that are more likely to outperform as a result of their adoption of sustainability best practices.

Since 1999, RobecoSAM has been conducting the annual Corporate Sustainability Assessment (CSA), which serves as the framework for measuring corporate sustainability performance and forms the research backbone for the construction of the Dow Jones Sustainability Indices (DJSI)

- The world's largest 2,500<sup>2</sup> publicly traded companies are invited to participate in RobecoSAM's CSA for possible inclusion in the Dow Jones Sustainability World Index (DJSI World)
- 59 RobecoSAM industries derived from the GICS® industry classification system are analyzed using industry-specific questionnaires
- No industries are excluded from the assessment
- Companies are evaluated based on a range of financially relevant sustainability criteria covering the economic, environmental and social dimensions
- Companies receive a Total Sustainability Score between 0 100 and are ranked against other companies in their industry
- The top 10% of companies within each industry are selected for inclusion in the DJSI World<sup>3</sup>
- The DJSI identify sustainability leaders across all industries, enabling investors to track their performance and integrate sustainability considerations into their portfolios

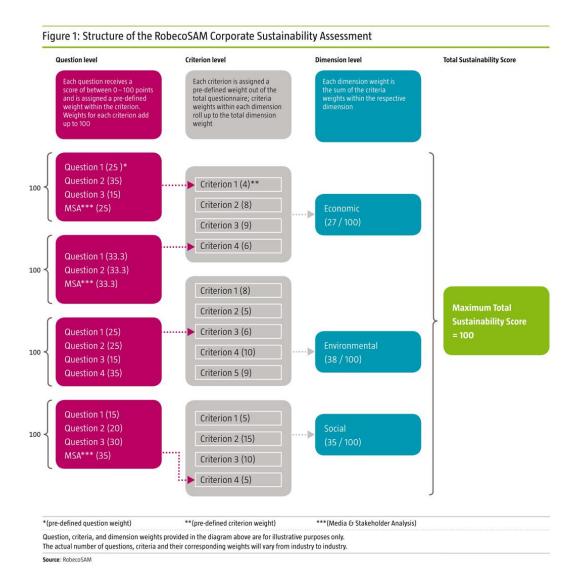
The CSA is designed to capture both general and industry-specific criteria covering the economic, environmental and social dimensions. Each of the three dimensions consists of, on average 6 – 10 criteria, and each criterion can contain between 2 – 10 questions, totaling approximately 80 – 120 questions, depending on the industry. Each criterion is worth up to 100 points, and is assigned a weight (percentage) of the total questionnaire. The criteria within each dimension roll up to the dimension weight. For each company, a Total Sustainability Score of up to 100 points is calculated based on the predefined weights established for each question and criterion. Figure 1 offers an overview of the general structure of the CSA.



<sup>&</sup>lt;sup>1</sup> Additional companies are invited for the regional Dow Jones Sustainability Indices, totaling approximately 3,300 companies.

<sup>&</sup>lt;sup>2</sup> Additional companies are invited for the regional Dow Jones Sustainability Indices, totaling approximately 3,300 companies.

<sup>&</sup>lt;sup>3</sup> The threshold for inclusion in the various DJSI Indices and the index component selection process can be found in the DJSI Guidebook which can be found at www.sustainability-indices.com.



## 3.2 A Comprehensive Analysis with an Industry-specific Focus

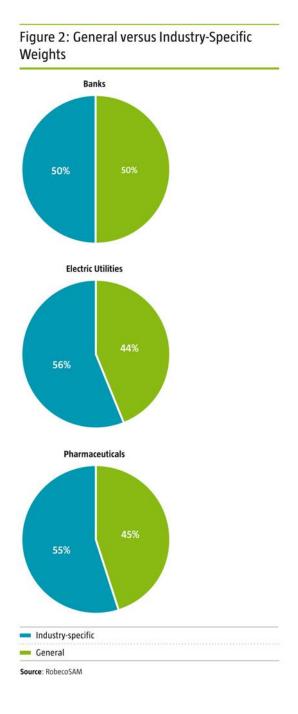
Based on major global sustainability challenges identified by RobecoSAM's analysts, general criteria relating to standard management practices and performance measures such as Corporate Governance, Human Capital Development and Risk & Crisis Management are defined and applied to each of the 59 industries. The general criteria account for approximately 40-50% of the assessment, depending on the industry as illustrated in Figure  $2^4$ .

