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## **KPIs for ESG**

**Key Performance Indicators for  
Environmental, Social and Governance Issues**

**A Guideline for Corporates on how to Report on ESG  
and a Benchmark for Investment Professionals on  
how to Integrate ESG into Financial Analysis**

**Version 1.1. - DRAFT**

endorsed by



**EFFAS THE EUROPEAN FEDERATION  
OF FINANCIAL ANALYSTS SOCIETIES**



**Society of Investment Professionals in Germany**

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The work presented in this paper was initially published by DVFA in March 2008 and gained significant attention in the capital market – both in Germany and internationally.

Since March 2008 the work has been applauded by several initiatives in the area of ESG. In May, the framework received an unqualified endorsement from EFFAS, the European Federation of Financial Analysts Societies and thus gained the status of an official EFFAS Standard.

However, ‘better is the enemy of good enough’ as they say. Throughout discussions with investment professionals, corporates, standard setters and international experts for business reporting, the authors of this paper - DVFA’s Commission on Non-Financials – felt that it was worthwhile incorporating some of the valuable suggestions made and also clarify some of the underlying ideas. This will serve to clarify the goal of DVFA’s and EFFAS’ initiative and facilitate implementation and communication into the corporate world.

Modifications include:

- A change of nomenclature: the original distinction between Master KPI and Applied KPI caused some misunderstandings. What was meant were topical areas (Master) and the actual KPI (Applied KPI). With version 1.1. these terms have been abandoned and replaced by ‘ESG’, which is now the term for topical area and ‘KPI’, which is the actual KPI;
- Topical areas are henceforth called ESG so that individual issues can be referred to as ESG 1, ESG 2, ESG 3 ... similar to the way that the IFRS accounting standards of the IASB are referred to as IAS1, IAS 2 etc.
- A new section has been added to explain how interested third parties e.g. corporates, brokers, investment firms, advisors can define sets of industry-specific ESGs and KPIs for additional sectors, and how the process of endorsement by DVFA/EFFAS is governed.

**Dr. Hendrik Garz**, WestLB AG, **Felix Schnell**, Allianz Global Investors KAG  
Chairs DVFA Commission on Non-Financials

Frankfurt/Germany, 05 Oct 2008



# Executive Summary

- DVFA Commission on Non-Financials (CNF) is a professional body of investment managers, financial analysts, corporates, auditing/assurance professionals, and experts in the field of Environmental, Social and Governance issues;
- CNF has defined topical areas for the reporting of ESG issues as well as key performance indicators (KPIs) for use in financial analysis of corporate performance;
- The Commission on ESG (CESG), a body of EFFAS (European Federation of Financial Analysts Societies) has endorsed the work of CNF as an important contribution to the integration of ESG into financial analysis, and hence given the framework the status of an EFFAS Standard
- 12 topical areas have been defined which apply to all sectors and industries. This part of the work is considered a standardised and comprehensive framework;
- 18 industry-specific topical areas were also defined as a starting point for specific sectors. This part is an open framework to be finalised for additional sectors in the coming months. Hence, additional topical areas may be added to the list of industry-specific topical areas;
- Topical areas throughout this document are referred to ESGs; ESGs are enumerated so that corporates and investment professionals can easily cross-reference the reported aspect as they can with IFRS (IAS 1, IAS, 7, IAS 19 etc.);
- Through global online research, all KPIs were surveyed with fund managers and financial analysts for relevance and validity;
- The work at hand includes the following items:
  - Basic principles for ESG reporting
  - Basic principles for reporting of quantified performance data with a specific focus on comparability and benchmarkability;
  - Details from the survey of the KPIs from international investment professionals;
  - Description, ratios, and detailed taxonomies for each individual KPI.
- The framework is designed as a recommendation for corporates and investment professionals. The purpose is not to present an additional reporting framework. Rather, recommendations are provided to the corporates on the use of the KPIs within the framework of existing performance communication, e.g. financial reporting, MD&A, CSR reports, GRI/G3;

|   | <b>E</b><br>Environmental   | <b>S</b><br>Social  | <b>G</b><br>Governance  | <b>V</b><br>Longterm Viability   |
|---|---|---|---|--|
| <b>General:</b><br>ESGs which apply to all industry-groups                    | ESG 1 Energy Efficiency<br>ESG 2 Deployment of Renewable Energy Sources   | ESG 3 Staff Turnover<br>ESG 4 Training & Qualification<br>ESG 5 Maturity of Workforce<br>ESG 6 Absenteeism<br>ESG 7 Restructuring-related Relocation of Jobs  | ESG 8 Contributions to Political Parties<br>ESG 9 Anti-competitive Behaviour, Monopoly<br>ESG 10 Corruption | ESG 11 Customer Satisfaction<br>ESG 12 Revenues from New Products  |
| <b>Industry-Group Specific:</b><br>ESGs which apply to select industry-groups | ESG 13 CO2 Emissions<br>ESG 14 NO <sub>2</sub> /SO <sub>2</sub> Emissions<br>ESG 15 Waste<br>ESG 16 Environmental Compatibility<br>ESG 17 End-of-Lifecycle Impact | ESG 18 Diversity<br>ESG 19 % of Credit Loans, Undergone ESG Screening<br>ESG 20 % of Funds Managed in Accordance to ESG Criteria<br>ESG 21 Financial Instruments held in Accordance to ESG Criteria<br>ESG 22 Investments in Accordance with ESG<br>ESG 23 Supplier Agreements in Accordance with ESG<br>ESG 24 Health & Safety of Products | ESG 25 Litigation Payments<br>ESG 26 Dimension of Pending Legal Proceedings                                 | ESG 27 R&D Expenses<br>ESG 28 Patents<br>ESG 29 Investments in Research on New Risk<br>ESG 30 Customer Retention |

## I. ESG and Mainstream Capital Markets

The debate on the capital market surrounding ESG is complex, and not always comprehensible, even to the experts. One thing, however, is clear: ESG is not ethical valuation but about understanding and measuring material risks impacted through ESG for companies in every industry.

Legislative solutions and government intervention in many capital markets are often seen as the only viable solutions to such issues. In light of the international nature of capital markets, and given the – subjective or objective – perception that the markets are overregulated, initiatives aimed at ESG legislation would likely arouse misgivings both here at home and abroad.

In an era of internationally active investors, the focus on ESG issues is being fuelled primarily by institutional investors, such as pension funds or insurance companies. It would be wrong to believe that the capital markets see the criteria applied by these investors as “green”. And such a characterisation would surely also be refuted by the CEOs and CFOs of these institutions.

Investors and analysts, whether SRI or mainstream, who demand “uneconomic” behaviour from companies are in the wrong line of work! The capital market cannot and should not be used as a lever to abrogate the regulatory market framework. This would be an absurd expectation, and would hold out no prospect for success. Indeed, the state does bear responsibility for the market framework.

The fact is, there is no fundamental contradiction, as has been assumed, between the objective of value creation for the ownership of companies and the call for attention to ESG aspects. On the contrary, ignoring these aspects equates to neglecting a stock of important long-term value drivers. This is confirmed by numerous empirical studies, which have concluded time and again that companies investing in ESG sustain a lower degree of risk!

In their mindsets and out of the approach they take, institutional investors are focused on long-term performance. They are not interested primarily in quarterly numbers, but rather in management integrity. They are not out for short-term, flash-in-the-pan gains. They expect thorough transparency when it comes to operational risks.

Moreover, the essence of ESG does not lie in the publishing of sustainability or CSR reports. ESG provides information about management systems, corporate governance, long-term viability of profitability, or potential reputational risks and liability issues.

Integration of ESG is often viewed under a theoretical framework that, although currently under some scrutiny from the academic world, has been well-established through practical experience: namely that of “efficient markets”. In short, this theory states that prices already reflect all known information relating to a share, and that the markets are in a state of equilibrium. All new information – and ESG represents an immense reservoir of additional information for financial analysts and investors (see above) – has the potential to impact the fundamental assessment of an equity. This presupposes, of course – and this is where the work of DVFA is focused – that the data is quantified, comparable, and benchmarkable! This is what makes the data usable for every investment professional.

ESG information may not affect the price of a company’s share, for instance, in the case of a new environmental process or a human capital initiative. But for the understanding of risk, including reputational risks or monetarily quantifiable litigations relating to child labour, pollution, etc., investment professionals look very closely at the information, due to the material risks to company reputation that are involved.

A paradigm shift is currently underway. Whereas, in the past, it was predominantly SRI investors who used ESG data for decisions geared toward ethical values, a growing number of “alpha seekers”, i.e. investors targeting undervalued companies in order to generate excess return, have now also discovered the usefulness of ESG information.

The DVFA initiative ties seamlessly into global initiatives that seek to promote holistic corporate reporting, including the use of extra-financials. SEC’s “Advisory Committee on Improvements to Financial Reporting” report, issued on 11 February 2008<sup>1</sup> pointed out that disclosure of key performance indicators (KPIs) would lead to increased transparency for investors. The Enhanced Business Reporting Consortium (EBR 360)<sup>2</sup> led by Prof. Robert Eccles has provided a framework for the integration of extra-financial topics such as ESG and intellectual capital for analysis purposes. As part of the global initiative WICI (Worldwide Initiative on Intellectual Capital), EBR 360, the EFFAS Commission on Intellectual Capital and the OECD have linked efforts to establish a common framework for intellectual capital reporting.

Meanwhile, the SEC has launched the “21st Century Disclosure Initiative”. Again, the work of DVFA, endorsed by EFFAS, will contribute substantially to the efforts of the SEC toward development of corporate reporting that covers the full range of investor needs.

Moreover, under the leadership of PriceWaterhouseCoopers New York, an XBRL (eXtensible Business Reporting Language) taxonomy has been created to allow interactive communication of KPIs. XBRL is a global initiative carried by a consortium of more than 400 global organisations including auditing firms, corporates, software firms, investment firms, regulators and standard setters.

There is a considerable conceptual and communicative gap between the more politically and human rights-motivated UN

campaign, “Principles for Responsible Investments”, and the day-to-day experience of sustainability in many companies. This disconnect cannot be remedied by any legislative means, and no attempt should be made by legislatures to do so. The issue at hand is a translation of features and properties, which at first glance are difficult to grasp and too complex to quantify into indicators that the capital markets can understand, use for calculations, and relate to monetary figures. This type of modelling relies on the financial-analytical mindset of investment professionals. These are the people who will develop such models, and ultimately, the only ones who will recognise their usefulness.

This report represents the work of DVFA Committee on Extra-Financials to date.

So far, industry-specific KPIs have been developed for 5 sectors. Other sectors will follow in the months to come. Individual sector supplements will be published by DVFA and EFFAS in the future.

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<sup>1</sup> <http://www.sec.gov/about/offices/oca/acifr.shtml>

<sup>2</sup> <http://www.ebr360.org/>

## II. Methodology

The DVFA Commission on Non-Financials (CNF) set to work in 2006, starting with research on corporate reports on ESG. It was a common perception that most of the corporate material was of limited use for investment professionals, as it was (and still is today) typically communicated in prose style. Moreover, ESG data are often delivered to stakeholders as a separate paper report.

Investment professionals – and this perception is also shared by corporates – rarely consume ESG reports in their entirety. There are several reasons for this: in most cases data is quantified; but even if quantified, the information is not comparable with data delivered by peers or across periods. For much data, there is no standard definition available. But most importantly, for many ESG-related items, there is little evidence of a correlation to the performance of the corporate, i.e. what are the implications of the ESG item reported for risk or profitability?

Consequently, CNF was tasked with identifying topical areas and key performance indicators (KPIs) for ESG, which would be reported by corporates, and which investors and financial analysts could integrate into a classic spreadsheet analysis.

Essential criteria for useable KPIs for ESG were defined as follows:

- They should depict a correlation to risk or success factors of corporate business
- They should be significant and relevant for investment decisions
- They should be firmly anchored in the corporate management system
- They must be quantified, comparable, and benchmarkable from peer to peer
- They should depict dynamics, i.e. from reporting period to reporting period
- They should be manageable in dimension ("Key"), e.g. small set of 30 KPIs max.

One of the most important considerations was to refrain from designing yet another reporting scheme. Rather, CNF's KPIs were to be compatible with traditional reporting statements, e.g. quarterly reports, annual reports; as well as with other formats, e.g. GRI's G3.

CNF gathered material on KPIs already in use or reported by corporates. The initial long list of 600 indicators was reduced to a set 30 KPIs through multiple iterative processes, moderating the discussion between mainstream investors and financial analysts and corporates. For three sectors – Utilities, Airlines, Automobiles & Components – specific profiles of KPIs were condensed to a sector supplement.

The KPIs were structured along the dimensions of ESG. A fourth pillar – Long-term Viability – was included to capture those KPIs which depict the concept of sustainability capital markets prefer: the term "sustainability" which was felt to be associated with SRI, green investing or ecologic-ethical movements, was avoided in favour of "long-term viability" as this represents a corporate's capability to produce long-term profits without sacrificing assets, skills, or resources through short-term exploitation.

The draft set of KPIs was then road-showed to investment professionals in Europe, and surveyed to fund managers and financial analysts on a global scale, the aim being to verify the selection of KPIs.

The explorational survey among investment professionals was targeted to equity sell- and buy-side investment professionals from firms with good reputations globally & continentally. The focus was on "mainstream" players. The online questionnaire, with a multiple-choice structure and comment boxes, also asked participants to provide details on occupation (sell-side/buy-side) and sectors covered.



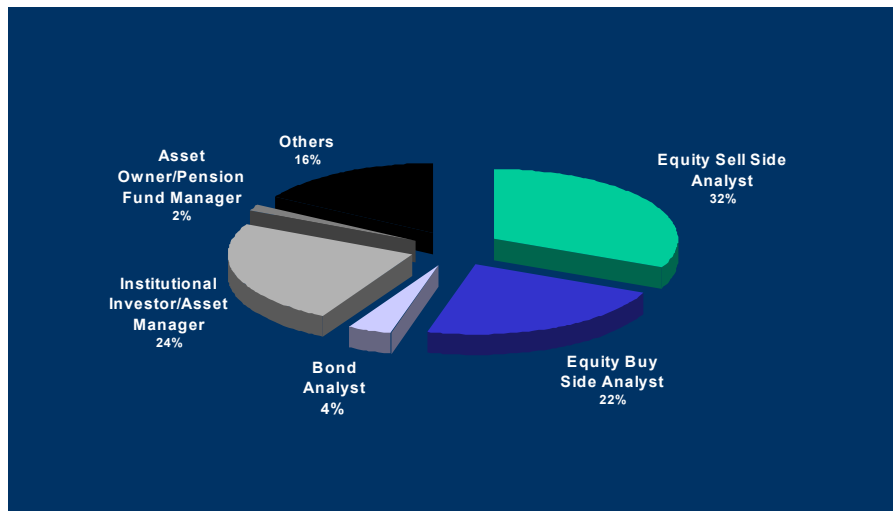


Figure 1: Distribution of the Respondents: Functions

After eliminating unfinished or partially finished questionnaires from the feedback of over 200 respondents, 122 completed

and valid responses remained. Note that buy-side is represented with 48% and sell-side with 36%.

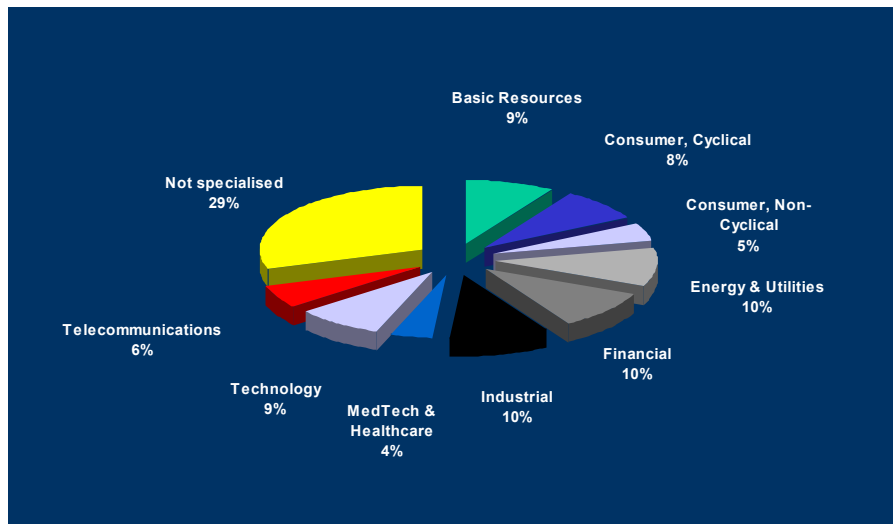


Figure 2: Distribution of the Respondents: Sectors

Because the survey generated a relatively large response in Germany (which was to be expected given that DVFA's main territory of operation is Germany), there is

by-and-large a strong bias towards continental European markets (74.5%). Anglo-Saxon markets participated with 24.6%.

## International Dimension of the Survey

|  |  |
|--|--|
| <b>ABN AMRO Bank nv</b>                              | <b>Feri Finance AG</b>                               |
| <b>ABP Vastgoed Holding BV</b>                       | <b>Fortis Investments</b>                            |
| <b>Allianz</b>                                       | <b>Goldman Sachs</b>                                 |
| <b>Allianz Dresdener Asset Management</b>            | <b>HSBC Bank</b>                                     |
| <b>ampega Investment AG</b>                          | <b>JP Morgan Chase &amp; Co</b>                      |
| <b>Argos Investment Managers</b>                     | <b>Kempen&amp;Co</b>                                 |
| <b>AXA</b>   | <b>Kredittrust</b>                                   |
| <b>Banca di Intermediazione Mobiliare IMI S.p.A.</b> | <b>LAZARD</b>  |
| <b>Bankgesellschaft Berlin</b>                       | <b>Legal&amp;General Investment Managers</b>         |
| <b>Banque General du Luxembourg</b>                  | <b>Merck Finck</b>                                   |
| <b>BHF Bank AG</b>                                   | <b>Merrill Lynch</b>                                 |
| <b>BNP Paribas</b>                                   | <b>Morgan Stanley Group Inc.</b>                     |
| <b>CEROS Vermoegensverwaltung GmbH</b>               | <b>ODDO &amp; CIE</b>                                |
| <b>CHEUVREUX DE VIRIEU</b>                           | <b>Rothschild Bank AG</b>                            |
| <b>Commerzbank AG</b>                                | <b>Sal. Oppenheim jr. &amp; Cie KGaA</b>             |
| <b>creditmutuel</b>                                  | <b>SAM Group Holding AG</b>                          |
| <b>Dexia Banque Belgique SA</b>                      | <b>Schweizerische Rueckversicherungsgesellschaft</b> |
| <b>Dresdner Kleinwort Wasserstein</b>                | <b>Societe Generale</b>                              |
| <b>DWS / Deutsche Asset Management</b>               | <b>Union-Investment</b>                              |
| <b>EQUINET AG</b>                                    | <b>WestLB AG</b>                                     |
| <b>F&amp;C Management Ltd.</b>                       | <b>Zürcher Kantonalbank</b>                          |

Figure 3: Institutions Involved in Survey

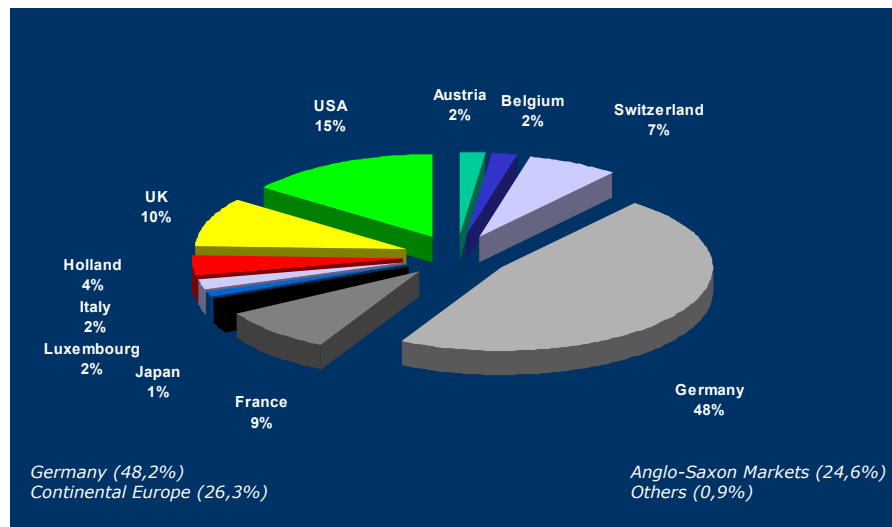


Figure 4: Geographical Distribution of Respondents

In the online questionnaire, investment professionals were asked for their opinion on the KPIs that the DVFA Commission on Non-Financials had preselected. The questions asked were the following:

*“How do you rate the following topical areas for extra or non-financials?”*

*“Are these topical areas currently important for your corporate analysis and/or valuation work?”*

On a scale ranging from 0 = not important/not relevant to 5 = very important/highly relevant, investment professionals were able to select how they rated DVFA's preselection. The results are shown in the two graphs below.