At least 50% of the questionnaire covers industry specific risks and opportunities that focus on economic, environmental and social challenges and trends that are particularly relevant to companies within that industry. This focus on industry-specific criteria reflects RobecoSAM's conviction that industry-specific sustainability opportunities and risks play a key role in a company's long-term success and allows RobecoSAM to compare companies against their own peers in order to identify sustainability leaders. For instance, a manufacturing company's management of its exposures to climate change risks cannot be



<sup>&</sup>lt;sup>4</sup> Criteria and weights are based on the 2011 CSA for the Banking, Electric Utilities and Pharmaceutical industries and are provided for illustrative purposes only. Criteria and weights will differ for other industries. Specific criteria and their corresponding weights for subsequent years may change.

compared to a bank's response to climate change. Therefore, for industries with complex supply chains and logistics, the assessment focuses on evaluating their efforts to manage carbon emissions, whereas for financial services providers, the assessment focuses on whether companies address climate change through their financial products or by offering innovative funding schemes that encourage a transition towards a low-carbon economy.





The relative weights of the economic, environmental and social dimension of the questionnaire vary by industry. For example, as shown in Figure 3<sup>5</sup>, the environmental dimension warrants a higher weighting in the Electric Utilities industry than in the Banking or Pharmaceutical industries.



Criteria within the questionnaire will vary from industry to industry to reflect industry-specific drivers, as shown in Figure 4, which provides a comparison of the criteria applied to the Banking, Electric Utilities and Pharmaceutical industries.

Moreover, certain criteria – even when applied to more than one industry – can have different weights within the CSA. For example, the Banking, Electric Utilities and Pharmaceutical industries each contain the "Occupational Health & Safety" criterion within the social dimension of their respective questionnaires, but the relative weight assigned to Occupational Health & Safety is 5%, 4%, and 2%, respectively. These differences stem from RobecoSAM research analysts' fundamental bottom-up analysis of each industry. Furthermore, the same criterion, when applied to different industries, may contain a slightly different set of questions to reflect industry-specific issues.



<sup>&</sup>lt;sup>5</sup> Criteria and weights are based on the 2011 CSA for the Banking, Electric Utilities and Pharmaceutical industries and are provided for illustrative purposes only. Criteria and weights will differ for other industries. Specific criteria and their corresponding weights for subsequent years may change.

Figure 4: Comparison of criteria and relative dimension weights for the Banking, Electric Utilities and Pharmaceutical industries

Economic Dimension	Banking	Electric Utilities	Pharmaceuticals	
Anti-crime policy/measures	• 1			industry-specific
Brand Management	•			industry-specific
Codes of Conduct/Compliance/Corruption & Bribery	•	0	0	genera
Corporate Governance	•	0	•	genera
Customer Relationship Management	•	•	•	industry-specific
Innovation Management			•	industry-specific
Market Opportunities		•		industry-specific
Marketing Practices			•	industry-specific
Price Risk Management		•		industry-specific
Research & Development				industry-specific
Risk & Crisis Management	•	•	•	genera
Stakeholder Engagement	•			industry-specific
Scorecards/Measurement Systems		•		industry-specific
Total Economic Dimension Weight	38%	30%	40%	
Environmental Dimension				
Biodiversity		•		industry-specific
Business Opportunities Financial Services/Products	•			industry-specific
Business Risks Large Projects/Export Finance	•			industry-specific
Climate Change Governance	•			industry-specific
Climate Strategy		•	•	industry-specific
Electricity Generation		•		industry-specific
Environmental Footprint	•			industry-specific
Environmental Policy/Management System	•	•	•	general
Environmental Reporting	•	•	•	genera
Operational Eco-Efficiency		•		industry-specific
Transmission & Distribution		0		industry-specific
Water-Related Risks		0		industry-specific
Total Environmental Dimension Weight	24%	35%	10%	
Social Dimension				
Addressing Cost Burden			•	industry-specific
Bioethics			•	industry-specific
Corporate Citizenship and Philanthropy	•	•	•	general
Controversial Issues, Dilemmas in lending/financing	•			industry-specific
Financial Inclusion/Capacity Building	•			industry-specific
Health Outcome Contribution			•	industry-specific
Human Capital Development	•	•	0	genera
Labor Practice Indicators	•	•	•	genera
Occupational Health & Safety	5%	4%	2%	industry-specific
Social Reporting	•	0	0	genera
Stakeholder Engagement		•	•	industry-specific
Standards for Suppliers	•		•	industry-specific
Strategy to Improve Access to Drugs or Products			•	industry-specific
Talent Attraction & Retention	•	•	•	general
Total Social Dimension Weight	38%	30%	50%	

Criteria and weights are based on the 2011 CSA for the Banking, Electric Utilities and Pharmaceutical industries and are provided for illustrative purposes only. Criteria and weights will differ for other industries. Specific criteria and their corresponding weights for subsequent years may change.

Source: RobecoSAM



## 3.3 What is RobecoSAM looking for?

In line with RobecoSAM's conviction that material nonfinancial factors contribute to better informed investment decisions, the methodology focuses on long-term sustainability factors that are relevant to each industry, material to the company's financial performance and under-researched in conventional financial analysis.

Within each criterion, RobecoSAM looks for evidence of a company's awareness of sustainability issues and for indications that it has implemented strategies to address them. RobecoSAM also evaluates the company's progress in implementing such strategies as well as the quality of its reporting on these issues. Therefore, the questions within each criterion are structured to capture and evaluate the following elements:

- 1. Awareness of the importance of these factors to its financial success
- 2. Determination of the potential financial impact (i.e. materiality) of its exposure to sustainability factors
- 3. Implementation of strategies to manage these sustainability risks or to capitalize on related opportunities in a manner that is consistent with its business models
- 4. Measurement of results in relation to stated KPIs in order to evaluate the effectiveness of its sustainability strategy
- 5. Validation or external audit of stated results
- 6. Transparent communication of its corporate sustainability strategies and extent to which stated targets have been met.

This framework for evaluating corporate sustainability performance enables RobecoSAM to develop a more robust understanding of a company's quality of management.

#### 3.4 Questionnaire & response rates

The CSA is based on 59 unique online questionnaires which differ from industry to industry as sustainability drivers and indicators vary depending on a company's area of business. The 59 RobecoSAM industries are derived from the industry and sub-industry levels of the GICS® classification. At the industry group level, RobecoSAM uses the standard GICS® classification.

The eligibility and index component selection rules are explained in detail in the respective index guidebook. A list of companies invited to participate in the assessment is published on <a href="https://www.sustainability-indices.com">www.sustainability-indices.com</a> each February.

The response rate of the assessment varies from year to year. In the 2013 assessment, 818 out of 3,300° invited companies filled out the CSA questionnaires. From March to August every year RobecoSAM assesses all participating companies and existing DJSI members with a market cap above USD 0.5 billion. Additional companies are assessed based exclusively on public information to ensure that 50% of the market cap in the 59 industries in each region (or country for Australia and Korea) is covered.



<sup>&</sup>lt;sup>6</sup>The world's largest 2,500 publicly traded companies are invited to participate in RobecoSAM's CSA for possible inclusion in the DJSI World. Additional companies are invited for the regional Dow Jones Sustainability Indices, totaling approximately 3,300 companies.

In September 2013, RobecoSAM publicly announced that 818 companies had filled out the questionnaire. An additional 1,013 companies were assessed based on public information only.

In addition to this, from September to February of the following year all DJSI Diversified members with a market cap above USD 0.5 billion that are not already covered in the March to August period, are assessed based on publicly available information. In this period, coverage is extended to every developed market company with a market cap larger than USD 1 billion to ensure more than 50% of the market cap in the 10 GICS® Sectors in each country is covered (provided that companies report in English). In emerging markets, at least 90% of the market cap in the 10 GICS® Sectors in each country is covered (provided that these companies stocks have at least a 10% average daily trading volume and report in English).

As a result, by February 2014, approximately 1,000 additional companies were assessed based on public information. This brings the total number of companies assessed to roughly 2,800.



# 3.5 Industry Group Classification

The 59 RobecoSAM industries roll up into the 24 GICS® Industry Groups as indicated in the following table:

Figure 5: RobecoSAM Industries

GICS® Industry Group	RobecoSAM Industry
Automobiles & Components	ATX Auto Components
·	AUT Automobiles
Banks	BNK Banks
Capital Goods	ARO Aerospace & Defense
	BLD Building Products
	CON Construction හ Engineering
	ELQ Electrical Components & Equipment
	IDD Industrial Conglomerates
	IEQ Machinery and Electrical Equipment
	TCD Trading Companies & Distributors
Commercial & Professional Services	ICS Commercial Services & Supplies
Commercial & Professional Services	PRO Professional Services
Consumar Durables Cr Annaval	DHP Household Durables
Consumer Durables & Apparel	
	HOM Homebuilding
	LEG Leisure Equipment & Products and Consumer Electronics
	TEX Textiles, Apparel & Luxury Goods
Consumer Services	CNO Casinos හ Gaming
	CSV Diversified Consumer Services
	REX Restaurants & Leisure Facilities
	TRT Hotels, Resorts & Cruise Lines
Diversified Financials	FBN Diversified Financial Services and Capital Markets
Energy	COL Coal හ Consumable Fuels
	OIE Energy Equipment හ Services
	OIX Oil & Gas
	PIP Oil & Gas Storage & Transportation
Food & Staples Retailing	FDR Food & Staples Retailing
Food Beverage & Tobacco	BVG Beverages
1000 Beverage & 1050cco	FOA Food Products
	TOB Tobacco
Health Care Equipment & Corvices	HEA Health Care Providers & Services
Health Care Equipment හ Services	
	MTC Health Care Equipment & Supplies
Household හ Personal Products	COS Personal Products
	HOU Household Products
Insurance	INS Insurance
Materials	ALU Aluminum
	CHM Chemicals
	COM Construction Materials
	CTR Containers හ Packaging
	FRP Paper & Forest Products
	MNX Metals & Mining
	STL Steel
Media	PUB Media
Pharmaceuticals, Biotechnology & Life Sciences	BTC Biotechnology
	DRG Pharmaceuticals
	LIF Life Sciences Tools & Services
Real Estate	REA Real Estate
Retailing	RTS Retailing
Semiconductors & Semiconductor Equipment	SEM Semiconductors & Semiconductor Equipment
Software & Services	SOF Software
Software O Services	TSV IT services & Internet Software and Services
Technology Hardware & Equipment	CMT Communications Equipment
recimology Hardware O Equipment	,
	ITC Electronic Equipment, Instruments & Components
T-l	THQ Computers & Peripherals and Office Electronics
Telecommunication Services	TLS Telecommunication Services
Transportation	AIR Airlines
	TRA Transportation and Transportation Infrastructure
Utilities	ELC Electric Utilities
	GAS Gas Utilities
	MUW Multi and Water Utilities