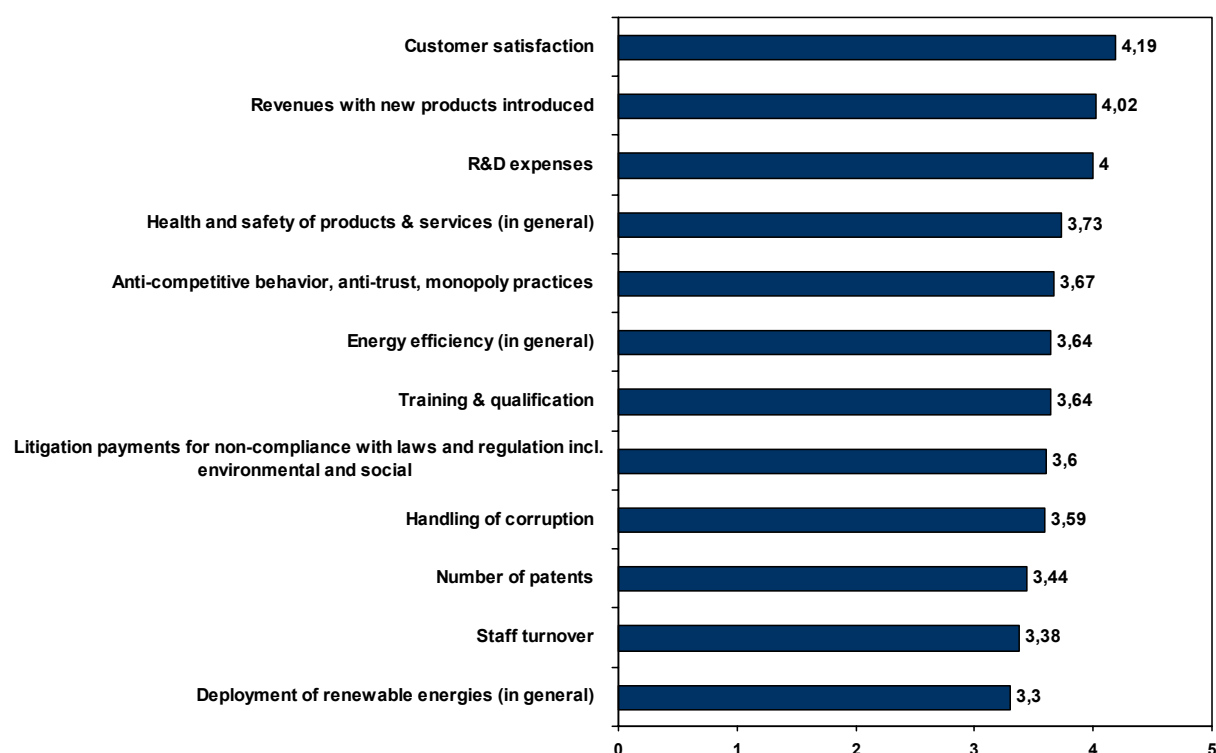


Figure 5: Perception of the 30 topical areas: Summary (1)

Interestingly, “classic” topical areas, such as Customer Satisfaction or Revenues with New Products were given a very high rating, whereas typical ESG issues, such as Energy Efficiency or CO2 Emissions were rated mid-field.

In any case, in the perception of investment professionals, there do not seem to be any unimportant or irrelevant topical areas. Even at the lower end of the scale, ESGs such as Screening of Supplier Agreements or Absenteeism Rate scored 2,99 and 3,04 respectively, and are thus rated with medium relevance.

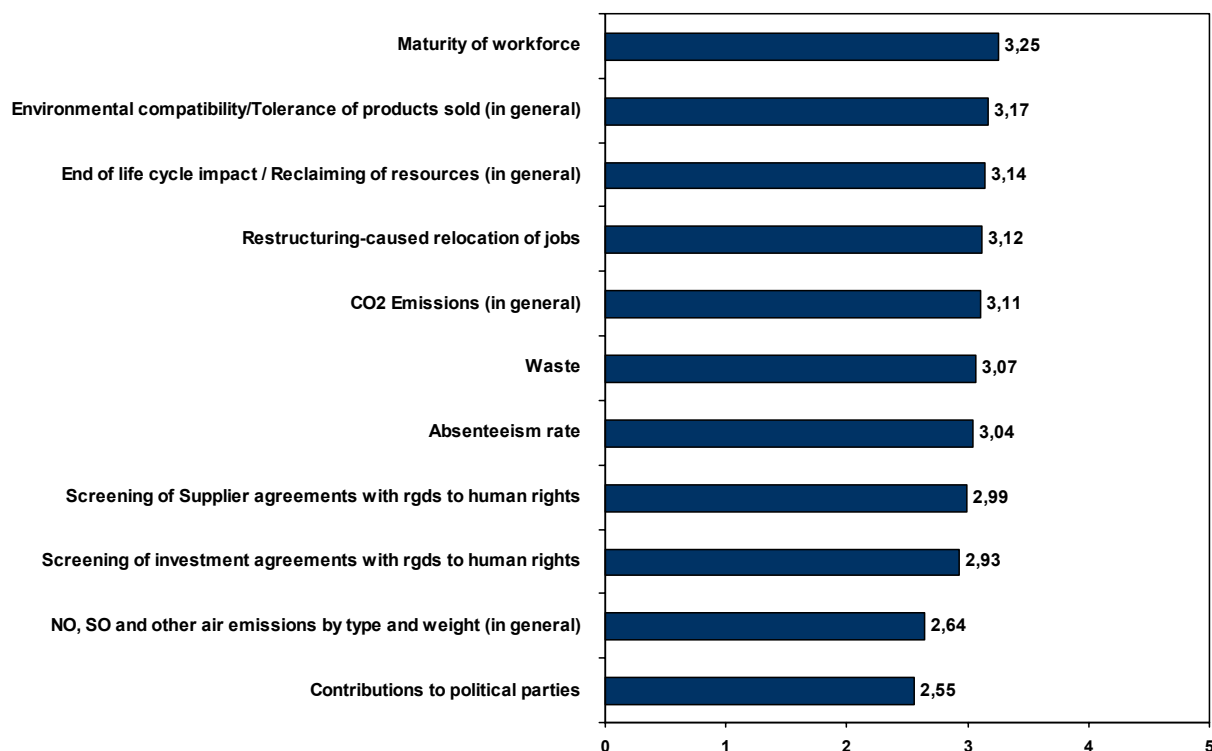


Figure 6: Perception of the 30 ESGs: Summary (2)

The results from the survey clearly indicate the following:

- There are topical areas within ESG that are indeed important for the investment decisions of mainstream investment professionals
- Investment professionals appear to perceive the most value in ESGs measuring “long-term viability”, reflecting that corporates are willing and able to undertake investments which safeguard success factors

### III. ESG Reporting

#### 1. Basic Principles

ESG is a generic term used in capital markets. Often, it is erroneously equated with terms like Corporate Responsibility or Sustainability. However, when mainstream capital markets look at ESG, two focal points immediately emerge: risk caused by (bad) ESG performance and business opportunities based on proactive ESG performance. Corporate Responsibility reports from corporates address several stakeholder groups, not just investors and financial analysts. However, as a professional association of investment professionals, DVFA will focus on the use of ESG in capital markets and how to assure that any ESG data be delivered in useful formats and with meaningful content to investment professionals.

In order that environmental, social and governance (ESG) data can be used as a basis for analysis by investment professionals, there are certain minimum requirements for the ESG management of individual companies and for the quality of ESG reporting.

We recommend that companies demonstrate satisfaction of these minimum requirements in the context of their ESG reporting, e.g. in an ESG report, or in online reporting, taking into account the essential elements outlined below.

#### Section A: Corporate strategy and ESG aspects

Throughout this paper we will look at both focal points of ESG: identifying and managing risks and identifying and capitalising on business opportunities. Traditionally, the focal point of risk has been more prominent to investment professionals. As with many aspects of corporate conduct, there is the perceived wisdom that corporates do not gain a bonus for good corporate governance or reputation well-being, but indeed suffer a massive discount when ESG issues are well managed. It will be one of the challenges of corporates to work out and communicate to investment professionals

how good ESG performance translates into better corporate performance in capital market currencies, i.e. value of the company and stock price.

A central feature of ESG is the identification and analysis of significant societal developments, along with the related opportunities and risks, with the aim of continually developing fields of ESG activity and associated measures. The future fields of activity provide impulses for the development of the corporate strategy and, at the same time, serve as a source of reinforcement for its implementation.

Including ESG aspects in the development of the corporate strategy offers companies broad potential for future success. In addition to expanding the scope of risk management to include ESG issues, it opens up opportunities to increase cost efficiency and improve the long-term prospects for success of the company.

***The company should outline the importance of ESG for the corporate strategy and explain how ESG aspects are taken into account when implementing the strategy.***

Every company – to differing degrees – has a basic understanding of its ecological, social, and governance responsibilities. Factors that influence or determine this basic understanding include the quality and focus of supervision by management and supervisory boards, the quality of company organisation and delegation of responsibilities by the management, the ESG philosophy as well as the integrity, ethical values and competence of the employees.

As a rule, this basic understanding of ESG is also expressed through overarching frameworks, such as an ESG strategy, under which company-specific fields of ESG activity are defined, as well as in more practically oriented regulations such as a code of conduct, environmental management guidelines, donation rules, or

group health and safety policies. Although these topics are already operational realities for many companies, there is often a lack of adequate documentation with respect to procedures and individual measures.

***The company should portray its understanding of ESG – e.g. by developing and publishing an ESG strategy – to the capital market to enhance transparency about risk exposure. Company-wide, practically oriented guidelines should be made available online.***

Companies with ESG management are able to promptly identify future legislative initiatives or opinion shaping processes, which could lead to regulatory interventions. This allows them to anticipate such developments in their product development or corporate communications and position themselves as pioneers in the area of ESG. To achieve this, however, companies must have a process and assessment system in place to evaluate the relevance of ESG issues.

***The company should determine and communicate the current and future relevance of ESG topics for its own business activities – e.g. in ESG reports or via the Internet.***

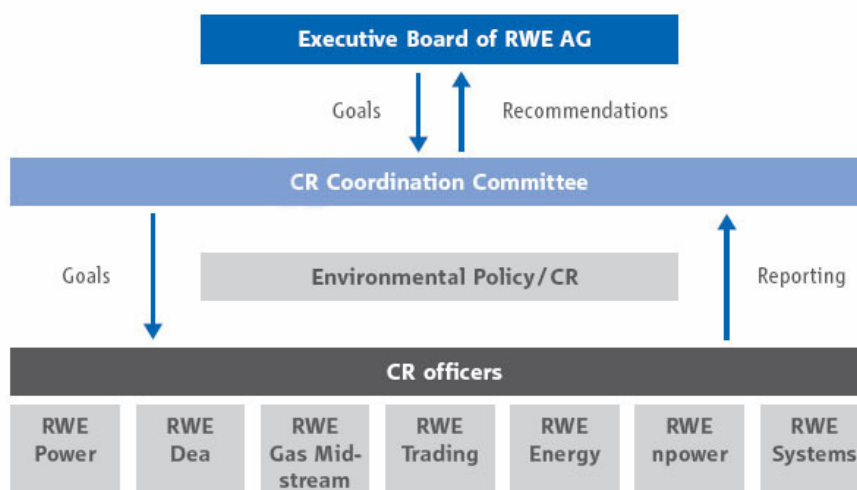
## **Best practice example: Assessment system for relevance of ESG topics**

### Section B: ESG management

The ESG management system serves to ensure that ESG activities in the defined fields are implemented at operational level and permits monitoring of these activities by the company management. Often a central ESG management committee is established, in which representatives of central ESG-related company functions regularly coordinate with the ESG representatives of the operative units and support the management board with respect to ESG issues. In many cases, there is a central ESG coordination office in place to support the ESG management committee in day-to-day business. The ESG management committee and the ESG coordination office ideally report directly to the CEO or the management board spokesman. Among other things, this serves to ensure the reinforcement function of ESG management for the corporate strategy. Alternatively, an organisational tie-in with the Strategy unit or Compliance Management can be a good idea.

***The company should lay out its ESG management system with its key elements and processes to the capital market. Additional information in the form of organisational charts and descriptions of key functions can also be published online.***

### **CR management structure of RWE AG as at 31 December 2007**



### **Best practice example: organisational structure of ESG management**

As a rule, the fields of activity defined in the company's ESG strategy are put into operation by way of an ESG program, which links them to concrete objectives and specifies ESG measures to meet these objectives. Generally, the company's overall ESG objectives are communicated to the operative units in a top-down iterative process. The primary fields of ESG activity should be taken into account when defining objectives and initiating measures. Attainment of the objectives is monitored from the bottom up, and this monitoring process culminates in an assessment of the ESG results by the central ESG management committee.

***The company should provide a description of its overall ESG program to the capital market. Additional reports on individual ESG projects with particular relevance for reinforcement of the corporate strategy may be published in the ESG report or online.***

For assessing the effectiveness of ESG activities and identifying needs for additional attention in areas previously deemed non-relevant, a systematic and early identification, collection, and communication of relevant information is required. Sources include internally generated data as well as information on external events, such as the results of stakeholder dialogues, client and employee surveys, or discourses with government authorities.

Companies should also report on how they interact with members of their supply chain, e.g. how suppliers' adherence to minimum ESG requirements is reviewed, and how customers are informed about the company's ESG performance.

***The company should present its communication with stakeholders in an aggregated form and highlight individual, especially relevant stakeholder-relationships in the ESG report or via the Internet.***

Compliance with the ESG management system and its functioning must be

continuously monitored. For instance, it would be possible for the internal audit department to review proper implementation of the ESG organisational requirements as part of its regular auditing duties. The central ESG coordination office could also carry out audits on the operative implementation of the ESG framework. Additionally, external assessments can be conducted, such as certifications of environmental management systems or CO<sub>2</sub> volumes, along with external audits of ESG reports or ESG data in the management report.

### **Section C: ESG reporting**

An important component of the ESG management system is internal reporting, which forms the basis for all planning and monitoring processes relating to ESG within the company and its - often widely varied - units and divisions. In order to monitor the achievement of objectives, companies usually define uniform key performance indicators (KPIs) for ESG company-wide. These KPIs are consolidated regularly throughout the company and, as a rule, reported at least once a year to the central ESG management committee.

ESG reporting must be based on a clearly structured process with definitive rules governing data collection, data entry/transmission, and central data aggregation. The process must ensure satisfactory audit trails for the data and feature adequate control mechanisms (e.g. approval procedures, automatic plausibility checks) to guarantee accurate reporting. The process should be supported by suitable ESG software.

In order to guarantee more efficient collection of ESG data, the units charged with data collection should be provided with benchmarks for the improvement of their data collection processes. This could be accomplished, for instance, with a group-wide ESG Accounting Manual, similar to the manual used for financial accounting. The manual could contain recommendations for audit-proof collection and documentation of basic data, or methods for efficient extrapolation of information from this data (e.g. data aggregation).

**The company must order its ESG reporting systematically and gear it towards a high level of data reliability.**

If ESG information is reported externally, the company should follow the DVFA Principles for Effective Financial Communication ([www.dvfa.com](http://www.dvfa.com)). Of particular importance are the principles relating to relevance, transparency, continuity and recentness, to ensure high-quality reporting of ESG-KPIs.

- **Relevance**  
Information is communicated based on relevance for the recipients and meets the expectations of investors and financial analysts with respect to scope, detail, frequency and completeness. Communication of ESG-KPIs is complete when all units controlled by the reporting company, or over which the company exerts significant influence, are included in the data collection. System boundaries – e.g. suppliers and their ESG contributions, or the ESG impact of product use by customers – must be clearly represented. When defining system boundaries and specific terminology, companies should orient themselves on general standards and guidance, such as the WBCSD/WRI GHG protocol<sup>3</sup>.
- **Transparency**  
ESG information should be consistent and transparent. The information should be quantified and adequately explained. Comparisons with other organisations should also be possible. For this reason, all material changes in the boundaries and scope of reporting, or the reporting periods, should be indicated and explained. The reported ESG-KPIs must be accurate (i.e. free from significant errors), plausible, and definitive, and not in contradiction with current measures, other company documentation (including annual reports) or generally recognised economic facts. Information should also be provided as to which data has been approximated and which

assumptions and methods were used as the basis for this approximation; or sources should be cited for such information.

- **Continuity and recentness**  
Information made available is always recent; communicated fragments and content are continually updated to reflect current developments. There are no contextual gaps in the company's reported ESG information. Abrupt, precipitous changes are avoided. It is advisable that the communication of ESG-KPIs be synchronised with financial reporting and that ESG-KPIs also be included in the management report, to the extent that these are relevant for an understanding of the company's performance or financial situation.

**The company must ensure complete, transparent, continual and up-to-date ESG reporting that contains the most important ESG-KPIs.**

The information, data, processes, and assigned competencies required for the preparation of ESG reports should be recorded, analyzed, documented, and disclosed in such a way that they would stand up to an internal and external audit or review. An independent audit by well-qualified third parties is a particularly good way to increase the assurance capability (i.e. perceived reliability) of the reported ESG-KPIs. This also serves to ensure the credibility and acceptance of ESG communication among the target groups. As a rule, external auditing carries the additional advantage that ESG reporting and ESG management can be improved based on the best practices referred to by the auditor.

For any recommendation other than these, corporates should generally align ESG reporting with all other reporting to the capital markets.

<sup>3</sup> The GHG protocol is an international guideline for calculation emissions and carbon footprints. <http://www.ghgprotocol.org>



First of all, the IASCF's technical summary entitled "Framework for the Preparation and Presentation of Financial Statements"<sup>4</sup> may serve as a guideline for underlying principles of user-oriented reporting. Although the IASCF document merely makes suggestions about financial statements, the recommendations can also be applied to ESG data:

"Qualitative characteristics are the attributes that make the information provided in financial statements useful to users. The four principal qualitative characteristics are understandability, relevance, reliability and comparability."<sup>5</sup>

## **2. Disclosure and Reporting on ESG Line Items**

Section 2.2 (Plausibility) of DVFA Principles for Effective Financial Communication explains that

"Company reports should be consistent and plausible. Financial information should be quantified and sufficiently documented."<sup>6</sup>

Quantification and documentation are also the most essential criteria relating to ESG data for investment professionals!

Before looking at the concept of key performance indicators (KPIs), however, it is important to understand the format in which the quantifiable data should be delivered.

First of all, the following recommendation on plausibility quoted from DVFA principles can be easily adapted to ESG data:

2.2.2 The method used for the calculation of reported figures is disclosed.

2.2.3 Segment reporting adequately represents the company, its lines of business and geographical distribution.

2.2.4 The structure of reports as well as the content and scope of data included is only changed in justified cases.

<sup>4</sup> <http://www.iasb.org/NR/rdonlyres/E366C162-17E4-4FBE-80EB-7A506A615138/0/Framework.pdf>  
26 February 2008

<sup>5</sup> *ibid*, page 1

<sup>6</sup> *ibid*, page 12

Section 3.1 (Continuity and Recentness) continues by recommending the following principles:

3.1.1 Time series are consistent over time

3.1.2 Changes to already defined segments are only made in justified exceptional cases.

Bearing these important criteria in mind, corporates are reminded that financial analysis cannot be carried out using isolated data. Financial analysis moves along the lines of two important analytical questions:

1. Diachronous underlying dynamics: data needs to be reported in a context that allows a period-to-period analysis of how the performance of a given item has developed, and how it will develop in the future period. Any line item or KPI for a reported period needs to be given historical and future values in order to be meaningful;
2. Synchronous/Industry dynamics: analyzing the performance of a corporate immediately gives rise to the question as to the performance of comparable (e.g. in terms of size, market capitalisation) corporates or peers.

An example may serve to illustrate the point: an automotive manufacturer discloses a KPI for the topical area or brief ESG "waste". The respective KPI – "tonnage of waste produced per unit" – shows a value of 30 tons/unit produced. Given the above explanations, investment professionals need to be given additional data in order to compare the reported item, answering the following questions:

1. What was the historic output of waste per unit? Was waste output perhaps at 35 tons/unit in the past, and is it the aim of the corporate to reduce waste in the future to, say, 27 tons/unit? 2. What is the output that peers of the automotive manufacturer produce? Is it better or worse?

The corporate should report time series of data rather than isolated items for the period reported.

Benchmark data (e.g. on peers, industry standards etc.) should be reported with line items to give the items a meaningful context.

## IV. Key Performance Indicators

### 1. ESGs and KPIs

Topical areas are called ESGs. ESGs describe the general purpose of issues to be reported. ESGs serve as an overarching description of the issue at hand, and explain the ratio behind the KPI.

ESGs are not the actual items to be reported. The actual items should be reported in the format of a KPI i.e. the actual line item to be reported. Corporates should select one or more of the KPIs depending on the applicability of the KPI for their respective industry.

The ESG serves as denominator. The KPI can be chosen from the list included and is the actual line item to be reported.

### 2. General ESGs and Industry-specific ESGs

General ESGs apply to all industries and should, hence, be areas which should be reported in the format of a KPI by all corporates. Industry-specific ESGs apply to specific industries only. General ESGs, however, are not more important than industry-specific ESGs. Rather, in order to arrive at a representative and authentic reporting picture, corporates should report all of the issues within the scope of the General ESGs by selecting those KPIs deemed meaningful, and select those Industry-specific ESGs necessary to report on industry-specific issues.

The list of industry-specific ESGs is not exhaustive! Corporates are welcome to add – selectively and after due consideration – additional Industry-specific ESGs and KPIs wherever necessary and appropriate.

KPIs for General ESGs should be disclosed by all industries. Industry-specific ESGs, should be reported additionally to depict issues relevant to the respective industry. Additional Industry-specific ESGs and KPIs may be added by corporates.

### 3. Taxonomies

Taxonomies are provided for both General ESGs and Industry-specific ESGs.