# 4. The Scoring Methodology

## 4.1 Scoring the Questions

The questionnaire is designed to ensure objectivity by limiting qualitative answers through predefined multiple- choice questions in which each potential answer is assigned a number of points between 0 – 100. For questions in which qualitative answers are allowed, RobecoSAM analysts evaluate the response using a predefined appraisal method, and convert the response into a quantitative score. In addition, companies must submit documentation to support the answers they have provided. For many questions, companies will only receive the maximum score for the question if they have provided adequate supporting material. In the following pages, we provide examples of specific questions from two different industries, and show how a company's response to these questions has an impact on the Total Sustainability Score.



Example 1: Pharmaceuticals				
Question	Please indicate your company's approaches to improve accessibility of drugs in both developing and developed countries. Please provide supporting documents.			
Question Points	0-100			
Question weight within criterion	50%			
Criterion	Strategy to improve access to drugs or products			
Dimension	Social			
RobecoSAM Rationale	Underprivileged patients are often unable to buy medicine to treat or cure their diseases due to financial constraints. This is often the case in developing countries, and is now becoming a growing concern in developed countries. As a serious social challenge that requires attention from healthcare providers, some pharmaceutical companies are tackling this issue by implementing programs to provide these patients with improved access to medicine. Such initiatives help to improve the company's credibility, build corporate and product brands and increase market penetration of their products and services.			
Possible Answers	Number of Points Awarded			
A) list of potential approaches     (company can check all that apply)	0 – 100 (depending on which approaches have been selected)			
B) not applicable	A question that has been marked "Not Applicable" will not be scored and the weight of the question will be equally redistributed across the other questions within the same criterion, only if the analyst agrees that the question does not apply to the company's business model. This option is only granted in exceptional cases.			
C) not known	0			

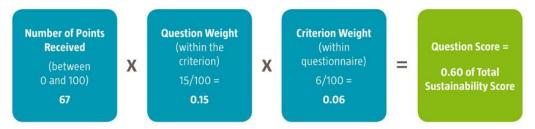
Assuming the company receives 50 points for its response to this question, its score will be calculated as follows:





Example 2: Banking				
Question	Which of the following qualitative and assurance aspects does your company's on-line financial service/system platform cover? Please provide or attach supporting documents.			
Question Points	0-100			
Question weight within criterion	15%			
Criterion	Customer Relationship Management			
Dimension	Economic			
RobecoSAM Rationale	Strong relationships with customers lead to increased customer satisfaction and loyalty. An important component of customer satisfaction is privacy and security. Internal on-line customer relationship management tools can provide important customer data, allowing the company to target specific customer groups and develop specific products, ultimately strengthening the relationship. Further, customers are increasingly demanding on-line services and convenient, reliable remote access to their accounts to accommodate their more flexible work arrangements and hectic lifestyles. Therefore, companies must ensure that they have implemented appropriate controls to prevent fraud, identity theft, attacks (hacking), and safeguard customer privacy. Guaranteeing a secure online environment reduces risks arising from the misuse of sensitive customer data and is crucial to maintaining customer trust.			
Possible Answers	Number of Points Awarded			
A) list of potential approaches     (company can check all that apply)	0 – 100 (depending on which approaches have been selected)			
B) not applicable	A question that has been marked "Not Applicable" will not be scored and the weight of the question will be equally redistributed across the other questions within the same criterion, only if the analyst agrees that the question does not apply to the company's business model. This option is only granted in exceptional cases.			
C) no such procedures / not known	0			

Assuming the company receives 67 points for its response to this question, its score will be calculated as follows:



## 4.2 Calculating the Total Sustainability Score

Total Sustainability Score =  $\Sigma$  (Number of Question points received x Question Weight x Criterion Weight)

A company's Total Sustainability Score at the highest aggregated level is the sum of all Question Scores. Each company receives a Total Sustainability Score ranging from 0 – 100. Once the Total Scores have been calculated, companies within the same industry are ranked against their peers in order to determine which companies are eligible for inclusion in the Dow Jones Sustainability Indices (DJSI). In addition, the 59 industries roll up into 24 global industry groups, and the top scoring company from each is named the Industry Group Leader and is profiled on the DJSI website.

CSA scores are derived from questionnaires that the invited companies complete online, on a voluntary basis. RobecoSAM aims to (i) identify, on a global basis, those companies that have a strong



commitment to sustainability; and (ii) quantify that commitment, across the key dimensions of sustainability (environmental, social, economic), so that such companies can be compared with each other over time. Therefore, it is reasonable to assume that the companies most inclined to respond to the CSA Questionnaire are also those that have the highest commitment to and awareness of sustainability.

In addition, the CSA also includes a large group of companies whose sustainability performance is evaluated by RobecoSAM based purely on publicly available information. This ensures that the coverage of the CSA is representative of the broader, global market for mid and large cap companies, both in terms of commitment to sustainability, and in terms of size, industry and country exposure.

RobecoSAM believes that self-reporting allows sustainability analysis at a much deeper level than frameworks based on public disclosure alone. For instance, the CSA Questionnaire asks about confidential matters that companies would typically not disclose publicly, such as internal risk management systems, human resource indicators/compensation systems or a company's innovation management framework.

Furthermore, RobecoSAM has taken a number of measures to ensure the accuracy of self-reporting:

- Statements regarding sustainability policies must be supported by official documents that the company provides separately.
- Most statements regarding actual performance (as opposed to policies) for which publicly
  available sources exist are verified against these sources. For standardized data and reporting,
  RobecoSAM looks for third party verification or assurance in addition to the performance
  figures. An example of this would be environmental performance indicators such as Scope 1
  CO2 emissions.
- The Media and Stakeholder Analysis (MSA), which is based on data provided by specialized
  media monitoring company RepRisk, serves as a cross-check between a company's stated
  policies and its actual involvement in and response to violations, law suits and controversies.
- Deloitte provides annual assurance on the application of the CSA and Corporate Sustainability Monitoring methodology as described in the DJSI Guidebooks.

#### 4.3 Assessing Companies exclusively on Publicly Available Information

In order to ensure that the CSA covers a representative group of companies – by region, industry sector and market cap size – RobecoSAM calculates Total Sustainability Scores for certain invited companies who choose not to participate in the CSA.

Non-participating companies' questionnaires are completed based exclusively on publicly available information. Public sustainability disclosures are often more limited than the information that can be obtained directly from participating companies. In this context, it is worth noting also that comparability of publicly available information varies due to differences in measurement and time periods, for example.

Nevertheless, a great deal of relevant and valid information regarding sustainability performance can be obtained from public disclosures. Representativeness and breadth of coverage are clearly important features of any sustainability scoring methodology. Therefore, while the questionnaires for non-participating companies may contain some information gaps, they still provide valuable information related to the sustainability efforts of those companies.



#### 4.4 Scoring Questions where no Information is available

Under the unadjusted approach, RobecoSAM assigns a zero score to any question where no information is available, as it is unknown whether the company has the applicable measure in place. This approach errs on the side of caution in granting sustainability scores: in the absence of any hard data, it grants the lowest possible score. While in some cases this may be a legitimate assumption, it is also true that this approach penalizes companies for not publicly disclosing information such as business strategies and competitive intelligence, but that may quite legitimately be considered confidential.

This approach effectively treats the level of disclosure in the questionnaires of the participating companies as the "gold standard" and sets the bar very high for companies whose score is based exclusively on public disclosures. It is best used in cases where the index user is more concerned with the level of sustainability performance itself, and less with representation of the underlying benchmark.

#### 4.5 Financial Materiality & Methodology

RobecoSAM pursues a truly integrated approach to analyzing sustainability performance. An interdisciplinary team of analysts designs, monitors and refines the CSA with the purpose of generating additional insights into the value creating and risk mitigating potential of companies, ensuring that the assessment focuses on sustainability criteria that are financially relevant to corporate performance, valuation and security selection. Not only does this make the results of the CSA assessment particularly relevant for investors, but it also helps companies to focus on sustainability issues that are more directly linked to their success as a business. RobecoSAM's approach is also unique in that it is based on information provided by the companies directly through the online questionnaire. This allows RobecoSAM to analyze sustainability at a much deeper level than frameworks based on public disclosure alone.