Taxonomies contain the following elements:

- a) A parent (= ESG) and child (= KPI) relationship scheme;
- b) ESGs contain a unique identifier e.g. ESG1, ESG 2, ESG 3
- c) KPIs also contain a unique identifier that permits back-reference to the specific ESG (Example: Parent = ESG “Maturity of Workforce”, Child = KPI “Average Age of Workforce”);
- d) A description field depicting how values for the KPI should be calculated;
- e) A short name, serving as an Element Name for an XBRL-based reporting template. NB. short names may be subject to modification;
- f) A format field that explains in which format data for the KPI should be disclosed;

An industry field that indicates the industries in which the KPI should be used. NB. For industry-specific KPIs, any reference to a specific industry may only be indicative, i.e. corporates need to identify those Industry-specific KPIs which best serve to depict their performance!

#### 4. Columns Corporate / Benchmark

There are two columns for most KPIs: one for data relating to the corporate, and another for data relating to a benchmark.

In chapter III, we already pointed out that financial analysis requires comparability of data and line items, i.e. users want to a) compare corporate performance within a reported period to prior periods, and b) compare line items of a corporate to an external benchmark.

It is recommended that corporates report both line items and relational benchmarks, which can consist of industry-related averages, data from peers or any other external reference point that serves to put individual corporate performance into context.

defined for five industry-groups: Utilities, Automotives, Transportation, Chemicals, and Re-Insurance. It is the intention of DVFA's Committee on Non-Financials to complete all remaining industries over the course of 2008 and 2009 through dialogue with both corporates and investors.

Corporates from industries whose Industry-specific ESGs have not yet been defined should not be discouraged, however: there may already be Industry-specific ESGs and KPIs within in the sample contained in this publication that may easily be adapted to other industries' needs. On the other hand, corporates are invited to work closely with DVFA's committee on completing KPI profiles for their respective industries.

#### 5. General ESGs and Respective KPIs

DVFA has identified 12 General ESGs for Extra/Non-Financials, which – following the common usage – are structured into E, S, G, and V (short for long-term viability).

Corporates should report on each of the General KPIs, selecting one or more of those KPIs that best match their business models or industries.

Annotations and details on reported entities should be provided if the data disclosed does not refer to an entire business or, if it does, would fail to provide meaningful data. For example, should meaningful data be unavailable for certain business units, regions or products, the corporates should clearly indicate the scope of data disclosed in annotations.

#### 6. Industry-specific ESGs and their Respective KPIs

Thorough ESG reporting allows corporates to track and disclose those issues specific and idiosyncratic to their industry. Often, differences between industries surface not only at the level of KPIs, but also in the context of ESGs.

DVFA's Industry-specific ESGs present a starting point for industry-specific reporting on KPIs for ESG. The sample of ESG and KPIs for Industry-specific KPIs has been

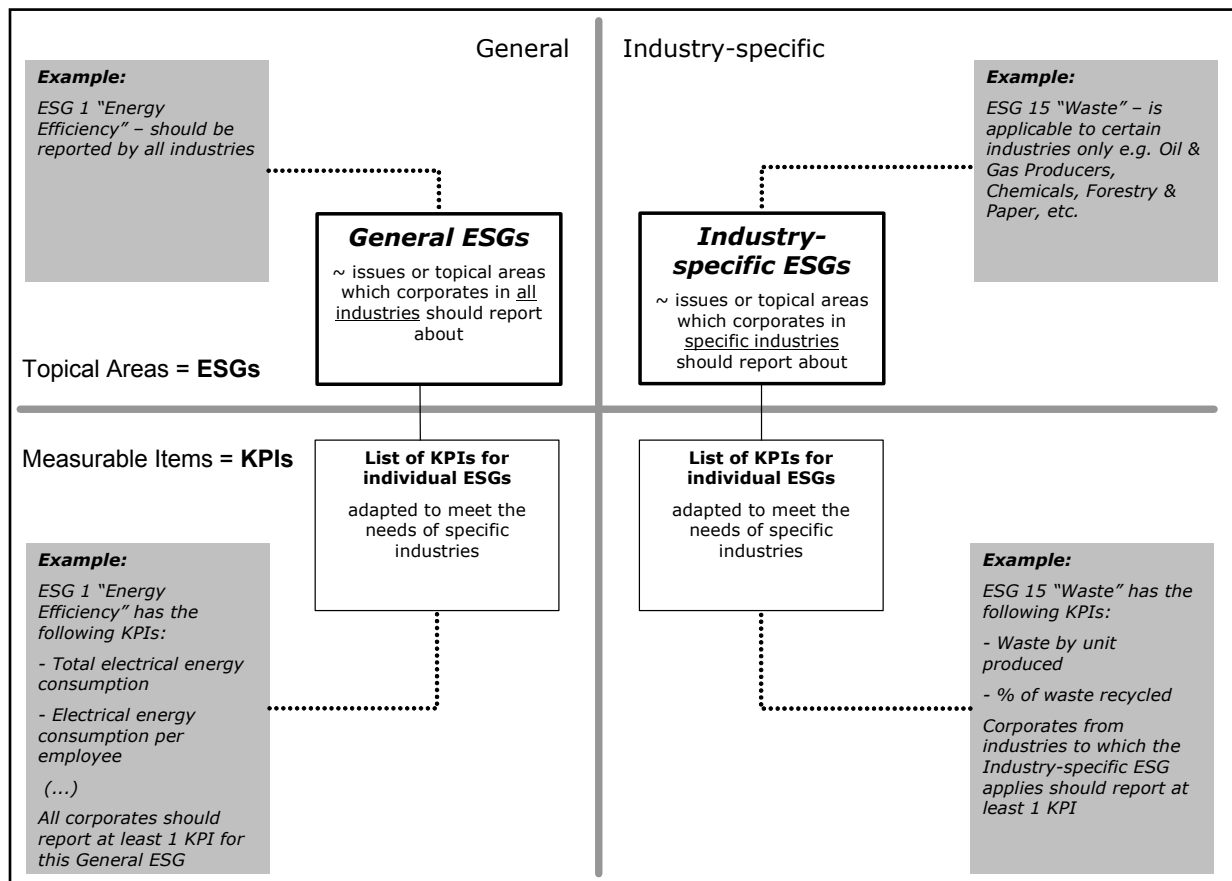


Figure 7: How ESGs and KPIs relate

## 7. Methodology for Defining Industry-specific ESGs and KPIs

Initially, DVFA provided industry-specific ESGs and KPIs for a limited number of industries. Currently, additional sectors are being defined by various parties. DVFA encourages third parties to develop sets of ESGs and KPIs for additional industries.

In general, the sets to be developed should possess the following traits:

- No more than 10-15 ESGs for a defined industry;
- Well balanced i.e. covering E, S and G;
- Based on the Dow Jones Industry Classification Guide;
- Quantifiable and well delineated.

Definition of a set of proposed ESGs and KPIs can be carried out by third parties and groups consisting of members from various stakeholder groups such as individual investment professionals from the sell or buy side, brokers, investment firms, corporates, ESG assurance providers and advisors, academics etc.

Representatives from any third party can assume responsibility for defining industry-specific ESGs and KPIs and thus be "in the lead". However, in order to receive recognition by DVFA/EFFAS and have sets of industry-specific ESGs as well as KPIs adopted as part of the framework, it is mandatory to follow the process steps described below.

The process comprises the following mandatory process steps:

- 1 Long listing ESG and performance indicators – selection of a variety of available topical areas and performance indicators for a specific industry.
- 2 Short listing ESGs and KPIs – an iterative process of condensing those topical areas and performance indicators with the highest relevance to investment professionals (~ KPIs).
- 3 Validation – conducting a survey with a wider group of investment professionals in order to establish the validity of selection of ESGs and KPIs across markets and continents.

## 1. Long listing of ESGs and performance indicators.

Long listing means selecting all of those topical areas and performance indicators which can typically be found in corporate reports, research reports or academic papers. There is no need at this stage to build qualified judgements on relevance or materiality. Alternatively, known Best Practices (BP) can be long listed and used as input to process step 2.

Potential sources include:

- Company reports e.g. CSR reports, webpage, company presentations;
- Public reports from research providers e.g. SAM, SiRi, Innovest, Vigeo;
- Freely accessible databases;
- Indicators from internal sources such as research departments, colleagues etc.

NB. Please respect intellectual property and use either publicly available information or information which you have been given express permission to use by the authors.

## 2. Short listing of ESG and KPIs

The process of short listing requires that selections be made from ESGs and available performance indicators on the long list. Essential selection criteria for short listing is the usefulness or relevance of the ESG and the respective performance indicator for understanding risk or business opportunities – *from the perspective of investors*. It is mandatory that a small focus-group of industry-specialised investment professionals is involved in the short listing process!

The best means of condensing the long list to a short list is a moderated group discussion with investment professionals, in which those performance indicators deemed most relevant or material are presented – including a short and concise explanation of the ratio for relevance and materiality by the group/individual in the lead of the given sector. The focus group of investment professionals is then asked to respond to the proposed ESGs and KPIs and critically assess the explanations rendered.

Other suitable methods of investigating are surveys with investment professionals, qualitative interviews etc.

Note that the discussion with investment professionals may have to go through several iterations: e.g. ESGs or KPIs proposed may not be considered useful by investment professionals, explanations proposed may not prove to be relevant to investment professionals, further research may be needed, additional performance indicators may have to be selected etc.

## 3. Validating the short list

Once a short list has been finalised, DVFA will survey the ESGs and KPIs with a wider group of investment professionals in Europe, Asia and the US, validating the findings of the focus group. If necessary, DVFA will ask the team organisation or team which is responsible for the given set of industry-specific KPIs to modify their list according to the results of the survey.

Those ESGs and KPIs which are confirmed to be material and relevant through the survey, will be endorsed in DVFA's framework for KPIs for ESG.

## How Corporates Select the Right Set of ESGs and KPIs

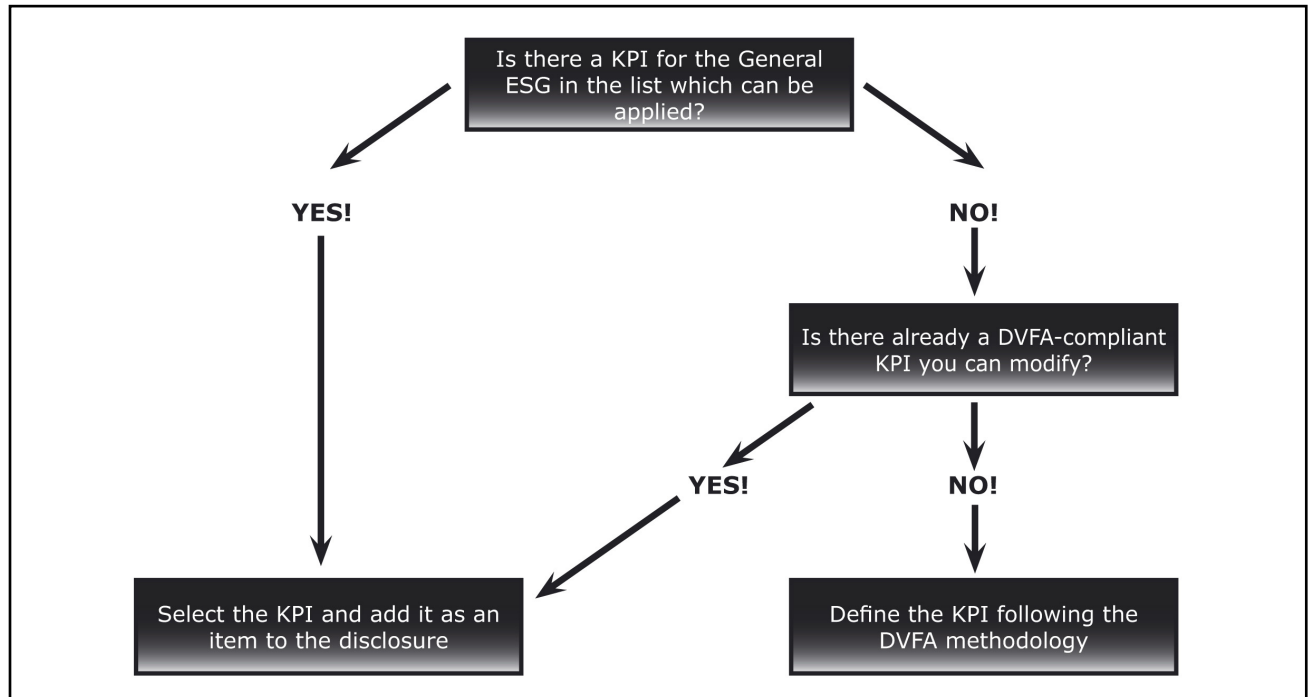


Figure 8: General ESG and KPIs

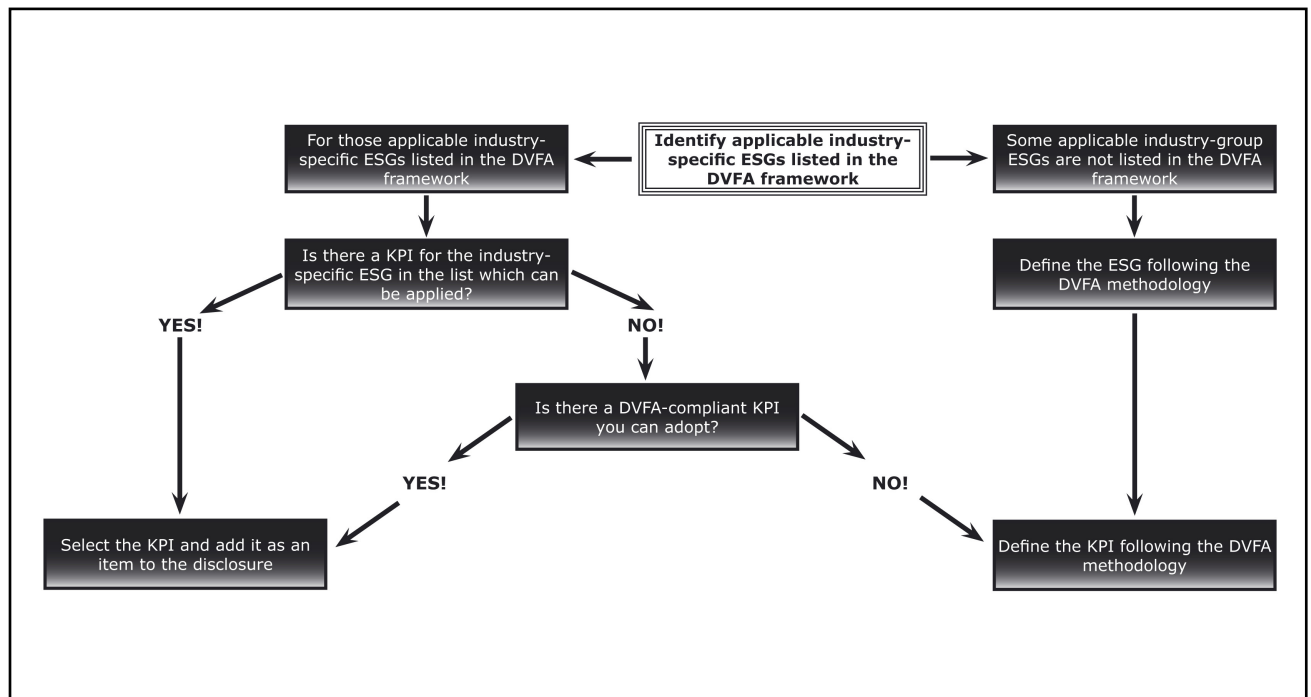


Figure 9: Industry-specific ESGs

| ESG  | KPI  |
|--|--|
| ESG 1 Energy efficiency  | ESG 1-1 Electric energy consumption total corporate  |
|  | ESG 1-2 Electric energy consumption per employee in kwh  |
|  | ESG 1-3 Electric energy intake in kwh per unit produced  |
|  | ESG 1-4 Targets to reduce energy consumption in %  |
|  | ESG 1-5 Heat consumption total   |
|  | ESG 1-6 Fuel consumption per passenger-mile/km   |
|  | ESG 1-7 % of r&d expenses on increasing energy efficiency as of total r&d expenses   |
| ESG 2 Deployment of renewable energy                             | ESG 2-1 % of energy in kwh from renewable energy sources as of total energy consumed   |
|  | ESG 2-2 % of energy in kwh from combined heat and power generation as of total energy consumed                               |
| ESG 3 Staff turnover   | ESG 3-1 % of full-time employees leaving p.a. / total number of employees  |
| ESG 4 Training & qualification                                   | ESG 4-1 Number of training days / employee / p.a.  |
|  | ESG 4-2 Average expenses on training / employee / p.a. in \$, €  |
|  | ESG 4-3 Total expenses on training and qualification in relation to revenues   |
| ESG 5 Maturity of workforce                                      | ESG 5-1 Average age of workforce as arithmetic mean  |
|  | ESG 5-2 Average age of workforce as median   |
|  | ESG 5-3 % of workforce to retire in next 5 years   |
|  | ESG 5-4 Average tenure of workforce  |
| ESG 6 Absenteeism rate   | ESG 6-1 Number of mandays lost / employee / p.a.   |
|  | ESG 6-2 Lost time incident in mandays / employee / p.a.  |
|  | ESG 6-3 Lost time incident in mandays / contractors and leased staff / p.a.  |
|  | ESG 6-4 Health rate  |
| ESG 7 Restructuring related relocation of jobs                   | ESG 7-1 Total cost of relocation in \$, € incl. Indemnity, pay-off, outplacement, hiring, training, consulting               |
| ESG 8 Contributions to political parties                         | ESG 8-1 Contributions to political parties as % of revenues  |
| ESG 9 Anti-competitive behaviour, anti-trust, monopoly practices | ESG 9-1 Expenses and fines on filings, law suits related to anti-competitive behaviour, anti-tust and monopoly practices     |
|  | ESG 9-2 Spendings on preventive measurements against anti-competitive behaviour, anti-tust and monopoly practices            |
| ESG 10 Corruption  | ESG 10-1 Percentage of business in regions with transparency international corruption index below 6.0                        |
|  | ESG 10-2 Percentage of business in countries in top, 2nd and 3rd quintile of transparency international corruption barometer |
| ESG 11 Customer satisfaction                                     | ESG 11-1 Percentage of satisfied customers as of total customers   |
|  | ESG 11-2 Percentage of revenues from repeat business as of total business  |
| ESG 12 Revenues from new products                                | ESG 12-1 Percentage of revenues from products at end of life-cycle   |
|  | ESG 12-2 Percentage of new products or modified products introduced less than 12 months ago                                  |

Figure 10. Overview of General ESGs and their KPIs

| ESG  | KPI  |
|--|--|
| ESG 13 CO2 Emissions   | ESG 13-1 CO2 Emissions total   |
|  | ESG 13-2 CO2 Emission by generation portfolio coal-fired   |
|  | ESG 13-3 CO2 Emission by kwh produced  |
|  | ESG 13-4 CO2 Emissions by passenger-km   |
|  | ESG 13-5 CO2 Emissions by passenger-mile   |
|  | ESG 13-6 CO2 Emissions by cargo-km   |
|  | ESG 13-7 CO2 Emissions by cargo-mile   |
|  | ESG 13-8 CO2 Emissions total production sites  |
|  | ESG 13-9 Average CO2 emission by car-kilometer of sold units   |
|  | ESG 13-10 Average CO2 emission by product-ton sold   |
| ESG 14 NO, SO Emissions  | ESG 14-1 NO, SO Emissions total  |
|  | ESG 14-2 NO, SO Emission by generation portfolio coal-fired  |
|  | ESG 14-3 NO, SO Emission by kwh produced   |
|  | ESG 14-4 NO, SO Emissions by passenger-km  |
|  | ESG 14-5 NO, SO Emissions by passenger-mile  |
|  | ESG 14-6 NO, SO Emissions by cargo-km  |
|  | ESG 14-7 NO, SO Emissions by cargo-mile  |
|  | ESG 14-8 NO, SO Emissions total production sites   |
| ESG 15 Waste   | ESG 15-1 Waste by unit produced  |
| ESG 16 Environmental compatibility   | ESG 16-1 Average fuel consumption of fleet of sold cars  |
|  | ESG 16-2 Percentage of ISO 14001 certified sites corporates  |
|  | ESG 16-3 Percentage of renewable energy produced as of total energy produced   |
|  | ESG 16-4 Total renewable energy produced from biomass  |
|  | ESG 16-5 Total renewable energy produced from wind   |
|  | ESG 16-6 Total renewable energy produced from hydro  |
|  | ESG 16-7 Percentage of revenues from eco-labeled products  |
| ESG 17 End-of-lifecycle impact   | ESG 17-1 Percentage of material recovered for reuse and at end of life-cycle   |
| ESG 18 Diversity   | ESG 18-1 Percentage of female employees as of total  |
|  | ESG 18-2 Percentage of female managers as of total   |
| ESG 19 Percentage of credit loans undergone ESG-screening  | ESG 19-1 Percentage of credit loans undergone ESG-screening  |
| ESG 20 Percentage of funds managed in accordance to ESG-criteria                                       | ESG 20-1 Percentage of funds managed in accordance to ESG-criteria   |
| ESG 21 Financial instruments, investment property held in accordance to ESG-criteria                   | ESG 21-1 Percentage of financial instruments, investment property held in accordance to ESG-criteria   |
| ESG 22 Investments in accordance with ESG criteria incl. investments in associates and minority stakes | ESG 22-1 Percentage of total investments, investments in associates and minority stakes in accordance with ESG criteria as of total investments    |
| ESG 23 Supplier agreements and supply chain partners screened for accordance with ESG                  | ESG 23-1 Percentage of suppliers and supply chain partners screened for accordance with ESG-criteria as of total supply chain                      |
| ESG 24 Health & safety aspects of products   | ESG 24-1 Total spendings on product safety / revenue   |
|  | ESG 24-2 Percentage of product recalls for safety or health reasons as of total recalls  |
|  | ESG 24-3 Spendings on product safety per unit produced   |
| ESG 25 Litigation payments   | ESG 25-1 Total litigation payments in \$, € for past period  |
|  | ESG 25-2 Total litigation payments in \$, € incl. litigation reserve forecast  |
|  | ESG 25-3 Total litigation payments in \$, € as a percentage of revenues  |
| ESG 26 Dimensions of pending legal proceedings   | ESG 26-1 Amount in \$, € in controversy, dispute from legal proceedings  |
|  | ESG 26-2 Amount in \$, € in controversy, dispute from legal proceedings as a percentage from total revenues  |
| ESG 27 R&D expenses  | ESG 27-1 Total r&d expenses in \$, €   |
|  | ESG 27-2 Total r&d expenses in \$, € as a percentage of total revenues   |
|  | ESG 27-3 Total r&d expenses or funding of research to external partners, suppliers or academic research in \$, €                                   |
|  | ESG 27-4 Total r&d expenses or funding of research to external partners, suppliers or academic research in \$, € as a percentage of total revenues |
| ESG 28 Patents   | ESG 28-1 Number of patents registered within last 12 months  |
|  | ESG 28-2 Number of patents registered within last 12 months as percentage of total number of patents   |
|  | ESG 28-3 Number of patents due to expire within next 12 months   |
|  | ESG 28-4 Number of patents due to expire within next 12 months as percentage of total number of patents  |
| ESG 29 Investments in research on new risk   | ESG 29-1 Total investments in research on new risk in \$, €  |
|  | ESG 29-2 Total investments in research on new risk in man days   |
|  | ESG 29-3 Total investments in research on new risk in \$, € as a percentage of revenues  |
| ESG 30 Customer retention  | ESG 30-1 Percentage of new customers as of total customers   |
|  | ESG 30-2 Average length of time of customer relationship in years  |
|  | ESG 30-3 Share-of-market by product, productline, segment, region or total   |