At least 50% of the questionnaire covers industry-specific risks and opportunities. This focus on industry-specific criteria reflects RobecoSAM's conviction that industry-specific sustainability opportunities and risks play a key role in a company's long-term success and allows RobecoSAM to compare companies against their own peers in order to identify sustainability leaders. RobecoSAM's CSA identifies the leading sustainability companies within the eliqible universe from each RobecoSAM industry.



To Starting with the 2013 DJSI review, the indices are fully aligned with the S&P Dow Jones Indices country classification. This relates to companies from Korea and Taiwan and affects the DJSI World Developed and DJSI Asia Pacific and their subsets. Korea will be solely considered a developed market. This means that Korean companies will only be eligible for the DJSI World, the DJSI Asia Pacific, DJSI Korea and their sub-sets. Taiwan will be solely considered an emerging market. This means that Taiwanese companies will cease to be eligible for the DJSI Asia Pacific as well as the DJSI World Developed (a subset index of the DJSI World). They are still eligible for the DJSI World Index as well as DJSI Emerging Markets.

# Media and Stakeholder Analysis (MSA)

#### 5.1 Integration of the MSA into the CSA

An integral component of the Corporate Sustainability Assessment is the ongoing monitoring of media and stakeholder commentaries and other publicly available information from consumer organizations, NGOs, governments or international organizations to identify companies' involvement and response to environmental, economic and social crisis situations that may have a damaging effect on their reputation and core business.

Throughout the year, RobecoSAM monitors news coverage of companies in the universe on a daily basis using media and stakeholder stories compiled and pre-screened by RepRisk, a leading business intelligence provider specializing in environmental, social and governance issues. News stories covered by the Media and Stakeholder Analysis (MSA), using data provided by RepRisk, include a range of issues such as economic crime or corruption, fraud, illegal commercial practices, human rights issues, labor disputes, workplace safety, catastrophic accidents or environmental disasters. RobecoSAM also reports or initiates MSA "cases" through the RepRisk system.

An MSA "case" is created if a company has been the subject of a specific allegation that can harm its reputation, resulting in financial consequences ranging from lost business, lost customers and declining sales, to liabilities, litigation or fines. Such a case therefore requires a reaction from the company in order to address the issue and minimize the negative impact of the crisis. In order to evaluate the quality of the company's response to the situation, RobecoSAM continues to monitor news flow related to the incident through RepRisk until it has been resolved, which in some cases may take over a year.

The MSA is built into the corporate sustainability assessment. For selected criteria within the questionnaire, predefined weights have been set aside for potential MSA cases that may arise during the year. The specific weight assigned to the MSA component will vary by criterion and from industry to industry, depending on the materiality of the potential impact on the company.

## 5.2 Impact of the MSA on Index Inclusion or Weight

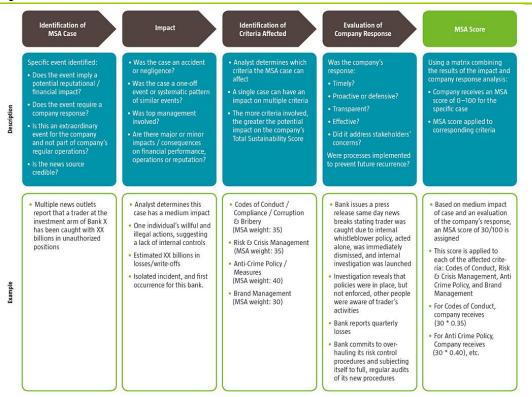
The MSA is integrated into the CSA questionnaires by treating each MSA case as if it were a question-with a pre-defined weight, within a given criterion--to which a score is applied. The specific weight assigned to the MSA question will vary by criterion, and from industry to industry, depending on the potential material impact on the company. Each company starts the year with a score of 100 for such MSA questions. However, as a result of an MSA case, a company will typically receive a lower score, leading to a reduction in its Total Sustainability Score. The results of the MSA analysis can reduce a company's Total Sustainability Score and thus affect its inclusion or weight in any of the DJSI Indices.

If a company has been part of recent controversies, scandals, allegations or disputes that negatively affected its reputation and/or financial performance it can lead to index exclusion in two ways: (i) by reducing the Total Sustainability Score causing the company to underperform its peers at the time of the review and (ii) through an index committee decision in exceptional cases at any time during the year when the issue is so severe that the company is removed from the index regardless of its score.



The chart in Figure 6 provides an overview of how a specific MSA case is identified, evaluated and integrated into the CSA.