Figure 11. Overview of Industry-specific ESGs and their KPIs



# General ESGs

| ESG                      | ESG 1 Energy Efficiency   |   |   |   |  |  |  |  |
|--------------------------|---|---|---|---|--|--|--|--|
| Definition and Reference | Energy efficiency was defined as "any change in energy use that results in an increase in net benefits per unit of energy" ( <a href="http://www.pce.govt.nz/reports/pce_reports_glossary.shtml#e">http://www.pce.govt.nz/reports/pce_reports_glossary.shtml#e</a> ). Energy efficiency has a direct effect on operational costs and exposure to fluctuations in energy supply and prices.  |   |   |   |  |  |  |  |
| KPI                      | ESG 1-1   |   | ESG 1-2   |   | ESG 1-3  |  | ESG 1-4  |  |
| Description              | Electric Energy Consumption Total Corporate   | Electric Energy Consumption Total Benchmark   | - Electric energy consumption per employee in kwh Corporate   | - Electric energy consumption per employee in kwh Benchmark   | - Electric energy intake in kwh per units produced Corporate                           | - Electric energy intake in kwh per units produced Benchmark                           | -Targets to reduce energy consumption Corporate          | -Targets to reduce energy consumption Benchmark          |
| Shortname                | ener.cons.tot.corp  | ener.cons.tot.bench   | ener.cons.employee.corp   | ener.cons.employee.bench  | ener.intake.unit.corp  | ener.intake.unit.bench   | targets.ener.cons.corp                                   | targets.ener.cons.bench                                  |
| Unit / Calculation       | kilowatthours (kwh) in '000s  | kilowatthours (kwh) in '000s  | kilowatthours (kwh) / employee  | kilowatthours (kwh) / employee  | kilowatthours (kwh) / unit output  | kilowatthours (kwh) / unit output  | percentage   | percentage   |
| Format                   | x,xxx,xxx,xxx.xx; numeric   | x,xxx,xxx,xxx.xx; numeric   | x,xxx,xxx,xxx.xx; numeric   | x,xxx,xxx,xxx.xx; numeric   | x,xxx,xxx.xx; numeric  | x,xxx,xxx.xx; numeric  | xx.xx %, numeric   | xx.xx %, numeric   |
| Sector                   | All   | All   | All   | All   | All  | All  | All  | All  |
| KPI                      | ESG 1-5   |   | ESG 1-6   |   | ESG 1-7  |  | ESG 1-8  |  |
| Description              | Heat Consumption Total Corporate  | Heat Consumption Total Benchmark  | - Fuel consumption per passenger-mile/km Corporate  | - Fuel consumption per passenger-mile/km Benchmark  | - % of R&D expenses on increasing energy efficiency as of total R&D expenses Corporate | - % of R&D expenses on increasing energy efficiency as of total R&D expenses Benchmark | Maintenance Capex in \$, € as of total revenue Corporate | Maintenance Capex in \$, € as of total revenue Benchmark |
| Shortname                | ener.cons.tot.corp  | ener.cons.tot.bench   | fuel.cons.pass.mile.corp  | fuel.cons.pass.mile.bench   | fuel.cons.pass.mile.corp   | fuel.cons.pass.mile.bench  | maint.capex.\$.corp                                      | maint.capex.\$.bench                                     |
| Unit / Calculation       | kilowatthours (kwh) in '000s  | kilowatthours (kwh) in '000s  | fuel in litres / passenger-mile   | fuel in litres / passenger-mile   | fuel in litres / passenger-mile  | fuel in litres / passenger-mile  | total maintenance capex in \$ or € / total revenues      | total maintenance capex in \$ or € / total revenues      |
| Format                   | x,xxx,xxx,xxx.xx; numeric   | x,xxx,xxx,xxx.xx; numeric   | x,xxx.xx; numeric   | x,xxx.xx; numeric   | x,xxx.xx; numeric  | x,xxx.xx; numeric  | xx.xx %  | xx.xx %  |
| Sector                   | All   | All   | TRANSPORTATION  | TRANSPORTATION  | All  | All  | ELECTRIC UTILITIES 7530                                  | ELECTRIC UTILITIES 7530                                  |
| ESG                      | ESG 2 Deployment of Renewable Energy  |   |   |   |  |  |  |  |
| Definition and Reference | As governments move to regulate activities that contribute to climate change, companies that are directly or indirectly responsible for emissions face regulatory risk through increased costs or other factors impacting competitiveness. Limits on greenhouse gas emissions can also create opportunities for organizations as new technologies and markets are created. Renewable energy is an example for this. Within this ESG 'renewable' is defined as any energy which is neither generated thermally e.g. from nuclear power or from fossil sources.   |   |   |   |  |  |  |  |
| KPI                      | ESG 2-1   |   | ESG 2-2   |   | ESG 2-3  |  |  |  |
| Description              | Percentage of energy in kwh from renewable energy sources as of total energy consumed Corporate   | Percentage of energy in kwh from renewable energy sources as of total energy consumed Benchmark | Percentage of energy in kwh from combined heat and power generation as of total energy consumed Corporate | Percentage of energy in kwh from combined heat and power generation as of total energy consumed Benchmark | Investments in Renewable Energy Generation as of Total Investments Corporate           | Investments in Renewable Energy Generation as of Total Investments Benchmark           |  |  |
| Shortname                | perc.renew.ener.corp  | perc.renew.ener.bench   | perc.renew.ener.corp  | perc.renew.ener.bench   | %.inv.renew.total.corp   | %.inv.renew.total.bench  |  |  |
| Unit / Calculation       | Percentage  | Percentage  | Percentage  | Percentage  | Percentage   | Percentage   |  |  |
| Format                   | xx.xx %, numeric  | xx.xx %, numeric  | xx.xx %, numeric  | xx.xx %, numeric  | xx.xx %, numeric   | xx.xx %, numeric   |  |  |
| Sector                   | All   | All   | All   | All   | ELECTRIC UTILITIES 7530  | ELECTRIC UTILITIES 7530  |  |  |
| ESG                      | ESG 3 Staff Turnover  |   |   |   |  |  |  |  |
| Definition and Reference | Employee retention delivers two important aspects of organization: from the angle of conserving the workforce and its inherent skills, knowledge etc. an organization's ability to retain a high percentage of its workforce is an asset for continuity and future development. Fluctuation typically puts organisations under stress; effort and expenses to integrate and train new employees also puts a strain on organisations as is generally known from start-up companies. However, retention may have a downside in so far as organisations must ensure taking on board new employees esp. young employees in order to balance the maturity of workforce so that continuity of operation is not put at risk. |   |   |   |  |  |  |  |
| KPI                      | ESG 3-1   |   |   |   |  |  |  |  |
| Description              | Percentage of full-time employees leaving p.a. / total number of employees Corporate  | Percentage of full-time employees leaving p.a. / total number of employees Benchmark            |   |   |  |  |  |  |
| Shortname                | staff.turn.corp   | staff.turn.bench  |   |   |  |  |  |  |
| Unit / Calculation       | Percentage  | Percentage  |   |   |  |  |  |  |
| Format                   | xx.xx %, numeric  | xx.xx %, numeric  |   |   |  |  |  |  |
| Sector                   | All   | All   |   |   |  |  |  |  |
| ESG                      | ESG 4 Training & Qualification  |   |   |   |  |  |  |  |
| Definition and Reference | Training and education provides an important aspect of the organisation's commitment to sustaining excellency by investing in employees' skills and knowhow. When comparing this KPI within a peer group it helps to understand the organization's preparedness to improve process or product quality. For further information please check R195 Human Resources Development Recommendation, 2004 at <a href="http://www.ilo.org/ilolex/cgi-bin/cvde/pl?R195">http://www.ilo.org/ilolex/cgi-bin/cvde/pl?R195</a>  |   |   |   |  |  |  |  |
| KPI                      | ESG 4-1   |   | ESG 4-2   |   | ESG 4-3  |  |  |  |
| Description              | Number of training days / employee / p.a. Corporate   | Number of training days / employee / p.a. Benchmark   | Average expenses on training / employee in \$/€ Corporate   | Average expenses on training / employee in \$/€ Benchmark   | Total expenses on training and qualification in relation to turnover/sales Corporate   | Total expenses on training and qualification in relation to turnover/sales Benchmark   |  |  |
| Shortname                | training.empl.corp  | training.empl.bench   | training.\$.empl.corp   | training.\$.empl.bench  | training.total\$.empl.corp   | training.total\$.empl.bench  |  |  |
| Unit / Calculation       | Days  | Days  | Currency \$ / € '000  | Currency \$ / € '000  | percentage   | percentage   |  |  |
| Format                   | xxx.x, numeric  | xxx.x, numeric  | xxx,xxx.xx  | xxx,xxx.xx  | xx.xx %  | xx.xx %  |  |  |
| Sector                   | All   | All   | All   | All   | All  | All  |  |  |

|                          |   |  |  |  |   |   |   |   |
|--------------------------|---|--|--|--|---|---|---|---|
| ESG                      | ESG 5 Maturity of Workforce   |  |  |  |   |   |   |   |
| Definition and Reference | Understanding the maturity of a workforce is key for assessing the risk of over-aging of the workforce i.e. the phenomenon that a large proportion of the workforce is retiring in a relatively short span. Whilst it is desirable that corporates continuously recruit new staff members within a timeframe that allows transfer of knowledge and experience from mature parts of the workforce experience shows that often such provident action is far from being standard practice in many corporates.  |  |  |  |   |   |   |   |
| KPI                      | ESG 5-1   |  | ESG 5-2  |  | ESG 5-3   |   | ESG 5-4   |   |
| Description              | Average age of workforce as an Arithmetic Mean Corporate  | Average age of workforce as an Arithmetic Mean Benchmark             | Average age of workforce as Median Corporate                   | Average age of workforce as Median Benchmark                   | Percentage of workforce to retire within in next 5 years of reported period Corporate | Percentage of workforce to retire within in next 5 years of reported period Benchmark | Average tenure of workforce Benchmark   | Average tenure of workforce Benchmark   |
| Shortname                | Arith.mean.age.workforce.corp   | Arith.mean.age.workforce.bench                                       | Median.age.workforce.corp                                      | Median.workforce.bench   | perc.retire.5yrs.corp   | perc.retire.5yrs.bench  | av.tenure.workforce.bench   | av.tenure.workforce.bench   |
| Unit / Calculation       | Years   | Years  | Years  | Years  | Percentage  | Percentage  | Years   | Years   |
| Format                   | xx.x, numeric   | xx.x, numeric  | xx.x, numeric  | xx.x, numeric  | xx.x %, numeric   | xx.x %, numeric   | xx.x, numeric   | xx.x, numeric   |
| Sector                   | All   | All  | All  | All  | All   | All   | All   | All   |
| ESG                      | ESG 6 Absenteeism Rate  |  |  |  |   |   |   |   |
| Definition and Reference | Absenteeism is a relatively effective indicator of workforce morale. Especially in industrial contexts accident is an indicator for workforce morale. Health Rate ("German: Gesundheitsquote") was added as an additional KPI. Health Rate describes working hours actual in relation to contractual working hours total; thus, effects of overtime hours are adjusted.   |  |  |  |   |   |   |   |
| Applied KPI              | ESG 6-1   |  | ESG 6-2  |  | ESG 6-3   |   | ESG 6-4   |   |
| Description              | Number of manday lost / employee / p.a. Corporate   | Number of manday lost / employee / p.a. Benchmark                    | Lost time incident in mandays lost per employee p.a. Corporate | Lost time incident in mandays lost per employee p.a. Benchmark | Lost time incident in mandays lost per contractors and leasing staff p.a. Corporate   | Lost time incident in mandays lost per contractors and leasing staff p.a. Benchmark   | Health Rate i.e. percentage of total working hours actual of total contractual hours Corporate. | Health Rate i.e. percentage of total working hours actual of total contractual hours Benchmark. |
| Shortname                | mandays.lost.corp   | mandays.lost.bench   | losttime.empl.incident.corp                                    | losttime.empl.incident.bench                                   | losttime.contract.incident.corp   | losttime.contract.incident.bench  | Health.rate.corp  | Health.rate.bench   |
| Unit / Calculation       | Days  | Days   | Days   | Days   | Days  | Days  | Percentage  | Percentage  |
| Format                   | xxx.x, numeric  | xxx.x, numeric   | xxx.x, numeric   | xxx.x, numeric   | xxx.x, numeric  | xxx.x, numeric  | xx.x %, numeric   | xx.x %, numeric   |
| Sector                   | All   | All  | Producing industries   | Producing industries   | Producing industries  | Producing industries  | All   | All   |
| ESG                      | ESG 7 Restructuring-related Relocation of Jobs  |  |  |  |   |   |   |   |
| Definition and Reference | The capacity of an organisation to deliver performance depends on the proverbial human capital i.e. resources, skills and knowledge of the organisation. Whenever relocation of a large part of the workforce occurs, be it to low-wage labour markets, be it to offshore suppliers there is a both a factor of savings to the cost structure of the organisation but also a loss of knowledge and skills, hence a decrease of the value of the company. Recruiting of employees after relocating a site, an office etc., on the other hands, incurs cost for hiring, training and integration. |  |  |  |   |   |   |   |
| KPI                      | ESG 7-1   |  |  |  |   |   |   |   |
| Description              | Total cost of relocation in \$, €, including indemnity, pay-off, outplacement, hiring, training, consulting   |  |  |  |   |   |   |   |
| Shortname                | reloc.cost.corp   |  |  |  |   |   |   |   |
| Unit / Calculation       | Currency \$ / € '000  |  |  |  |   |   |   |   |
| Format                   | xxx,xxx,xxx,xx numeric  |  |  |  |   |   |   |   |
| Sector                   | All   |  |  |  |   |   |   |   |
| ESG                      | ESG 8 Contributions to Political Parties  |  |  |  |   |   |   |   |
| Definition and Reference | In many western cultures contributions to political parties are generally perceived as a service to the democratic system which carries the organisation. However, a well-balanced contribution to a variety of political organisations sets off the risk of an organisation as being perceived as pursuing interests directly related to organisational goals. Nevertheless, investors may question both the necessity of contribution to political parties and the legitimacy as any contribution in monetary terms is an outflow of profits!   |  |  |  |   |   |   |   |
| KPI                      | ESG 8-1   |  |  |  |   |   |   |   |
| Description              | % of contributions to political parties in \$, € / revenue Corporate  | % of contributions to political parties in \$, € / revenue Benchmark |  |  |   |   |   |   |
| Shortname                | % contr.parties.rev.corp  | % contr.parties.rev.bench  |  |  |   |   |   |   |
| Unit / Calculation       | Currency \$ / € '000  | Currency \$ / € '000   |  |  |   |   |   |   |
| Format                   | xxx,xxx,xxx,xx numeric  | xxx,xxx,xxx,xx numeric   |  |  |   |   |   |   |
| Sector                   | All   | All  |  |  |   |   |   |   |
| ESG                      | ESG 9 Anti-competitive behavior, anti-trust, monopoly practices   |  |  |  |   |   |   |   |
| Definition and Reference | Anti-competitive behavior both bears reputational risk and monetary effects through fines and legal sanctions. Recent incidents within the European Union e.g. show the negative impact on organisations' P&L.  |  |  |  |   |   |   |   |
| KPI                      | ESG 9-1   | ESG 9-2  |  |  |   |   |   |   |
| Description              | Expenses and fines on filings and law suits related to anti-competitive behaviour, anti-trust and monopoly practices Corporate  | Spending on preventive measurements Corporate                        |  |  |   |   |   |   |
| Shortname                | fines.antitrust&.corp   | spend.prev.antitrust&.corp   |  |  |   |   |   |   |
| Unit / Calculation       | Currency \$ / € '000  | Currency \$ / € '000   |  |  |   |   |   |   |
| Format                   | xxx,xxx,xxx,xx numeric  | xxx,xxx,xxx,xx numeric   |  |  |   |   |   |   |

|                          |   |  |   |   |  |  |  |  |
|--------------------------|---|--|---|---|--|--|--|--|
| Sector                   | All   | All  |   |   |  |  |  |  |
| ESG                      | ESG 10 Corruption   |  |   |   |  |  |  |  |
| Definition and Reference | <p>The concept of corruption does not necessarily apply easily in certain emerging markets in so far as market participation may seem to require local representatives to play along perceived "rules" of non-compliant behavior. Stewardship requires senior management to clearly and unmistakably set policies which provide orientation to local workforce. In return, targets for market penetration in markets susceptible to forms of corruption should take into account limits of growth if growth would imply breach of anti-corruption policies.</p> <p>F&amp;C Investments (reo Report 4 th Quarter 2007, page 8p) measure the costs associated with bribery by an anonymized but authentic example: a Swiss engineering company found guilty on paying a bribe in Africa of \$ 1 Mill, payed a fine of \$ 16 Mill, incurred \$ 76 Mill. forensic accounting and compliance costs (incl. 43,000 lawyer-hours), lost \$ 200 mill. on the contraction; reputation damage and management distraction are not accounted for as unquantifiable.</p> <p>Transparency International (www.transparency.org) measures corruption and bribery around the globe and is a valid score for any score or ranking on corruption.</p> |  |   |   |  |  |  |  |
| KPI                      | ESG 10-1  |  | ESG 10-2  |   |  |  |  |  |
| Description              | Percentage of business in regions with Corruption Index below 6.0 Corporate   | Percentage of business in regions with Corruption Index below 6.0 Benchmark          | Percentage of business in countries in top, 2nd and 3rd quintile of Transparency International Corruption Barometer Corporate | Percentage of business in countries in top, 2nd and 3rd quintile of Transparency International Corruption Barometer Benchmark |  |  |  |  |
| Shortname                | corruption.index.corp   | corruption.index.bench   | corruption.quint.corp   | corruption.quint.bench  |  |  |  |  |
| Unit / Calculation       | Source: Transparency International Corruption Score   | Source: Transparency International Corruption Score                                  | Source: Transparency International Corruption Barometer   | Source: Transparency International Corruption Barometer   |  |  |  |  |
| Format                   | xx.xx %   | xx.xx %  | xx.xx %   | xx.xx %   |  |  |  |  |
| Sector                   | All   | All  | All   | All   |  |  |  |  |
| ESG                      | ESG 11 Customer Satisfaction  |  |   |   |  |  |  |  |
| Definition and Reference | <p>Having satisfied customers is the ultimate goal of any organisation. Specifically, experience tells us that measuring customer satisfaction with the aim of finding areas of improvement is important to maintain sustainable share-of-markets. Customer defection may have erosive effects as it typically occurs as a slow and undetected process until it gains a momentum at which it is difficult to counterbalance.</p>  |  |   |   |  |  |  |  |
| KPI                      | ESG 11-1  |  | ESG 11-2  |   |  |  |  |  |
| Description              | Percentage of satisfied customers as of total customers Corporate   | Percentage of satisfied customers as of total customers Benchmark                    | Customer retention: percentage of revenues from repeat business / total business Corporate                                    | Customer retention: percentage of revenues from repeat business / total business Benchmark                                    |  |  |  |  |
| Shortname                | cust.sat.corp   | cust.sat.bench   | repeat.bus.corp   | repeat.bus.bench  |  |  |  |  |
| Unit / Calculation       | Percentage  | Percentage   | Percentage  | Percentage  |  |  |  |  |
| Format                   | xx.xx %   | xx.xx %  | xx.xx %   | xx.xx %   |  |  |  |  |
| Sector                   | All   | All  | All   | All   |  |  |  |  |
| ESG                      | ESG 12 Revenues from New Products   |  |   |   |  |  |  |  |
| Definition and Reference | <p>The amount of resources an organisation is prepared to spent on products which will be marketable in a distant future is one of the most important indicators for future profit growth potentials. Any meaningful KPI in this area will also serve to investors for understanding how current cashflows can be continued when products and services mature. Depending on the industry it may be necessary that KPIs for e.g. products, patents, R&amp;D encompass activities with external agencies such as technological suppliers or academic forms of cooperation.</p>  |  |   |   |  |  |  |  |
| KPI                      | ESG 12-1  |  | ESG 12-2  |   |  |  |  |  |
| Description              | Percentage of revenues from products with lifecycle smaller than 12 months Corporate  | Percentage of revenues from products with lifecycle smaller than 12 months Benchmark | Percentage of new products with lifecycle smaller than 12 months / total product portfolio Corporate                          | Percentage of new products with lifecycle smaller than 12 months / total product portfolio benchmark                          |  |  |  |  |
| Shortname                | rev\$.newprod.corp  | rev\$.newprod.bench  | rev\$.newprod.corp  | rev\$.newprod.bench   |  |  |  |  |
| Unit / Calculation       | Percentage  | Percentage   | Percentage  | Percentage  |  |  |  |  |
| Format                   | xx.xx %   | xx.xx %  | xx.xx %   | xx.xx %   |  |  |  |  |
| Sector                   | All   | All  | All   | All   |  |  |  |  |

## Sector-Specific ESGs

| ESG                      | ESG 13 CO2 Emissions  |   |  |  |   |   |  |                                 |
|--------------------------|---|---|--|--|---|---|--|---------------------------------|
| Definition and Reference | <p>Greenhouse gas emissions are the main cause of climate change. This Indicator can be used to explain targets for regulations or trading systems at international or national levels. It also provides insights into the potential cost implications of taxation or trading systems for reporting companies.</p> <p>Please refer to the Greenhouse Gas Protocol: "The Greenhouse Gas Protocol (GHG Protocol) is the most widely used international accounting tool for government and business leaders to understand, quantify, and manage greenhouse gas emissions. The GHG Protocol Initiative, a decade-long partnership between the World Resources Institute and the World Business Council for Sustainable Development, is working with businesses, governments, and environmental groups around the world to build a new generation of credible and effective programs for tackling climate change." Source: <a href="http://www.ghgprotocol.org">www.ghgprotocol.org</a></p> <p>Other definitions can be found at ISO Organisation (<a href="http://www.iso.org/iso/hot_topics/hot_topics_climate_change_tools.htm#quantifying">http://www.iso.org/iso/hot_topics/hot_topics_climate_change_tools.htm#quantifying</a>). The newly developed standards ISO 14064 and ISO 14065 provide an internationally agreed framework for measuring GHG emissions and verifying claims made about them so that "a tonne of carbon is always a tonne of carbon".</p> <p>Other sources:<br/>VfU Indicators: Internal Environmental Performance Indicators for the Financial Industry: see <a href="http://www.vfu.de/scin/userdata/File/Downloads/update%202007/VfU_Indicators_2005_Calculation_File_February_2007.xls">http://www.vfu.de/scin/userdata/File/Downloads/update%202007/VfU_Indicators_2005_Calculation_File_February_2007.xls</a></p> |   |  |  |   |   |  |                                 |
| KPI                      | ESG13-1   |   |  |  |   |   |  |                                 |
| Description              | CO2 Emissions Total Corporate   | CO2 Emissions Total Benchmark   |  |  |   |   |  |                                 |
| Shortname                | CO2.emiss.total.corp  | CO2.emiss.total.bench   |  |  |   |   |  |                                 |
| Unit / Calculation       | Total CO2 Emissions in Million tons   | Total CO2 Emissions in Million tons                                     |  |  |   |   |  |                                 |
| Format                   | xxx,xxx,xxx.xx MtCO2  | xxx,xxx,xxx.xx MtCO2  |  |  |   |   |  |                                 |
| Sectors                  | <b>Oil &amp; Gas Producers [0530]</b>   | Oil Equipment, Services & Distribution [0570]                           | <b>Chemicals [1350]</b>                          | Forestry & Paper [1730]                          | <b>Industrial Metals [1750]</b>         | Mining [1770]                                     | <b>Construction &amp; Materials [2350]</b> | Aerospace & Defense [2710]      |
|                          | <b>X</b>  |   | <b>X</b>   |  | <b>X</b>                                |   | <b>X</b>                                   |                                 |
|                          | General Industrials [2720]  | Electronic & Electrical Equipment [2730]                                | Industrial Engineering [2750]                    | Industrial Transportation [2770]                 | Support Services [2790]                 | Automobiles & Parts [3350]                        | Beverages [3530]                           | Food Producers [3570]           |
|                          |   |   |  |  |   |   |  |                                 |
|                          | Household Goods [3720]  | Leisure Goods [3740]  | Personal Goods [3760]                            | Tobacco [3780]                                   | Health Care Equipment & Services [4530] | <b>Pharmaceuticals &amp; Biotechnology [4570]</b> | Food & Drug Retailer [5330]                | General Retailers [5370]        |
|                          |   |   |  |  |   | <b>X</b>  |  |                                 |
|                          | Media [5550]  | Travel & Leisure [5750]   | Fixed Line Telecommunications [6530]             | Mobile Telecommunications [6570]                 | <b>Electricity Utilities [7530]</b>     | Gas, Water & Multiutilities [7570]                | Banks [8350]                               | <b>Nonlife Insurance [8530]</b> |
|                          |   |   |  |  | <b>X</b>                                |   |  | <b>X</b>                        |
|                          | Life Insurance [8570]   | <b>Real Estate [8730]</b>   | General Financial [8770]                         | Equity Investment Instruments [8980]             | Nonequity Investment Instruments [8990] | Software & Computer Services [9530]               | Technology Hardware & Equipment [9570]     |                                 |
|                          |   | <b>X</b>  |  |  |   |   |  |                                 |
| KPI                      | ESG 13-2  |   | ESG 13-3   |  |   |   |  |                                 |
| Description              | CO2 Emissions by Generation Portfolio Coal-Fired Powerstation Corporate   | CO2 Emissions by Generation Portfolio Coal-Fired Powerstation Benchmark | CO2 Emissions by Kilowatthour produced Corporate | CO2 Emissions by Kilowatthour produced Benchmark |   |   |  |                                 |
| Shortname                | CO2.emiss.employee.corp   | CO2.emiss.employee.bench  | CO2.kwh.corp                                     | CO2.kwh.bench                                    |   |   |  |                                 |
| Unit / Calculation       | Total CO2 Emissions in Million tons   | Total CO2 Emissions in Million tons                                     | Total CO2 emissions / total kwh produced         | Total CO2 emissions / total kwh produced         |   |   |  |                                 |
| Format                   | xxx.xx MtCO2  | xxx.xx MtCO2  | xxxx g/ kwh                                      | xxxx g/ kwh                                      |   |   |  |                                 |
| Sectors                  | Oil & Gas Producers [0530]  | Oil Equipment, Services & Distribution [0570]                           | Chemicals [1350]                                 | Forestry & Paper [1730]                          | Industrial Metals [1750]                | Mining [1770]                                     | Construction & Materials [2350]            | Aerospace & Defense [2710]      |
|                          |   |   |  |  |   |   |  |                                 |
|                          | General Industrials [2720]  | Electronic & Electrical Equipment [2730]                                | Industrial Engineering [2750]                    | Industrial Transportation [2770]                 | Support Services [2790]                 | Automobiles & Parts [3350]                        | Beverages [3530]                           | Food Producers [3570]           |
|                          |   |   |  |  |   |   |  |                                 |
|                          | Household Goods [3720]  | Leisure Goods [3740]  | Personal Goods [3760]                            | Tobacco [3780]                                   | Health Care Equipment & Services [4530] | Pharmaceuticals & Biotechnology [4570]            | Food & Drug Retailer [5330]                | General Retailers [5370]        |
|                          |   |   |  |  |   |   |  |                                 |
|                          | Media [5550]  | Travel & Leisure [5750]   | Fixed Line Telecommunications [6530]             | Mobile Telecommunications [6570]                 | <b>Electricity Utilities [7530]</b>     | Gas, Water & Multiutilities [7570]                | Banks [8350]                               | Nonlife Insurance [8530]        |
|                          |   |   |  |  | <b>X</b>                                |   |  |                                 |
|                          | Life Insurance [8570]   | Real Estate [8730]  | General Financial [8770]                         | Equity Investment Instruments [8980]             | Nonequity Investment Instruments [8990] | Software & Computer Services [9530]               | Technology Hardware & Equipment [9570]     |                                 |
|                          |   |   |  |  |   |   |  |                                 |

| KPI                | ESG 13-4                                       |  | ESG 13-5                                   |  | ESG 13-6                                |  | ESG 13-7                               |  |
|--------------------|--|--|--|--|---|--|--|--|
| Description        | CO2 Emissions by passenger-km Corporate        | CO2 Emissions by passenger-km Benchmark        | CO2 Emissions by passenger-mile Corporate  | CO2 Emissions by passenger-mile Benchmark  | CO2 Emissions by cargo-km Corporate     | CO2 Emissions by cargo-km Benchmark    | CO2 Emissions by cargo-mile Corporate  | CO2 Emissions by cargo-mile Benchmark  |
| Shortname          | CO2.emiss.passkm.corp                          | CO2.emiss.passkm.bench                         | CO2.emiss.passmile.corp                    | CO2.emiss.passmile.bench                   | CO2.emiss.cargokm.corp                  | CO2.emiss.cargokm.bench                | CO2.emiss.cargomile.corp               | CO2.emiss.cargomile.bench              |
| Unit / Calculation | Total CO2 Emissions / total passenger-km       | Total CO2 Emissions / total passenger-km       | Total CO2 Emissions / total passenger-mile | Total CO2 Emissions / total passenger-mile | Total CO2 Emissions / total cargo-km    | Total CO2 Emissions / total cargo-km   | Total CO2 Emissions / total cargo-mile | Total CO2 Emissions / total cargo-mile |
| Format             | xxx,xxx.xx g/km                                | xxx,xxx.xx g/km                                | xxx,xxx.xx g/km                            | xxx,xxx.xx g/km                            | xxx,xxx.xx g/km                         | xxx,xxx.xx g/km                        | xxx,xxx.xx g/km                        | xxx,xxx.xx g/km                        |
| Sectors            | Oil & Gas Producers [0530]                     | Oil Equipment, Services & Distribution [0570]  | Chemicals [1350]                           | Forestry & Paper [1730]                    | Industrial Metals [1750]                | Mining [1770]                          | Construction & Materials [2350]        | Aerospace & Defense [2710]             |
|                    |  |  |  |  |   |  |  |  |
|                    | General Industrials [2720]                     | Electronic & Electrical Equipment [2730]       | Industrial Engineering [2750]              | Industrial Transportation [2770]           | Support Services [2790]                 | Automobiles & Parts [3350]             | Beverages [3530]                       | Food Producers [3570]                  |
|                    |  |  |  | X  |   |  |  |  |
|                    | Household Goods [3720]                         | Leisure Goods [3740]                           | Personal Goods [3760]                      | Tobacco [3780]                             | Health Care Equipment & Services [4530] | Pharmaceuticals & Biotechnology [4570] | Food & Drug Retailer [5330]            | General Retailers [5370]               |
|                    |  |  |  |  |   |  |  |  |
|                    | Media [5550]                                   | Travel & Leisure [5750]                        | Fixed Line Telecommunications [6530]       | Mobile Telecommunications [6570]           | Electricity Utilities [7530]            | Gas, Water & Multiutilities [7570]     | Banks [8350]                           | Nonlife Insurance [8530]               |
|                    |  | X  |  |  |   |  |  |  |
| Sectors            | Life Insurance [8570]                          | Real Estate [8730]                             | General Financial [8770]                   | Equity Investment Instruments [8980]       | Nonequity Investment Instruments [8990] | Software & Computer Services [9530]    | Technology Hardware & Equipment [9570] |  |
|                    |  |  |  |  |   |  |  |  |
|                    |  |  |  |  |   |  |  |  |
|                    |  |  |  |  |   |  |  |  |
|                    |  |  |  |  |   |  |  |  |
|                    |  |  |  |  |   |  |  |  |
|                    |  |  |  |  |   |  |  |  |
|                    |  |  |  |  |   |  |  |  |
| KPI                | ESG 13-8                                       |  |  |  |   |  |  |  |
| Description        | CO2 Emissions total production sites Corporate | CO2 Emissions total production sites Benchmark |  |  |   |  |  |  |
| Shortname          | CO2.emiss.prodsites.corp                       | CO2.emiss.prodsites.bench                      |  |  |   |  |  |  |
| Unit / Calculation | Total CO2 Emissions of all production sites    | Total CO2 Emissions of all production sites    |  |  |   |  |  |  |
| Format             | xxx,xxx,xxx.xx MtCO2                           | xxx,xxx,xxx.xx MtCO2                           |  |  |   |  |  |  |
| Sectors            | Oil & Gas Producers [0530]                     | Oil Equipment, Services & Distribution [0570]  | Chemicals [1350]                           | Forestry & Paper [1730]                    | Industrial Metals [1750]                | Mining [1770]                          | Construction & Materials [2350]        | Aerospace & Defense [2710]             |
|                    |  |  | X  | X  | X                                       |  | X                                      |  |
|                    | General Industrials [2720]                     | Electronic & Electrical Equipment [2730]       | Industrial Engineering [2750]              | Industrial Transportation [2770]           | Support Services [2790]                 | Automobiles & Parts [3350]             | Beverages [3530]                       | Food Producers [3570]                  |
|                    | X  | X  | X  |  |   | X                                      |  | X                                      |
|                    | Household Goods [3720]                         | Leisure Goods [3740]                           | Personal Goods [3760]                      | Tobacco [3780]                             | Health Care Equipment & Services [4530] | Pharmaceuticals & Biotechnology [4570] | Food & Drug Retailer [5330]            | General Retailers [5370]               |
|                    |  |  |  |  |   |  |  |  |
|                    | Media [5550]                                   | Travel & Leisure [5750]                        | Fixed Line Telecommunications [6530]       | Mobile Telecommunications [6570]           | Electricity Utilities [7530]            | Gas, Water & Multiutilities [7570]     | Banks [8350]                           | Nonlife Insurance [8530]               |
|                    |  |  |  |  |   |  |  |  |
| Sectors            | Life Insurance [8570]                          | Real Estate [8730]                             | General Financial [8770]                   | Equity Investment Instruments [8980]       | Nonequity Investment Instruments [8990] | Software & Computer Services [9530]    | Technology Hardware & Equipment [9570] |  |
|                    |  |  |  |  |   |  | X                                      |  |

| KPI                | ESG 13-9   |  |                                      |                                      |   |  |  |                            |
|--------------------|--|--|--------------------------------------|--------------------------------------|---|--|--|----------------------------|
| Description        | Average CO2 Emission by Car-kilometer of Sold units Corporate                  | Average CO2 Emission by Car-kilometer Sold units Benchmark                     |                                      |                                      |   |  |  |                            |
| Shortname          | Av.CO2.emiss.carkm.corp  | Av.CO2.emiss.carkm.bench   |                                      |                                      |   |  |  |                            |
| Unit / Calculation | CO2 Emission on average through entire product portfolio in gram per kilometer | CO2 Emission on average through entire product portfolio in gram per kilometer |                                      |                                      |   |  |  |                            |
| Format             | xxx g / km   | xxx g / km   |                                      |                                      |   |  |  |                            |
| Sectors            | Oil & Gas Producers [0530]   | Oil Equipment, Services & Distribution [0570]                                  | Chemicals [1350]                     | Forestry & Paper [1730]              | Industrial Metals [1750]                | Mining [1770]                          | Construction & Materials [2350]        | Aerospace & Defense [2710] |
|                    |  |  |                                      |                                      |   |  |  |                            |
|                    | General Industrials [2720]   | Electronic & Electrical Equipment [2730]                                       | Industrial Engineering [2750]        | Industrial Transportation [2770]     | Support Services [2790]                 | Automobiles & Parts [3350]             | Beverages [3530]                       | Food Producers [3570]      |
|                    |  |  |                                      | X                                    |   | X                                      |  |                            |
|                    | Household Goods [3720]   | Leisure Goods [3740]   | Personal Goods [3760]                | Tobacco [3780]                       | Health Care Equipment & Services [4530] | Pharmaceuticals & Biotechnology [4570] | Food & Drug Retailer [5330]            | General Retailers [5370]   |
|                    |  |  |                                      |                                      |   |  |  |                            |
|                    | Media [5550]   | Travel & Leisure [5750]  | Fixed Line Telecommunications [6530] | Mobile Telecommunications [6570]     | Electricity Utilities [7530]            | Gas, Water & Multiutilities [7570]     | Banks [8350]                           | Nonlife Insurance [8530]   |
|                    |  |  |                                      |                                      |   |  |  |                            |
| Sectors            | Life Insurance [8570]  | Real Estate [8730]   | General Financial [8770]             | Equity Investment Instruments [8980] | Nonequity Investment Instruments [8990] | Software & Computer Services [9530]    | Technology Hardware & Equipment [9570] |                            |
|                    |  |  |                                      |                                      |   |  |  |                            |
|                    |  |  |                                      |                                      |   |  |  |                            |
|                    |  |  |                                      |                                      |   |  |  |                            |
|                    |  |  |                                      |                                      |   |  |  |                            |
|                    |  |  |                                      |                                      |   |  |  |                            |
|                    |  |  |                                      |                                      |   |  |  |                            |
|                    |  |  |                                      |                                      |   |  |  |                            |
| KPI                | ESG 13-10  |  |                                      |                                      |   |  |  |                            |
| Description        | CO2 Emission by product sold in ton Corporate                                  | CO2 Emission by product sold in ton Benchmark                                  |                                      |                                      |   |  |  |                            |
| Shortname          | CO2.prod.ton.corp  | CO2.prod.ton.bench   |                                      |                                      |   |  |  |                            |
| Unit / Calculation | Total CO2 Emission / product-tons sold   | Total CO2 Emission / product-tons sold   |                                      |                                      |   |  |  |                            |
| Format             | x,xxx g / ton  | x,xxx g / ton  |                                      |                                      |   |  |  |                            |
| Sectors            | Oil & Gas Producers [0530]   | Oil Equipment, Services & Distribution [0570]                                  | Chemicals [1350]                     | Forestry & Paper [1730]              | Industrial Metals [1750]                | Mining [1770]                          | Construction & Materials [2350]        | Aerospace & Defense [2710] |
|                    |  |  | X                                    |                                      | X                                       |  | X                                      |                            |
|                    | General Industrials [2720]   | Electronic & Electrical Equipment [2730]                                       | Industrial Engineering [2750]        | Industrial Transportation [2770]     | Support Services [2790]                 | Automobiles & Parts [3350]             | Beverages [3530]                       | Food Producers [3570]      |
|                    |  |  |                                      |                                      |   |  |  | X                          |
|                    | Household Goods [3720]   | Leisure Goods [3740]   | Personal Goods [3760]                | Tobacco [3780]                       | Health Care Equipment & Services [4530] | Pharmaceuticals & Biotechnology [4570] | Food & Drug Retailer [5330]            | General Retailers [5370]   |
|                    |  |  |                                      |                                      |   | X                                      |  |                            |
|                    | Media [5550]   | Travel & Leisure [5750]  | Fixed Line Telecommunications [6530] | Mobile Telecommunications [6570]     | Electricity Utilities [7530]            | Gas, Water & Multiutilities [7570]     | Banks [8350]                           | Nonlife Insurance [8530]   |
|                    |  |  |                                      |                                      |   |  |  |                            |
| Sectors            | Life Insurance [8570]  | Real Estate [8730]   | General Financial [8770]             | Equity Investment Instruments [8980] | Nonequity Investment Instruments [8990] | Software & Computer Services [9530]    | Technology Hardware & Equipment [9570] |                            |
|                    |  |  |                                      |                                      |   |  |  |                            |