Figure 6: Overview of MSA Process: From Identification to Resolution



The hypothetical MSA example has been provided for illustrative purposes only and does not reflect an actual MSA case or outcome. Criteria weights and MSA scores have been arbitrarily applied and are used for illustrative purposes only and do not reflect the actual weights in the questionnaire. The weight of the MSA component within selected criteria will vary from industry to industry, and may change from year to year.

Source: RobecoSAM

#### 5.3 Calculation of the MSA Score for a specific case

Based on the example outlined in Figure 6, Bank X receives an MSA Score of 30/100. This score is then applied to the weight that has been allotted to the MSA component of the "Codes of Conduct / Compliance/Corruption & Bribery" criterion, as shown in Figure 7.

Figure 7: Calculation of MSA Score





The same scoring process is applied to all other criteria that have been linked to the MSA case in question. If no MSA cases have been identified during the course of the year, then the company will receive the full 100 points allotted to the MSA component for each criterion, and will have no negative impact on its total score. The results of the MSA can reduce a company's Total Sustainability Score and thus affect its inclusion in any of the DJSI Indices. In addition, severe incidents and breaches that cast strong doubts on a company's procedures and ability to handle the situation can be escalated to the DJSI Index Committee by the analyst. During the course of the MSA evaluation, the analyst may contact companies to clarify any open points that may arise from the MSA case, thus allowing the analyst to include the company's responses when making a recommendation to the DJSI Index Committee. The Committee consists of two RobecoSAM representatives and two S&P Dow Jones Indices representatives and meets on a quarterly basis. Following a thorough analysis, the DJSI Index Committee may decide to change a company's eligibility immediately, regardless of the company's Total Sustainability Score.

#### 5.4 Updating the Questionnaire – Raising the Bar

Each year following the announcement of the DJSI components, the CSA is reviewed and adjustments are made to the questions and their relative weights in order to capture new sustainability issues that are expected to have an impact on companies' competitive landscape Overall responsibility for updating the questionnaire and ensuring the assessment process runs smoothly lies with the Methodology Committee, the Sustainability Investing Research (SI Research) team and the Sustainability Application & Operations team.

Analysts are assigned to specific industries and draw upon knowledge gained through their participation in industry conferences, roundtable discussions with industry organizations, as well as direct contact with companies throughout the course of the year in order to determine which industry-specific criteria warrant a review. As a general rule, analysts rely on their financial expertise to determine which sustainability opportunities and challenges are most likely to have an impact on a company's financial performance.

In addition, specialized analysts are assigned general and cross-industry criteria such as Supply Chain Management, Occupational Health & Safety and Corporate Governance. These analysts are responsible for staying informed on sustainability developments related to their assigned criteria and ensuring that the questions connected to the specific topic are also current. During the annual methodology review process, analysts can propose adjustments to weights, as well as additions or deletions of specific questions.

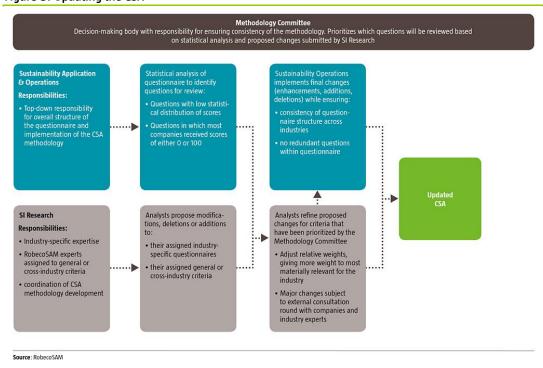
In parallel, the Sustainability Application & Operations team, which is responsible for the implementation of the CSA methodology changes, conducts a statistical analysis of companies' scores to identify questions that merit further review. Questions in which all (or almost all) companies received 100 or 0 points, or questions that have a very low statistical distribution of scores are subject to further discussion. This analysis provides RobecoSAM with an indication of which questions may be outdated, which corporate sustainability practices have been widely adopted by companies, or which ones may need to be refined in order to more adequately distinguish the leaders from the laggards.

The Methodology Committee is responsible for ensuring consistency of the methodology and is the decision making body within the governance structure that has been put in place for the annual review of the CSA. RobecoSAM aims to limit changes to approximately 10-20% of the questionnaire.

An overview of the methodology review process is provided in Figure 8.



Figure 8: Updating the CSA



#### 5.5 External Verification

Information provided in the questionnaire is verified for accuracy by crosschecking companies' answers with the supporting documentation they have provided, checking publicly available information, and by verifying a company's track record on crisis management with media and stakeholder reports. In addition, to ensure quality and objectivity of the CSA, independent third party Deloitte conducts an external audit of the assessment process each year.