| ESG                      | ESG 14 NO, SO Emissions   |  |   |   |   |  |  |                            |
|--------------------------|---|--|---|---|---|--|--|----------------------------|
| Definition and Reference | Greenhouse gas emissions are the main cause of climate change. This Indicator can be used to explain targets for regulations or trading systems at international or national levels. It also provides insights into the potential cost implications of taxation or trading systems for reporting companies.   |  |   |   |   |  |  |                            |
|                          | Please refer to the Greenhouse Gas Protocol: "The Greenhouse Gas Protocol (GHG Protocol) is the most widely used international accounting tool for government and business leaders to understand, quantify, and manage greenhouse gas emissions. The GHG Protocol Initiative, a decade-long partnership between the World Resources Institute and the World Business Council for Sustainable Development, is working with businesses, governments, and environmental groups around the world to build a new generation of credible and effective programs for tackling climate change." Source: www.ghgprotocol.org |  |   |   |   |  |  |                            |
|                          | Other definitions can be found at ISO Organisation ( <a href="http://www.iso.org/iso/hot_topics/hot_topics_climate_change_tools.htm#quantifying">http://www.iso.org/iso/hot_topics/hot_topics_climate_change_tools.htm#quantifying</a> ). The newly developed standards ISO 14064 and ISO 14065 provide an internationally agreed framework for measuring GHG emissions and verifying claims made about them so that "a tonne of carbon is always a tonne of carbon".   |  |   |   |   |  |  |                            |
|                          | Other sources:<br>VfU Indicators: Internal Environmental Performance Indicators for the Financial Industry: see <a href="http://www.vfu.de/scin/userdata/File/Downloads/update%202007/VfU_Indicators_2005_Calculation_File_February_2007.xls">http://www.vfu.de/scin/userdata/File/Downloads/update%202007/VfU_Indicators_2005_Calculation_File_February_2007.xls</a>   |  |   |   |   |  |  |                            |
| KPI                      | ESG 14-1  |  |   |   |   |  |  |                            |
| Description              | NO, SO Emissions Total Corporate  | NO, SO Emissions Total Benchmark   |   |   |   |  |  |                            |
| Shortname                | NOSO.emiss.total.corp   | NOSO.emiss.total.bench   |   |   |   |  |  |                            |
| Unit / Calculation       | Total NO, SO Emissions in Million tons  | Total NO, SO Emissions in Million tons                                     |   |   |   |  |  |                            |
| Format                   | xxx,xxx,xxx.xx MtNOSO   | xxx,xxx,xxx.xx MtNOSO  |   |   |   |  |  |                            |
| Sectors                  | Oil & Gas Producers [0530]  | Oil Equipment, Services & Distribution [0570]                              | Chemicals [1350]                                    | Forestry & Paper [1730]                             | Industrial Metals [1750]                | Mining [1770]                          | Construction & Materials [2350]        | Aerospace & Defense [2710] |
|                          |   |  |   |   |   |  |  |                            |
|                          | General Industrials [2720]  | Electronic & Electrical Equipment [2730]                                   | Industrial Engineering [2750]                       | Industrial Transportation [2770]                    | Support Services [2790]                 | Automobiles & Parts [3350]             | Beverages [3530]                       | Food Producers [3570]      |
|                          |   |  |   |   |   |  |  |                            |
|                          | Household Goods [3720]  | Leisure Goods [3740]   | Personal Goods [3760]                               | Tobacco [3780]                                      | Health Care Equipment & Services [4530] | Pharmaceuticals & Biotechnology [4570] | Food & Drug Retailer [5330]            | General Retailers [5370]   |
|                          |   |  |   |   |   |  |  |                            |
|                          | Media [5550]  | Travel & Leisure [5750]  | Fixed Line Telecommunications [6530]                | Mobile Telecommunications [6570]                    | Electricity Utilities [7530]            | Gas, Water & Multiutilities [7570]     | Banks [8350]                           | Nonlife Insurance [8530]   |
|                          |   |  |   |   | X                                       |  |  |                            |
| Sectors                  | Life Insurance [8570]   | Real Estate [8730]   | General Financial [8770]                            | Equity Investment Instruments [8980]                | Nonequity Investment Instruments [8990] | Software & Computer Services [9530]    | Technology Hardware & Equipment [9570] |                            |
|                          |   |  |   |   |   |  |  |                            |
| KPI                      | ESG 14-2  |  | ESG 14-3  |   |   |  |  |                            |
| Description              | NO, SO Emissions by Generation Portfolio Coal-Fired Powerstation Corporate  | NO, SO Emissions by Generation Portfolio Coal-Fired Powerstation Benchmark | NO, SO Emissions by Kilowatthour produced Corporate | NO, SO Emissions by Kilowatthour produced Benchmark |   |  |  |                            |
| Shortname                | NOSO.emiss.employee.corp  | NOSO.emiss.employee.bench  | NOSO.kwh.corp                                       | NOSO.kwh.bench                                      |   |  |  |                            |
| Unit / Calculation       | Total NO, SO Emissions in Million tons  | Total NO, SO Emissions in Million tons                                     | Total NO, SO emissions / total kwh produced         | Total NO, SO emissions / total kwh produced         |   |  |  |                            |
| Format                   | xxx.xx MtCO2  | xxx.xx MtCO2   | xxxx g / kwh  | xxxx g / kwh  |   |  |  |                            |
| Sectors                  | Oil & Gas Producers [0530]  | Oil Equipment, Services & Distribution [0570]                              | Chemicals [1350]                                    | Forestry & Paper [1730]                             | Industrial Metals [1750]                | Mining [1770]                          | Construction & Materials [2350]        | Aerospace & Defense [2710] |
|                          |   |  |   |   |   |  |  |                            |
|                          | General Industrials [2720]  | Electronic & Electrical Equipment [2730]                                   | Industrial Engineering [2750]                       | Industrial Transportation [2770]                    | Support Services [2790]                 | Automobiles & Parts [3350]             | Beverages [3530]                       | Food Producers [3570]      |
|                          |   |  |   |   |   |  |  |                            |
|                          | Household Goods [3720]  | Leisure Goods [3740]   | Personal Goods [3760]                               | Tobacco [3780]                                      | Health Care Equipment & Services [4530] | Pharmaceuticals & Biotechnology [4570] | Food & Drug Retailer [5330]            | General Retailers [5370]   |
|                          |   |  |   |   |   |  |  |                            |
|                          | Media [5550]  | Travel & Leisure [5750]  | Fixed Line Telecommunications [6530]                | Mobile Telecommunications [6570]                    | Electricity Utilities [7530]            | Gas, Water & Multiutilities [7570]     | Banks [8350]                           | Nonlife Insurance [8530]   |
|                          |   |  |   |   | X                                       |  |  |                            |
| Sectors                  | Life Insurance [8570]   | Real Estate [8730]   | General Financial [8770]                            | Equity Investment Instruments [8980]                | Nonequity Investment Instruments [8990] | Software & Computer Services [9530]    | Technology Hardware & Equipment [9570] |                            |
|                          |   |  |   |   |   |  |  |                            |

| KPI                | ESG 14-4  |   | ESG 14-5                                     |  | ESG 14-6                                |  | ESG 14-7                                 |  |
|--------------------|---|---|--|--|---|--|--|--|
| Description        | NO,SO Emissions by passenger-km Corporate         | NO,SO Emissions by passenger-km Benchmark         | NO,SO Emissions by passenger-mile Corporate  | NO,SO Emissions by passenger-mile Benchmark  | NO,SO Emissions by cargo-km Corporate   | NO,SO Emissions by cargo-km Benchmark  | NO,SO Emissions by cargo-mile Corporate  | NO,SO Emissions by cargo-mile Benchmark  |
| Shortname          | NOSO.emiss.passkm.corp                            | NOSO.emiss.passkm.bench                           | NOSO.emiss.passmile.corp                     | NOSO.emiss.passmile.bench                    | NOSO.emiss.cargokm.corp                 | NOSO.emiss.cargokm.bench               | NOSO.emiss.cargomile.corp                | NOSO.emiss.cargomile.bench               |
| Unit / Calculation | Total NO,SO Emissions / total passenger-km        | Total NO,SO Emissions / total passenger-km        | Total NO,SO Emissions / total passenger-mile | Total NO,SO Emissions / total passenger-mile | Total NO,SO Emissions / total cargo-km  | Total NO,SO Emissions / total cargo-km | Total NO,SO Emissions / total cargo-mile | Total NO,SO Emissions / total cargo-mile |
| Format             | xxx,xxx.xx g/km                                   | xxx,xxx.xx g/km                                   | xxx,xxx.xx g/km                              | xxx,xxx.xx g/km                              | xxx,xxx.xx g/km                         | xxx,xxx.xx g/km                        | xxx,xxx.xx g/km                          | xxx,xxx.xx g/km                          |
| Sectors            | Oil & Gas Producers [0530]                        | Oil Equipment, Services & Distribution [0570]     | Chemicals [1350]                             | Forestry & Paper [1730]                      | Industrial Metals [1750]                | Mining [1770]                          | Construction & Materials [2350]          | Aerospace & Defense [2710]               |
|                    |   |   |  |  |   |  |  |  |
|                    | General Industrials [2720]                        | Electronic & Electrical Equipment [2730]          | Industrial Engineering [2750]                | Industrial Transportation [2770]             | Support Services [2790]                 | Automobiles & Parts [3350]             | Beverages [3530]                         | Food Producers [3570]                    |
|                    |   |   |  | X  |   |  |  |  |
|                    | Household Goods [3720]                            | Leisure Goods [3740]                              | Personal Goods [3760]                        | Tobacco [3780]                               | Health Care Equipment & Services [4530] | Pharmaceuticals & Biotechnology [4570] | Food & Drug Retailer [5330]              | General Retailers [5370]                 |
|                    |   |   |  |  |   |  |  |  |
|                    | Media [5550]                                      | Travel & Leisure [5750]                           | Fixed Line Telecommunications [6530]         | Mobile Telecommunications [6570]             | Electricity Utilities [7530]            | Gas, Water & Multiutilities [7570]     | Banks [8350]                             | Nonlife Insurance [8530]                 |
|                    |   | X   |  |  |   |  |  |  |
| Sectors            | Life Insurance [8570]                             | Real Estate [8730]                                | General Financial [8770]                     | Equity Investment Instruments [8980]         | Nonequity Investment Instruments [8990] | Software & Computer Services [9530]    | Technology Hardware & Equipment [9570]   |  |
|                    |   |   |  |  |   |  |  |  |
|                    |   |   |  |  |   |  |  |  |
|                    |   |   |  |  |   |  |  |  |
|                    |   |   |  |  |   |  |  |  |
|                    |   |   |  |  |   |  |  |  |
|                    |   |   |  |  |   |  |  |  |
|                    |   |   |  |  |   |  |  |  |
| KPI                | ESG 14-8  |   |  |  |   |  |  |  |
| Description        | NO, SO Emissions total production sites Corporate | NO, SO Emissions total production sites Benchmark |  |  |   |  |  |  |
| Shortname          | NOSO.emiss.prodsites.corp                         | NOSO.emiss.prodsites.bench                        |  |  |   |  |  |  |
| Unit / Calculation | Total CO2 Emissions of all production sites       | Total CO2 Emissions of all production sites       |  |  |   |  |  |  |
| Format             | xxx,xxx,xxx.xx MtCO2                              | xxx,xxx,xxx.xx MtCO2                              |  |  |   |  |  |  |
| Sectors            | Oil & Gas Producers [0530]                        | Oil Equipment, Services & Distribution [0570]     | Chemicals [1350]                             | Forestry & Paper [1730]                      | Industrial Metals [1750]                | Mining [1770]                          | Construction & Materials [2350]          | Aerospace & Defense [2710]               |
|                    |   |   |  |  |   |  |  |  |
|                    | General Industrials [2720]                        | Electronic & Electrical Equipment [2730]          | Industrial Engineering [2750]                | Industrial Transportation [2770]             | Support Services [2790]                 | Automobiles & Parts [3350]             | Beverages [3530]                         | Food Producers [3570]                    |
|                    |   |   |  |  |   | X                                      |  |  |
|                    | Household Goods [3720]                            | Leisure Goods [3740]                              | Personal Goods [3760]                        | Tobacco [3780]                               | Health Care Equipment & Services [4530] | Pharmaceuticals & Biotechnology [4570] | Food & Drug Retailer [5330]              | General Retailers [5370]                 |
|                    |   |   |  |  |   |  |  |  |
|                    | Media [5550]                                      | Travel & Leisure [5750]                           | Fixed Line Telecommunications [6530]         | Mobile Telecommunications [6570]             | Electricity Utilities [7530]            | Gas, Water & Multiutilities [7570]     | Banks [8350]                             | Nonlife Insurance [8530]                 |
|                    |   |   |  |  |   |  |  |  |
| Sectors            | Life Insurance [8570]                             | Real Estate [8730]                                | General Financial [8770]                     | Equity Investment Instruments [8980]         | Nonequity Investment Instruments [8990] | Software & Computer Services [9530]    | Technology Hardware & Equipment [9570]   |  |
|                    |   |   |  |  |   |  |  |  |
|                    |   |   |  |  |   |  |  |  |
|                    |   |   |  |  |   |  |  |  |
|                    |   |   |  |  |   |  |  |  |
|                    |   |   |  |  |   |  |  |  |
|                    |   |   |  |  |   |  |  |  |
|                    |   |   |  |  |   |  |  |  |



| ESG                      | ESG 15 Waste  |  |                                      |   |   |  |   |                              |
|--------------------------|---|--|--------------------------------------|---|---|--|---|------------------------------|
| Definition and Reference | <p>Proposed indicators:<br/>- waste in specific terms (kilogramm, ton, litres, gallons etc.) per unit produced e.g. X tons of waste / 1 ton of car produced, x litres of water contaminated / 1 ton of material produced.</p> <p>DEFRA/UK proposes: Waste can be measured by estimating the number and weight of rubbish bags that leave the business over a set period of time. If the waste is sorted prior to disposal, then Defra says that more detailed measurement of specific waste, such as tonnes of glass can be made, but waste can be treated as a general category. Waste should be reported in metric tonnes per annum. In the UK , many companies already record this information as the UK landfill tax is charged per tonne. Defra guidelines say that where possible, waste should be broken down into separate categories, such as paper, glass, aluminium and the final route of disposal, for example, 50% to landfill, 30% incinerated and 20% recycled reported. If an estimation method has been used then this should also be reported.</p> |  |                                      |   |   |  |   |                              |
| Applied KPI              | ESG 15-1  |  |                                      |   |   |  |   |                              |
| Description              | Waste by unit produced Corporate  | Waste by unit produced Benchmark   |                                      |   |   |  |   |                              |
| Shortname                | waste.unit.corp   | waste.unit.bench   |                                      |   |   |  |   |                              |
| Unit / Calculation       | Total waste related to production / number of units produced in specific measure (ton, gram, ounce, litre)  | Total waste related to production / number of units produced in specific measure (ton, gram, ounce, litre) |                                      |   |   |  |   |                              |
| Format                   | xxx.xxx.xx [unit measure] / unit  | xxx.xxx.xx [unit measure] / unit   |                                      |   |   |  |   |                              |
| Sectors                  | <b>Oil &amp; Gas Producers [0530]</b>   | Oil Equipment, Services & Distribution [0570]  | <b>Chemicals [1350]</b>              | <b>Forestry &amp; Paper [1730]</b>      | <b>Industrial Metals [1750]</b>         | <b>Mining [1770]</b>                   | <b>Construction &amp; Materials [2350]</b>        | Aerospace & Defense [2710]   |
|                          | <b>X</b>  |  | <b>X</b>                             | <b>X</b>                                | <b>X</b>                                | <b>X</b>                               | <b>X</b>  |                              |
|                          | General Industrials [2720]  | <b>Electronic &amp; Electrical Equipment [2730]</b>  | <b>Industrial Engineering [2750]</b> | <b>Industrial Transportation [2770]</b> | Support Services [2790]                 | <b>Automobiles &amp; Parts [3350]</b>  | <b>Beverages [3530]</b>                           | <b>Food Producers [3570]</b> |
|                          |   | <b>X</b>   | <b>X</b>                             | <b>X</b>                                |   | <b>X</b>                               | <b>X</b>  | <b>X</b>                     |
|                          | Household Goods [3720]  | Leisure Goods [3740]   | Personal Goods [3760]                | Tobacco [3780]                          | Health Care Equipment & Services [4530] | Pharmaceuticals & Biotechnology [4570] | Food & Drug Retailer [5330]                       | General Retailers [5370]     |
|                          |   |  |                                      |   |   |  |   |                              |
|                          | Media [5550]  | <b>Travel &amp; Leisure [5750]</b>   | Fixed Line Telecommunications [6530] | Mobile Telecommunications [6570]        | Electricity Utilities [7530]            | Gas, Water & Multiutilities [7570]     | <b>Banks [8350]</b>                               | Nonlife Insurance [8530]     |
|                          |   | <b>X</b>   |                                      |   |   |  | <b>X</b>  |                              |
|                          | Life Insurance [8570]   | Real Estate [8730]   | General Financial [8770]             | Equity Investment Instruments [8980]    | Nonequity Investment Instruments [8990] | Software & Computer Services [9530]    | <b>Technology Hardware &amp; Equipment [9570]</b> |                              |
|                          |   |  |                                      |   |   |  | <b>X</b>  |                              |
| KPI                      | ESG 15-2  |  |                                      |   |   |  |   |                              |
| Description              | % of waste recycled Corporate   | % of waste recycled Benchmark  |                                      |   |   |  |   |                              |
| Shortname                | waste.%recycle.corp   | waste.%recycle.bench   |                                      |   |   |  |   |                              |
| Unit / Calculation       | Waste recycled / Total waste  | Waste recycled / Total waste   |                                      |   |   |  |   |                              |
| Format                   | xx.xx %   | xx.xx %  |                                      |   |   |  |   |                              |
| Sectors                  | <b>Oil &amp; Gas Producers [0530]</b>   | Oil Equipment, Services & Distribution [0570]  | <b>Chemicals [1350]</b>              | <b>Forestry &amp; Paper [1730]</b>      | <b>Industrial Metals [1750]</b>         | <b>Mining [1770]</b>                   | <b>Construction &amp; Materials [2350]</b>        | Aerospace & Defense [2710]   |
|                          | <b>X</b>  |  | <b>X</b>                             | <b>X</b>                                | <b>X</b>                                | <b>X</b>                               | <b>X</b>  |                              |
|                          | General Industrials [2720]  | Electronic & Electrical Equipment [2730]   | Industrial Engineering [2750]        | <b>Industrial Transportation [2770]</b> | Support Services [2790]                 | <b>Automobiles &amp; Parts [3350]</b>  | <b>Beverages [3530]</b>                           | <b>Food Producers [3570]</b> |
|                          |   |  |                                      | <b>X</b>                                |   | <b>X</b>                               | <b>X</b>  | <b>X</b>                     |
|                          | Household Goods [3720]  | Leisure Goods [3740]   | Personal Goods [3760]                | Tobacco [3780]                          | Health Care Equipment & Services [4530] | Pharmaceuticals & Biotechnology [4570] | Food & Drug Retailer [5330]                       | General Retailers [5370]     |
|                          |   |  |                                      |   |   |  |   |                              |
|                          | Media [5550]  | <b>Travel &amp; Leisure [5750]</b>   | Fixed Line Telecommunications [6530] | Mobile Telecommunications [6570]        | Electricity Utilities [7530]            | Gas, Water & Multiutilities [7570]     | <b>Banks [8350]</b>                               | Nonlife Insurance [8530]     |
|                          |   | <b>X</b>   |                                      |   |   |  | <b>X</b>  |                              |
|                          | Life Insurance [8570]   | Real Estate [8730]   | General Financial [8770]             | Equity Investment Instruments [8980]    | Nonequity Investment Instruments [8990] | Software & Computer Services [9530]    | <b>Technology Hardware &amp; Equipment [9570]</b> |                              |
|                          |   |  |                                      |   |   |  | <b>X</b>  |                              |

| ESG                      | ESG 16 Environmental Compatibility  |  |                                      |                                      |   |  |  |                            |
|--------------------------|---|--|--------------------------------------|--------------------------------------|---|--|--|----------------------------|
| Definition and Reference | Product markets should reflect the effort of companies to reduce emissions because for some products, e.g. cars the highest proportion of life cycle emissions is during the operational stage. Thus emissions of the product can have a very high impact on the climate. Companies are facing regulatory risk due to reduction targets e.g. for fleet emissions. |  |                                      |                                      |   |  |  |                            |
| KPI                      | ESG 16-1  |  |                                      |                                      |   |  |  |                            |
| Description              | Average fuel consumption of fleet of sold vehicles Corporate  | Average fuel consumption of fleet of sold vehicles Benchmark   |                                      |                                      |   |  |  |                            |
| Shortname                | av.fuel.cons.fleet.corp   | av.fuel.cons.fleet.bench   |                                      |                                      |   |  |  |                            |
| Unit / Calculation       | average fuel consumption across entire fleet in litres per 100 km   | average fuel consumption across entire fleet in litres per 100 km  |                                      |                                      |   |  |  |                            |
| Format                   | xx.xx l / 100km   | xx.xx l / 100km  |                                      |                                      |   |  |  |                            |
| Sectors                  | Oil & Gas Producers [0530]  | Oil Equipment, Services & Distribution [0570]  | Chemicals [1350]                     | Forestry & Paper [1730]              | Industrial Metals [1750]                | Mining [1770]                          | Construction & Materials [2350]        | Aerospace & Defense [2710] |
|                          | General Industrials [2720]  | Electronic & Electrical Equipment [2730]   | Industrial Engineering [2750]        | Industrial Transportation [2770]     | Support Services [2790]                 | Automobiles & Parts [3350]             | Beverages [3530]                       | Food Producers [3570]      |
|                          | Household Goods [3720]  | Leisure Goods [3740]   | Personal Goods [3760]                | Tobacco [3780]                       | Health Care Equipment & Services [4530] | X                                      | Food & Drug Retailer [5330]            | General Retailers [5370]   |
|                          | Media [5550]  | Travel & Leisure [5750]  | Fixed Line Telecommunications [6530] | Mobile Telecommunications [6570]     | Electricity Utilities [7530]            | Gas, Water & Multiutilities [7570]     | Banks [8350]                           | Nonlife Insurance [8530]   |
|                          | Life Insurance [8570]   | Real Estate [8730]   | General Financial [8770]             | Equity Investment Instruments [8980] | Nonequity Investment Instruments [8990] | Software & Computer Services [9530]    | Technology Hardware & Equipment [9570] |                            |
| KPI                      | ESG 16-2  |  |                                      |                                      |   |  |  |                            |
| Description              | Percentage of ISO 14001 certified sites Corporates, further information <a href="http://www.iso14000-iso14001-environmental-management.com/">http://www.iso14000-iso14001-environmental-management.com/</a>   | Percentage of ISO 14001 certified sites benchmark, further information <a href="http://www.iso14000-iso14001-environmental-management.com/">http://www.iso14000-iso14001-environmental-management.com/</a> |                                      |                                      |   |  |  |                            |
| Shortname                | %ISO14001.sites.corp  | %ISO14001.sites.bench  |                                      |                                      |   |  |  |                            |
| Unit / Calculation       | Number of sites with ISO 14001 certification / number of total sites  | Number of sites with ISO 14001 certification / number of total sites   |                                      |                                      |   |  |  |                            |
| Format                   | xx.xx %   | xx.xx %  |                                      |                                      |   |  |  |                            |
| Sectors                  | Oil & Gas Producers [0530]  | Oil Equipment, Services & Distribution [0570]  | Chemicals [1350]                     | Forestry & Paper [1730]              | Industrial Metals [1750]                | Mining [1770]                          | Construction & Materials [2350]        | Aerospace & Defense [2710] |
|                          | General Industrials [2720]  | Electronic & Electrical Equipment [2730]   | Industrial Engineering [2750]        | Industrial Transportation [2770]     | Support Services [2790]                 | Automobiles & Parts [3350]             | Beverages [3530]                       | Food Producers [3570]      |
|                          | Household Goods [3720]  | Leisure Goods [3740]   | Personal Goods [3760]                | Tobacco [3780]                       | Health Care Equipment & Services [4530] | Pharmaceuticals & Biotechnology [4570] | Food & Drug Retailer [5330]            | General Retailers [5370]   |
|                          | Media [5550]  | Travel & Leisure [5750]  | Fixed Line Telecommunications [6530] | Mobile Telecommunications [6570]     | Electricity Utilities [7530]            | Gas, Water & Multiutilities [7570]     | Banks [8350]                           | Nonlife Insurance [8530]   |
|                          | Life Insurance [8570]   | Real Estate [8730]   | General Financial [8770]             | Equity Investment Instruments [8980] | Nonequity Investment Instruments [8990] | Software & Computer Services [9530]    | Technology Hardware & Equipment [9570] |                            |
|                          |   |  |                                      |                                      |   | X                                      | X                                      |                            |