#### 5.6 Leveraging Sustainability Insights

In addition to determining the components of the full range of the DJSI and DJSI Diversified index families, the insights derived from the CSA are fully integrated into our asset management offering and sustainability benchmarking activities. Data from the CSA also form the basis for the sustainability information that our parent company Robeco integrates in its mainstream fundamental and quantitative investment activities. Furthermore, RobecoSAM uses the results of the CSA to determine the companies that are eligible for inclusion in The Sustainability Yearbook — a reference guide to the world's sustainability leaders. The Sustainability Yearbook provides extensive qualitative analysis highlighting current and future challenges shaping the competitive landscape for each of the 59 industries. In addition, The Sustainability Yearbook contains statistical information indicating the total number of companies assessed for each industry, as well as the average and top scores at the dimension level.



It is very important to note that, in addition to the CSA scores being used as inputs for the various sustainability indices and the Sustainability Yearbook, RobecoSAM uses the aggregated CSA findings as research support and as one of the inputs in the research process leading to the selection and weighting of portfolio constituents of its own asset management business and that of its parent company Robeco. Data is also used to conduct empirical in-house research or in cooperation with academic institutions to measure the impact of corporate sustainability performance on financial performance.

#### 5.7 Annual timeline

**Figure 9: Timeline of CSA Process** early September early April end of May Analysis of companies' responses, calculation of Sustainability Scores & DJSI calculation Sep Oct Nov Dec Jan Feb Mar Apr May Jul Aug Sep mid March

Source: RobecoSAM



# 6. ESG Factor Score Methodology

Using the information collected through RobecoSAM's annual Corporate Sustainability Assessment (CSA) over the past 20 years, RobecoSAM' has developed an advanced "Smart ESG" scoring methodology. In contrast to traditional factors such as value or momentum, traditional ESG scores are very broad, often aggregating hundreds of single indicators into one score, diluting financially material information. RobecoSAM's new generation of ESG scores builds upon our existing sustainability data by eliminating known biases such as market cap, industry and regional biases. By removing these known biases, we are able to pinpoint which ESG indicators are the most financially relevant for different industries, sharpening our focus on financial materiality. The resulting ESG factor scores can therefore be used like traditional factors (value, growth, momentum, etc.) and at the same time are uncorrelated to traditional factors.

ESG factor scores are based on the same underlying ESG question data as the Total Sustainability score used for the DJSI index family. However, the scorecard used to calculate ESG factor scores from the ESG question data is different from the scorecard used for the calculation of Total Sustainability scores. The two key differentiators of the scorecard of ESG factor scores are:

- ESG factor scores are unbiased, i.e. they show no exposure to existing factors
- ESG factor scores focus on ESG criteria that have proved to be financially material in long-term materiality testing.

The scoring process for calculating ESG factor scores is as follows:

#### I. Un-biasing sustainability data

- 1. Allocate all assessed companies into 60 buckets, i.e.
  - a. 3 regions (Americas, Europe, APAC)
  - b. 2 assessment types (company assessment or self-assessment by RobecoSAM)
  - c. 10 GICS sectors
- 2. In each bucket, calculate z-scores at question level
- 3. Apply sigma-function for reducing impact of outliers to each set of z-scores per bucket. The resulting scores are in [-1,1]

#### II. Enhancing materiality

- Run Least Absolute Shrinkage Selection Operator (LASSO) [cf Tibshirani, 1996] regression of standardized question scores against total market return of all assessed companies in each sector-region, simulating across different subsets of the sample data
- 2. Obtain a mean regression coefficient (i.e. the materiality estimate) with a 95% confidence interval from the simulations.

#### III. Calculated ESG factor scores

1. Start with absolute DJSI question scorecard weights per company



- 2. Exclude all special values<sup>8</sup> and redistribute missing weights over remaining questions (with no theme or dimension cap)
- 3. Tilt weights according to LASSO regression results, using the DJSI scorecard as a starting point. Questions with a positive regression coefficient get weight added (linearly via regression coefficient size, up to a maximum of +4% to the best question), and negatively material questions get weights scaled down (linearly via regression coefficient size, down to a minimum of x1/4 weight to the worst question)

## IV. Run factor adjustment

- 1. Perform a regression analysis of the scores calculated in III with common factors such as size, value and dividend yield of companies as input variable.
- 2. The residuals of the regression analysis are the final factor adjusted ESG factor scores



<sup>&</sup>lt;sup>8</sup> Special values are missing data points for a certain company – either because the company did not provide the data or the data could not be found in the public domain.

# 7. Contact

## 7.1 Contact RobecoSAM

RobecoSAM Indices for index licenses and requests:

Tel.: +41 44 653 18 00 (during Central European Time business hours).

Email: indices@robecosam.com

RobecoSAM DJSI Helpline for companies with questions related to the CSA: Tel.: +41 44 653 10 30 (during Central European Time business hours).

Email: <a href="mailto:index@robecosam.com">index@robecosam.com</a>



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