| KPI                | ESG 16-3  |   | ESG 16-4  |   | ESG 16-5   |  | ESG 16-6  |   |
|--------------------|---|---|---|---|--|--|---|---|
| Description        | Percentage of renewable energy produced as of total energy produced Corporate   | Percentage of renewable energy produced as of total energy produced Benchmark | Total Renewable Electricity produced from biomass Corporate | Total Renewable Electricity produced from biomass Corporate | Total Renewable Electricity produced from wind Corporate | Total Renewable Electricity produced from wind Corporate | Total Renewable Electricity produced from hydro Corporate | Total Renewable Electricity produced from hydro Corporate |
| Shortname          | %.renewable.prod.corp   | %.renewable.prod.bench  | total.renew.biomass.prod.corp                               | total.renew.biomass.prod.bench                              | total.renew.wind.prod.corp                               | total.renew.wind.prod.bench                              | total.renew.hydro.prod.corp                               | total.renew.hydro.prod.bench                              |
| Unit / Calculation | Renewable emnergy produced in GWh / total energy produced in GWh  | Renewable emnergy produced in GWh / total energy produced in GWh              | Renewable electricity produced from biomass in GWh          | Renewable electricity produced from biomass in GWh          | Renewable electricity produced from wind in GWh          | Renewable electricity produced from wind in GWh          | Renewable electricity produced from hydro in GWh          | Renewable electricity produced from hydro in GWh          |
| Format             | xx.xx %   | xx.xx %   | x,xxx GWh   | x,xxx GWh   | x,xxx GWh  | x,xxx GWh  | x,xxx GWh   | x,xxx GWh   |
| Sectors            | Oil & Gas Producers [0530]  | Oil Equipment, Services & Distribution [0570]                                 | Chemicals [1350]  | Forestry & Paper [1730]                                     | Industrial Metals [1750]                                 | Mining [1770]  | Construction & Materials [2350]                           | Aerospace & Defense [2710]                                |
|                    |   |   |   |   |  |  |   |   |
|                    | General Industrials [2720]  | Electronic & Electrical Equipment [2730]                                      | Industrial Engineering [2750]                               | Industrial Transportation [2770]                            | Support Services [2790]                                  | Automobiles & Parts [3350]                               | Beverages [3530]  | Food Producers [3570]                                     |
|                    |   |   |   |   |  |  |   |   |
|                    | Household Goods [3720]  | Leisure Goods [3740]  | Personal Goods [3760]                                       | Tobacco [3780]  | Health Care Equipment & Services [4530]                  | Pharmaceuticals & Biotechnology [4570]                   | Food & Drug Retailer [5330]                               | General Retailers [5370]                                  |
|                    |   |   |   |   |  |  |   |   |
|                    | Media [5550]  | Travel & Leisure [5750]   | Fixed Line Telecommunications [6530]                        | Mobile Telecommunications [6570]                            | <b>Electricity Utilities [7530]</b>                      | <b>Gas, Water &amp; Multiutilities [7570]</b>            | Banks [8350]  | Nonlife Insurance [8530]                                  |
|                    |   |   |   |   | <b>X</b>   | <b>X</b>   |   |   |
| Sectors            | Life Insurance [8570]   | Real Estate [8730]  | General Financial [8770]                                    | Equity Investment Instruments [8980]                        | Nonequity Investment Instruments [8990]                  | Software & Computer Services [9530]                      | Technology Hardware & Equipment [9570]                    |   |
|                    |   |   |   |   |  |  |   |   |
|                    |   |   |   |   |  |  |   |   |
|                    |   |   |   |   |  |  |   |   |
|                    |   |   |   |   |  |  |   |   |
|                    |   |   |   |   |  |  |   |   |
|                    |   |   |   |   |  |  |   |   |
|                    |   |   |   |   |  |  |   |   |
| KPI                | ESG 16-7  |   |   |   |  |  |   |   |
| Description        | Percentage of eco-labeled products sold Corporate   | Percentage of eco-labeled products sold Benchmark                             |   |   |  |  |   |   |
| Shortname          | %.ecolabel.sold.corp  | %.ecolabel.sold.bench   |   |   |  |  |   |   |
| Unit / Calculation | For a catalogue of eco-labeled products in the EU check www.eco-label.com. Calculation: revenues from eco-labeled products / total revenues |   |   |   |  |  |   |   |
| Format             | xx.xx %   | xx.xx %   |   |   |  |  |   |   |
| Sectors            | Oil & Gas Producers [0530]  | Oil Equipment, Services & Distribution [0570]                                 | Chemicals [1350]  | <b>Forestry &amp; Paper [1730]</b>                          | Industrial Metals [1750]                                 | Mining [1770]  | Construction & Materials [2350]                           | Aerospace & Defense [2710]                                |
|                    |   |   |   | <b>X</b>  |  |  |   |   |
|                    | General Industrials [2720]  | <b>Electronic &amp; Electrical Equipment [2730]</b>                           | Industrial Engineering [2750]                               | Industrial Transportation [2770]                            | Support Services [2790]                                  | Automobiles & Parts [3350]                               | <b>Beverages [3530]</b>                                   | <b>Food Producers [3570]</b>                              |
|                    |   | <b>X</b>  |   |   |  |  | <b>X</b>  | <b>X</b>  |
|                    | <b>Household Goods [3720]</b>   | <b>Leisure Goods [3740]</b>   | <b>Personal Goods [3760]</b>                                | Tobacco [3780]  | Health Care Equipment & Services [4530]                  | Pharmaceuticals & Biotechnology [4570]                   | <b>Food &amp; Drug Retailer [5330]</b>                    | <b>General Retailers [5370]</b>                           |
|                    | <b>X</b>  | <b>X</b>  | <b>X</b>  |   |  |  | <b>X</b>  | <b>X</b>  |
|                    | Media [5550]  | <b>Travel &amp; Leisure [5750]</b>  | Fixed Line Telecommunications [6530]                        | Mobile Telecommunications [6570]                            | <b>Electricity Utilities [7530]</b>                      | <b>Gas, Water &amp; Multiutilities [7570]</b>            | Banks [8350]  | Nonlife Insurance [8530]                                  |
|                    |   | <b>X</b>  |   |   | <b>X</b>   | <b>X</b>   |   |   |
| Sectors            | Life Insurance [8570]   | Real Estate [8730]  | General Financial [8770]                                    | Equity Investment Instruments [8980]                        | Nonequity Investment Instruments [8990]                  | Software & Computer Services [9530]                      | Technology Hardware & Equipment [9570]                    |   |
|                    |   |   |   |   |  |  |   |   |

| ESG                      | ESG 17 End-of-lifecycle Impact   |   |  |  |   |  |  |                            |
|--------------------------|--|---|--|--|---|--|--|----------------------------|
| Definition and Reference | The reclaiming of resources at the end of the life cycle has an impact on the cost of the company. This impact depends for example on the composition of the product (e.g. recyclability of materials, level of hazardous materials) and the market for used components.   |   |  |  |   |  |  |                            |
| KPI                      | ESG 17-1   |   |  |  |   |  |  |                            |
| Description              | Percentage of material recovered for reusing at end of lifecycle of product Corporate  | Percentage of material recovered for reusing at end of lifecycle of product Benchmark |  |  |   |  |  |                            |
| Shortname                | %recover.mat.endlife.corp  | %recover.mat.endlife.bench  |  |  |   |  |  |                            |
| Unit / Calculation       | Material being recovered / total material built  | Material being recovered / total material built                                       |  |  |   |  |  |                            |
| Format                   | xx.xx %  | xx.xx %   |  |  |   |  |  |                            |
| Sectors                  | Oil & Gas Producers [0530]   | Oil Equipment, Services & Distribution [0570]   | Chemicals [1350]   | Forestry & Paper [1730]                                      | Industrial Metals [1750]                | Mining [1770]                          | Construction & Materials [2350]        | Aerospace & Defense [2710] |
|                          |  |   |  |  |   |  |  |                            |
|                          | General Industrials [2720]   | Electronic & Electrical Equipment [2730]  | Industrial Engineering [2750]                                | Industrial Transportation [2770]                             | Support Services [2790]                 | Automobiles & Parts [3350]             | Beverages [3530]                       | Food Producers [3570]      |
|                          |  |   |  |  |   | X                                      |  |                            |
|                          | Household Goods [3720]   | Leisure Goods [3740]  | Personal Goods [3760]  | Tobacco [3780]   | Health Care Equipment & Services [4530] | Pharmaceuticals & Biotechnology [4570] | Food & Drug Retailer [5330]            | General Retailers [5370]   |
|                          | X  |   |  |  |   | X                                      |  |                            |
|                          | Media [5550]   | Travel & Leisure [5750]   | Fixed Line Telecommunications [6530]                         | Mobile Telecommunications [6570]                             | Electricity Utilities [7530]            | Gas, Water & Multiutilities [7570]     | Banks [8350]                           | Nonlife Insurance [8530]   |
|                          |  |   |  |  |   |  |  |                            |
|                          | Life Insurance [8570]  | Real Estate [8730]  | General Financial [8770]                                     | Equity Investment Instruments [8980]                         | Nonequity Investment Instruments [8990] | Software & Computer Services [9530]    | Technology Hardware & Equipment [9570] |                            |
|                          |  |   |  |  |   | X                                      | X                                      |                            |
| ESG                      | ESG 18 Diversity   |   |  |  |   |  |  |                            |
| Definition and Reference | <p>Quote from Wikipedia: "The "business case for diversity", theorizes that in a global marketplace, a company that employs a diverse workforce (both men and women, people of many generations, people from ethnically and racially diverse backgrounds etc.) is better able to understand the demographics of the marketplace it serves and is thus better equipped to thrive in that marketplace than a company that has a more limited range of employee demographics. An additional corollary suggests that a company that supports the diversity of its workforce can also improve employee satisfaction, productivity and retention. This portion of the business case, often referred to as inclusion, relates to how an organization utilizes its various relevant diversities. If a workforce is diverse, but the employer takes little or no advantage of that breadth of that experience, then it cannot monetize whatever benefits background diversity might offer."</p> <p>Source: Wikipedia, 4 February 2008, <a href="http://en.wikipedia.org/wiki/Diversity_%28business%29">http://en.wikipedia.org/wiki/Diversity_%28business%29</a></p> <p>Helpful tools and further background information can be found at <a href="http://www.workinfo.com/free/Downloads/40.htm">http://www.workinfo.com/free/Downloads/40.htm</a>.</p> |   |  |  |   |  |  |                            |
| KPI                      | ESG 18-1   |   | ESG 18-2   |  |   |  |  |                            |
| Description              | Percentage of female employees as of total employees Corporate   | Percentage of female employees as of total employees Benchmark                        | Percentage of female managers as of total managers Corporate | Percentage of female managers as of total managers Benchmark |   |  |  |                            |
| Shortname                | %divers.female.total.corp  | %divers.female.total.bench  | divers.female.managers.total.corp                            | divers.female.managers.total.bench                           |   |  |  |                            |
| Unit / Calculation       | Percentage   | Percentage  | Percentage   | Percentage   |   |  |  |                            |
| Format                   | xx.xx %, numeric   | xx.xx %, numeric  | xx.xx %, numeric   | xx.xx %, numeric   |   |  |  |                            |
| Sectors                  | Oil & Gas Producers [0530]   | Oil Equipment, Services & Distribution [0570]   | Chemicals [1350]   | Forestry & Paper [1730]                                      | Industrial Metals [1750]                | Mining [1770]                          | Construction & Materials [2350]        | Aerospace & Defense [2710] |
|                          |  |   |  |  |   |  |  |                            |
|                          | General Industrials [2720]   | Electronic & Electrical Equipment [2730]  | Industrial Engineering [2750]                                | Industrial Transportation [2770]                             | Support Services [2790]                 | Automobiles & Parts [3350]             | Beverages [3530]                       | Food Producers [3570]      |
|                          |  |   |  |  |   |  |  |                            |
|                          | Household Goods [3720]   | Leisure Goods [3740]  | Personal Goods [3760]  | Tobacco [3780]   | Health Care Equipment & Services [4530] | Pharmaceuticals & Biotechnology [4570] | Food & Drug Retailer [5330]            | General Retailers [5370]   |
|                          |  |   |  |  |   |  |  |                            |
|                          | Media [5550]   | Travel & Leisure [5750]   | Fixed Line Telecommunications [6530]                         | Mobile Telecommunications [6570]                             | Electricity Utilities [7530]            | Gas, Water & Multiutilities [7570]     | Banks [8350]                           | Nonlife Insurance [8530]   |
|                          |  |   |  |  |   |  |  |                            |
|                          | Life Insurance [8570]  | Real Estate [8730]  | General Financial [8770]                                     | Equity Investment Instruments [8980]                         | Nonequity Investment Instruments [8990] | Software & Computer Services [9530]    | Technology Hardware & Equipment [9570] |                            |
|                          | X  |   |  |  |   |  | X                                      | X                          |

| ESG                      | ESG 19 % of Credit Loans, Investments and Prop Trading Activities Undergone ESG Screening  |   |   |   |  |  |  |                                 |
|--------------------------|--|---|---|---|--|--|--|---------------------------------|
| Definition and Reference | Funding is one of the most effective levers in giving ESG-issues and topics priority. Through making funds available as loans and credits for ESG-compliant investments banks can be pivotal in serving to stir engagements in areas such as climate change, ethical supply chain management and corruption. Yet, even if the banking industry's credit granting process does not explicitly take into account ESG issues the process itself should be geared to identifying business cases potentially detrimental to ESG aspects and rigorously decline granting loans and credits to this business cases. Additionally to credit and loans, Prop Trading need to be monitored with regards to ESG compliance. |   |   |   |  |  |  |                                 |
| KPI                      | ESG 19-1   |   | ESG 19-2  |   |  |  |  |                                 |
| Description              | Percentage of total loans undergone ESG screening Corporate  | Percentage of total loans undergone ESG screening Benchmark               | Percentage of prop trading activities undergone ESG screening Corporate | Percentage of prop trading activities undergone ESG screening Benchmark |  |  |  |                                 |
| Shortname                | % loans.ESG.screen.corp  | % loans.ESG.screen.bench  | proptrad.ESG.screen.corp  | proptrad.ESG.screen.bench   |  |  |  |                                 |
| Unit / Calculation       | Percentage   | Percentage  | Percentage  | Percentage  |  |  |  |                                 |
| Format                   | xx.xx %, numeric   | xx.xx %, numeric  | xx.xx %, numeric  | xx.xx %, numeric  |  |  |  |                                 |
| Sectors                  | Oil & Gas Producers [0530]   | Oil Equipment, Services & Distribution [0570]                             | Chemicals [1350]  | Forestry & Paper [1730]   | Industrial Metals [1750]                       | Mining [1770]                          | Construction & Materials [2350]        | Aerospace & Defense [2710]      |
|                          |  |   |   |   |  |  |  |                                 |
|                          | General Industrials [2720]   | Electronic & Electrical Equipment [2730]                                  | Industrial Engineering [2750]   | Industrial Transportation [2770]  | Support Services [2790]                        | Automobiles & Parts [3350]             | Beverages [3530]                       | Food Producers [3570]           |
|                          |  |   |   |   |  |  |  |                                 |
|                          | Household Goods [3720]   | Leisure Goods [3740]  | Personal Goods [3760]   | Tobacco [3780]  | Health Care Equipment & Services [4530]        | Pharmaceuticals & Biotechnology [4570] | Food & Drug Retailer [5330]            | General Retailers [5370]        |
|                          |  |   |   |   |  |  |  |                                 |
|                          | Media [5550]   | Travel & Leisure [5750]   | Fixed Line Telecommunications [6530]                                    | Mobile Telecommunications [6570]  | Electricity Utilities [7530]                   | Gas, Water & Multiutilities [7570]     | <b>Banks [8350]</b>                    | Nonlife Insurance [8530]        |
|                          |  |   |   |   |  |  | <b>X</b>                               |                                 |
|                          | Life Insurance [8570]  | Real Estate [8730]  | <b>General Financial [8770]</b>   | <b>Equity Investment Instruments [8980]</b>                             | <b>Nonequity Investment Instruments [8990]</b> | Software & Computer Services [9530]    | Technology Hardware & Equipment [9570] |                                 |
|                          |  |   | <b>X</b>  | <b>X</b>  | <b>X</b>                                       |  |  |                                 |
| ESG                      | ESG 20 % of Funds Managed in Accordance to ESG Criteria  |   |   |   |  |  |  |                                 |
| Definition and Reference | Through increasing the percentage of funds managed in accordance to ESG criteria the Re-Insurance industries can produce effective engagement of an institutional investor.  |   |   |   |  |  |  |                                 |
| KPI                      | ESG 20-1   |   |   |   |  |  |  |                                 |
| Description              | Percentage of total funds held in accordance with ESG criteria Corporate.  | Percentage of total funds held in accordance with ESG criteria benchmark. |   |   |  |  |  |                                 |
| Shortname                | % funds.ESG.screen.corp  | % funds.ESG.screen.bench  |   |   |  |  |  |                                 |
| Unit / Calculation       | Percentage   | Percentage  |   |   |  |  |  |                                 |
| Format                   | xx.xx %, numeric   | xx.xx %, numeric  |   |   |  |  |  |                                 |
| Sectors                  | Oil & Gas Producers [0530]   | Oil Equipment, Services & Distribution [0570]                             | Chemicals [1350]  | Forestry & Paper [1730]   | Industrial Metals [1750]                       | Mining [1770]                          | Construction & Materials [2350]        | Aerospace & Defense [2710]      |
|                          |  |   |   |   |  |  |  |                                 |
|                          | General Industrials [2720]   | Electronic & Electrical Equipment [2730]                                  | Industrial Engineering [2750]   | Industrial Transportation [2770]  | Support Services [2790]                        | Automobiles & Parts [3350]             | Beverages [3530]                       | Food Producers [3570]           |
|                          |  |   |   |   |  |  |  |                                 |
|                          | Household Goods [3720]   | Leisure Goods [3740]  | Personal Goods [3760]   | Tobacco [3780]  | Health Care Equipment & Services [4530]        | Pharmaceuticals & Biotechnology [4570] | Food & Drug Retailer [5330]            | General Retailers [5370]        |
|                          |  |   |   |   |  |  |  |                                 |
|                          | Media [5550]   | Travel & Leisure [5750]   | Fixed Line Telecommunications [6530]                                    | Mobile Telecommunications [6570]  | Electricity Utilities [7530]                   | Gas, Water & Multiutilities [7570]     | <b>Banks [8350]</b>                    | <b>Nonlife Insurance [8530]</b> |
|                          |  |   |   |   |  |  | <b>X</b>                               | <b>X</b>                        |
|                          | <b>Life Insurance [8570]</b>   | Real Estate [8730]  | <b>General Financial [8770]</b>   | <b>Equity Investment Instruments [8980]</b>                             | <b>Nonequity Investment Instruments [8990]</b> | Software & Computer Services [9530]    | Technology Hardware & Equipment [9570] |                                 |
|                          | <b>X</b>   |   | <b>X</b>  | <b>X</b>  | <b>X</b>                                       |  |  |                                 |

| ESG                      | ESG 21 Financial Instruments, Investment Property held in Accordance to ESG Criteria  |   |                                      |   |  |   |  |                                 |
|--------------------------|---|---|--------------------------------------|---|--|---|--|---------------------------------|
| Definition and Reference | Definitions of financial instruments and investment property can be found at IFRS (cf. IAS 39, 40)  |   |                                      |   |  |   |  |                                 |
| KPI                      | ESG 21-1  |   |                                      |   |  |   |  |                                 |
| Description              | Percentage of total financial instruments, investment property held in accordance to ESG as of total investments, investments in associates, financial instruments, investment property Corporate   | Percentage of total financial instruments, investment property held in accordance to ESG as of total investments, investments in associates, financial instruments, investment property Benchmark |                                      |   |  |   |  |                                 |
| Shortname                | %fininstrum.ESG.screen.corp   | %fininstrum.ESG.screen.bench  |                                      |   |  |   |  |                                 |
| Unit / Calculation       | Percentage  | Percentage  |                                      |   |  |   |  |                                 |
| Format                   | xx.xx %, numeric  | xx.xx %, numeric  |                                      |   |  |   |  |                                 |
| Sectors                  | Oil & Gas Producers [0530]  | Oil Equipment, Services & Distribution [0570]   | Chemicals [1350]                     | Forestry & Paper [1730]                     | Industrial Metals [1750]                       | Mining [1770]                                     | Construction & Materials [2350]            | Aerospace & Defense [2710]      |
|                          |   |   |                                      |   |  |   |  |                                 |
|                          | General Industrials [2720]  | Electronic & Electrical Equipment [2730]  | Industrial Engineering [2750]        | Industrial Transportation [2770]            | Support Services [2790]                        | Automobiles & Parts [3350]                        | Beverages [3530]                           | Food Producers [3570]           |
|                          |   |   |                                      |   |  |   |  |                                 |
|                          | Household Goods [3720]  | Leisure Goods [3740]  | Personal Goods [3760]                | Tobacco [3780]                              | Health Care Equipment & Services [4530]        | Pharmaceuticals & Biotechnology [4570]            | Food & Drug Retailer [5330]                | General Retailers [5370]        |
|                          |   |   |                                      |   |  |   |  |                                 |
|                          | Media [5550]  | Travel & Leisure [5750]   | Fixed Line Telecommunications [6530] | Mobile Telecommunications [6570]            | Electricity Utilities [7530]                   | Gas, Water & Multiutilities [7570]                | <b>Banks [8350]</b>                        | <b>Nonlife Insurance [8530]</b> |
|                          |   |   |                                      |   |  |   | <b>X</b>                                   | <b>X</b>                        |
|                          | Life Insurance [8570]   | Real Estate [8730]  | <b>General Financial [8770]</b>      | <b>Equity Investment Instruments [8980]</b> | <b>Nonequity Investment Instruments [8990]</b> | Software & Computer Services [9530]               | Technology Hardware & Equipment [9570]     |                                 |
|                          |   |   | <b>X</b>                             | <b>X</b>                                    | <b>X</b>                                       |   |  |                                 |
| ESG                      | ESG 22 Investments in Accordance with ESG Criteria incl. Investments in Associates and minority stakes  |   |                                      |   |  |   |  |                                 |
| Definition and Reference | Investing without taking human right issues such as environmental aspects or child-labour into account bear substantial reputational risks for organisations. Direct investments should reflect minimum standards of sustainability e.g. environmental compatibility. Moreover, organisations may underestimate the potential lever of their investment policies vis-a-vis third party suppliers e.g. in emerging markets or third-world countries. By ways of negotiating minimum standards of compliance with human rights standards such as minimum wages for workers, safety standards and occlusion of malpractices of an organisation's suppliers the investing party can assert human rights acknowledgement of its third party suppliers. |   |                                      |   |  |   |  |                                 |
| KPI                      | ESG 22-1  |   |                                      |   |  |   |  |                                 |
| Description              | Percentage of total investments and investments in associates in accordance to ESG as of total investments and investments in associates Corporate  | Percentage of total investments and investments in associates in accordance to ESG as of total investments and investments in associates Benchmark  |                                      |   |  |   |  |                                 |
| Shortname                | %inv.ESG.screen.corp  | %inv.ESG.screen.bench   |                                      |   |  |   |  |                                 |
| Unit / Calculation       | Percentage  | Percentage  |                                      |   |  |   |  |                                 |
| Format                   | xx.xx %, numeric  | xx.xx %, numeric  |                                      |   |  |   |  |                                 |
| Sectors                  | <b>Oil &amp; Gas Producers [0530]</b>   | <b>Oil Equipment, Services &amp; Distribution [0570]</b>  | <b>Chemicals [1350]</b>              | <b>Forestry &amp; Paper [1730]</b>          | <b>Industrial Metals [1750]</b>                | <b>Mining [1770]</b>                              | <b>Construction &amp; Materials [2350]</b> | Aerospace & Defense [2710]      |
|                          | <b>X</b>  | <b>X</b>  | <b>X</b>                             | <b>X</b>                                    | <b>X</b>                                       | <b>X</b>  | <b>X</b>                                   |                                 |
|                          | General Industrials [2720]  | Electronic & Electrical Equipment [2730]  | Industrial Engineering [2750]        | <b>Industrial Transportation [2770]</b>     | Support Services [2790]                        | <b>Automobiles &amp; Parts [3350]</b>             | Beverages [3530]                           | Food Producers [3570]           |
|                          |   |   |                                      | <b>X</b>                                    |  | <b>X</b>  |  |                                 |
|                          | Household Goods [3720]  | Leisure Goods [3740]  | Personal Goods [3760]                | Tobacco [3780]                              | Health Care Equipment & Services [4530]        | <b>Pharmaceuticals &amp; Biotechnology [4570]</b> | Food & Drug Retailer [5330]                | General Retailers [5370]        |
|                          |   |   |                                      |   |  | <b>X</b>  |  |                                 |
|                          | Media [5550]  | <b>Travel &amp; Leisure [5750]</b>  | Fixed Line Telecommunications [6530] | Mobile Telecommunications [6570]            | <b>Electricity Utilities [7530]</b>            | <b>Gas, Water &amp; Multiutilities [7570]</b>     | Banks [8350]                               | Nonlife Insurance [8530]        |
|                          |   | <b>X</b>  |                                      |   | <b>X</b>                                       | <b>X</b>  |  |                                 |
|                          | Life Insurance [8570]   | Real Estate [8730]  | General Financial [8770]             | Equity Investment Instruments [8980]        | Nonequity Investment Instruments [8990]        | Software & Computer Services [9530]               | Technology Hardware & Equipment [9570]     |                                 |
|                          |   |   |                                      |   |  |   |  |                                 |

| ESG                       | ESG 23 Supplier Agreements and Supply Chain Partners Screened for Accordance with ESG   |  |  |  |   |   |  |                            |
|---------------------------|---|--|--|--|---|---|--|----------------------------|
| Definition and Reference  | Investing without taking human right issues such as environmental aspects or child-labour into account bear substantial reputational risks for organisations. Direct investments should reflect minimum standards of sustainability e.g. environmental compatibility. Moreover, organisations may underestimate the potential lever of their investment policies vis-a-vis third party suppliers e.g. in emerging markets or third-world countries. By ways of negotiating minimum standards of compliance with human rights standards such as minimum wages for workers, safety standards and occlusion of malpractices of an organisation's suppliers the investing party can assert human rights acknowledgement of its third party suppliers. |  |  |  |   |   |  |                            |
| KPI                       | ESG 23-1  |  |  |  |   |   |  |                            |
| Description               | Percentage of suppliers screened for accordance to ESG as of total number of suppliers Corporate  | Percentage of suppliers screened for accordance to ESG as of total number of suppliers Benchmark |  |  |   |   |  |                            |
| Shortname                 | %supplychain.ESG.screen.corp  | %supplychain.ESG.screen.bench  |  |  |   |   |  |                            |
| Unit / Calculation Format | Percentage<br>xx.xx %, numeric  | Percentage<br>xx.xx %, numeric   |  |  |   |   |  |                            |
| Sectors                   | Oil & Gas Producers [0530]  | Oil Equipment, Services & Distribution [0570]  | Chemicals [1350]   | Forestry & Paper [1730]  | Industrial Metals [1750]                                | Mining [1770]   | Construction & Materials [2350]        | Aerospace & Defense [2710] |
|                           |   |  | X  |  |   |   |  | X                          |
|                           | General Industrials [2720]  | Electronic & Electrical Equipment [2730]   | Industrial Engineering [2750]  | Industrial Transportation [2770]   | Support Services [2790]                                 | Automobiles & Parts [3350]                                    | Beverages [3530]                       | Food Producers [3570]      |
|                           |   |  | X  | X  |   | X   |  | X                          |
|                           | Household Goods [3720]  | Leisure Goods [3740]   | Personal Goods [3760]  | Tobacco [3780]   | Health Care Equipment & Services [4530]                 | Pharmaceuticals & Biotechnology [4570]                        | Food & Drug Retailer [5330]            | General Retailers [5370]   |
|                           |   |  | X  |  |   | X   | X                                      | X                          |
|                           | Media [5550]  | Travel & Leisure [5750]  | Fixed Line Telecommunications [6530]   | Mobile Telecommunications [6570]   | Electricity Utilities [7530]                            | Gas, Water & Multiutilities [7570]                            | Banks [8350]                           | Nonlife Insurance [8530]   |
|                           |   | X  |  |  |   |   |  |                            |
|                           | Life Insurance [8570]   | Real Estate [8730]   | General Financial [8770]   | Equity Investment Instruments [8980]   | Nonequity Investment Instruments [8990]                 | Software & Computer Services [9530]                           | Technology Hardware & Equipment [9570] |                            |
|                           |   |  |  |  |   |   |  |                            |
| ESG                       | ESG 24 Health & Safety Aspects of Products  |  |  |  |   |   |  |                            |
| Definition and Reference  | Health and safety of products have an influence on the reputation of the company. The lack of health and safety standards can reduce sales in the case of an accident for example. Moreover, with consumer protection on the rise and an increasing awareness of consumers about compatibility of materials used, undesired side-effects of product usage litigation risks for corporates producing in low-wage zones increase. On the other hand companies may achieve premium margins for products which cater to consumers' increased demand for products in accordance with highest safety and health standards.  |  |  |  |   |   |  |                            |
| KPI                       | ESG 24-1  |  | ESG 24-2   |  | ESG 24-3  |   |  |                            |
| Description               | Total spendings on product safety Corporate as a percentage of revenues Corporate   | Total spendings on product safety Corporate as a percentage of revenues Benchmark                | Percentage of product recalls for safety or health reason as of total products sold or shipped Corporate | Percentage of product recalls for safety or health reason as of total products sold or shipped Benchmark | Spendings on product safety per unit produced Corporate | Total spendings on product safety per unit produced Benchmark |  |                            |
| Shortname                 | %spend.prodsafety.rev.corp  | %spend.prodsafety.rev.bench  | %prod.recall.of tot.corp   | %prod.recall.of tot.bench  | \$spend.prodsafety.unit.corp                            | \$spend.prodsafety.unit.bench                                 |  |                            |
| Unit / Calculation Format | %<br>xx.xx %  | %<br>xx.xx %   | xx.xx %<br>xxx,xxx,xxx,xxx \$, €   | xx.xx %<br>xx.xx %, numeric  | \$. €, €<br>xxx,xxx,xxx,xxx \$, €                       | \$. €, €<br>xx.xx %, numeric                                  |  |                            |
| Sectors                   | Oil & Gas Producers [0530]  | Oil Equipment, Services & Distribution [0570]  | Chemicals [1350]   | Forestry & Paper [1730]  | Industrial Metals [1750]                                | Mining [1770]   | Construction & Materials [2350]        | Aerospace & Defense [2710] |
|                           | X   | X  | X  |  | X   | X   | X                                      |                            |
|                           | General Industrials [2720]  | Electronic & Electrical Equipment [2730]   | Industrial Engineering [2750]  | Industrial Transportation [2770]   | Support Services [2790]                                 | Automobiles & Parts [3350]                                    | Beverages [3530]                       | Food Producers [3570]      |
|                           | X   | X  | X  | X  |   | X   |  | X                          |
|                           | Household Goods [3720]  | Leisure Goods [3740]   | Personal Goods [3760]  | Tobacco [3780]   | Health Care Equipment & Services [4530]                 | Pharmaceuticals & Biotechnology [4570]                        | Food & Drug Retailer [5330]            | General Retailers [5370]   |
|                           | X   | X  | X  | X  | X   | X   |  |                            |
|                           | Media [5550]  | Travel & Leisure [5750]  | Fixed Line Telecommunications [6530]   | Mobile Telecommunications [6570]   | Electricity Utilities [7530]                            | Gas, Water & Multiutilities [7570]                            | Banks [8350]                           | Nonlife Insurance [8530]   |
|                           |   | X  |  |  | X   | X   |  |                            |
|                           | Life Insurance [8570]   | Real Estate [8730]   | General Financial [8770]   | Equity Investment Instruments [8980]   | Nonequity Investment Instruments [8990]                 | Software & Computer Services [9530]                           | Technology Hardware & Equipment [9570] |                            |
|                           |   |  |  |  |   |   |  |                            |

| ESG                      | ESG 25 Litigation Payments   |   |   |  |   |  |  |                                 |
|--------------------------|--|---|---|--|---|--|--|---------------------------------|
| Definition and Reference | From an economic perspective, compliance reduces either directly in terms of fines or indirectly through impacts on reputation incurred financial risks. Additionally an organization's compliance record may have an influence on its ability to expand operations or gain permits. |   |   |  |   |  |  |                                 |
| KPI                      | ESG25-1  | ESG 25-2  | ESG 25-3  |  |   |  |  |                                 |
| Description              | Total litigation payments in \$, € past period Corporate   | Total litigation payments or litigation reserve in \$, € forecast Corporate                     | Total litigation payments as percentage from total revenue Corporate                            | Total litigation payments as percentage from total revenue Benchmark |   |  |  |                                 |
| Shortname                | litigation.payments.tot.\$ corp  | litigation.payments.fcast.\$ corp   | litigation.%rev.corp  | litigation.%rev.bench  |   |  |  |                                 |
| Unit / Calculation       | US \$, €   | US \$, €  | Percentage  | Percentage   |   |  |  |                                 |
| Format                   | xxx,xxx,xxx,xxx.--   | xxx,xxx,xxx,xxx.--  | xx.xx %, numeric  | xx.xx %, numeric   |   |  |  |                                 |
| Sectors                  | Oil & Gas Producers [0530]   | Oil Equipment, Services & Distribution [0570]   | Chemicals [1350]  | Forestry & Paper [1730]  | Industrial Metals [1750]                | Mining [1770]                          | Construction & Materials [2350]        | Aerospace & Defense [2710]      |
|                          |  |   |   |  |   |  |  |                                 |
|                          | General Industrials [2720]   | Electronic & Electrical Equipment [2730]  | Industrial Engineering [2750]   | <b>Industrial Transportation [2770]</b>                              | Support Services [2790]                 | <b>Automobiles &amp; Parts [3350]</b>  | Beverages [3530]                       | Food Producers [3570]           |
|                          |  |   |   | <b>X</b>   |   | <b>X</b>                               |  |                                 |
|                          | Household Goods [3720]   | Leisure Goods [3740]  | Personal Goods [3760]   | Tobacco [3780]   | Health Care Equipment & Services [4530] | Pharmaceuticals & Biotechnology [4570] | Food & Drug Retailer [5330]            | General Retailers [5370]        |
|                          |  |   |   |  |   |  |  |                                 |
|                          | Media [5550]   | <b>Travel &amp; Leisure [5750]</b>  | Fixed Line Telecommunications [6530]  | Mobile Telecommunications [6570]                                     | <b>Electricity Utilities [7530]</b>     | Gas, Water & Multiutilities [7570]     | Banks [8350]                           | <b>Nonlife Insurance [8530]</b> |
|                          |  | <b>X</b>  |   |  | <b>X</b>                                |  |  | <b>X</b>                        |
|                          | Life Insurance [8570]  | Real Estate [8730]  | General Financial [8770]  | Equity Investment Instruments [8980]                                 | Nonequity Investment Instruments [8990] | Software & Computer Services [9530]    | Technology Hardware & Equipment [9570] |                                 |
|                          |  |   |   |  |   |  |  |                                 |
| ESG                      | ESG 26 Dimension of Pending Legal Proceedings  |   |   |  |   |  |  |                                 |
| Definition and Reference | The dimension of pending legal proceedings is a first-level risk indicator and as such important for investors and financial analysts. However, rather than quoting the number of proceedings corporates should quote the amount in dispute or controversy.                          |   |   |  |   |  |  |                                 |
| KPI                      | ESG 26-1   | ESG 26-2  |   |  |   |  |  |                                 |
| Description              | Amount in dispute/controversy from legal proceedings Corporate.  | Amount in dispute/controversy from legal proceedings as percentage from total revenue Corporate | Amount in dispute/controversy from legal proceedings as percentage from total revenue Benchmark |  |   |  |  |                                 |
| Shortname                | controversy.legalproc.\$ corp  | controversy.legalproc.%rev.corp   | controversy.legalproc.%rev.bench  |  |   |  |  |                                 |
| Unit / Calculation       | US \$, €   | Percentage  | Percentage  |  |   |  |  |                                 |
| Format                   | xxx,xxx,xxx,xxx.--   | xx.xx %, numeric  | xx.xx %, numeric  |  |   |  |  |                                 |
| Sectors                  | Oil & Gas Producers [0530]   | Oil Equipment, Services & Distribution [0570]   | Chemicals [1350]  | Forestry & Paper [1730]  | Industrial Metals [1750]                | Mining [1770]                          | Construction & Materials [2350]        | Aerospace & Defense [2710]      |
|                          |  |   |   |  |   |  |  |                                 |
|                          | General Industrials [2720]   | Electronic & Electrical Equipment [2730]  | Industrial Engineering [2750]   | Industrial Transportation [2770]                                     | Support Services [2790]                 | Automobiles & Parts [3350]             | Beverages [3530]                       | Food Producers [3570]           |
|                          |  |   |   |  |   |  |  |                                 |
|                          | Household Goods [3720]   | Leisure Goods [3740]  | Personal Goods [3760]   | Tobacco [3780]   | Health Care Equipment & Services [4530] | Pharmaceuticals & Biotechnology [4570] | Food & Drug Retailer [5330]            | General Retailers [5370]        |
|                          |  |   |   |  |   |  |  |                                 |
|                          | Media [5550]   | Travel & Leisure [5750]   | Fixed Line Telecommunications [6530]  | Mobile Telecommunications [6570]                                     | Electricity Utilities [7530]            | Gas, Water & Multiutilities [7570]     | Banks [8350]                           | <b>Nonlife Insurance [8530]</b> |
|                          |  |   |   |  |   |  |  | <b>X</b>                        |
|                          | Life Insurance [8570]  | Real Estate [8730]  | General Financial [8770]  | Equity Investment Instruments [8980]                                 | Nonequity Investment Instruments [8990] | Software & Computer Services [9530]    | Technology Hardware & Equipment [9570] |                                 |
|                          |  |   |   |  |   |  |  |                                 |



| ESG                      | ESG 27 R&D Expenses   |   |   |                                      |   |  |  |                            |
|--------------------------|---|---|---|--------------------------------------|---|--|--|----------------------------|
| Definition and Reference | The amount of resources an organisation is prepared to spent on products which will be marketable in a distant future is one of the most important indicators for future profit growth potentials. Any meaningful KPI in this area will also serve to investors for understanding how current cashflows can be continued when products and services mature. Depending on the industry it may be necessary that KPIs for e.g. products, patents, R&D encompass activities with external agencies such as technological suppliers or academic forms of cooperation. |   |   |                                      |   |  |  |                            |
| KPI                      | ESG 27-1  | ESG 27-2  |   |                                      |   |  |  |                            |
| Description              | Total R&D Expenses in US \$ or € Corporate  | Total R&D Expenses in US \$ or € as % of revenue Corporate  | Total R&D Expenses in US \$ or € as % of revenue Bench  |                                      |   |  |  |                            |
| Shortname                | \$r&d.expenses.corp   | R&D.expenses.%rev.corp  | R&D.expenses.%rev.bench   |                                      |   |  |  |                            |
| Unit / Calculation       | US \$, €  | Percentage  | Percentage  |                                      |   |  |  |                            |
| Format                   | xxx,xxx,xxx,xxx.--  | xx.xx %, numeric  | xx.xx %, numeric  |                                      |   |  |  |                            |
| Sectors                  | Oil & Gas Producers [0530]  | Oil Equipment, Services & Distribution [0570]   | Chemicals [1350]  | Forestry & Paper [1730]              | Industrial Metals [1750]                | Mining [1770]                          | Construction & Materials [2350]        | Aerospace & Defense [2710] |
|                          |   |   | X   |                                      |   |  |  | X                          |
|                          | General Industrials [2720]  | Electronic & Electrical Equipment [2730]  | Industrial Engineering [2750]   | Industrial Transportation [2770]     | Support Services [2790]                 | Automobiles & Parts [3350]             | Beverages [3530]                       | Food Producers [3570]      |
|                          |   | X   | X   | X                                    |   | X                                      |  |                            |
|                          | Household Goods [3720]  | Leisure Goods [3740]  | Personal Goods [3760]   | Tobacco [3780]                       | Health Care Equipment & Services [4530] | Pharmaceuticals & Biotechnology [4570] | Food & Drug Retailer [5330]            | General Retailers [5370]   |
|                          |   |   |   |                                      | X                                       | X                                      |  |                            |
|                          | Media [5550]  | Travel & Leisure [5750]   | Fixed Line Telecommunications [6530]  | Mobile Telecommunications [6570]     | Electricity Utilities [7530]            | Gas, Water & Multiutilities [7570]     | Banks [8350]                           | Nonlife Insurance [8530]   |
|                          |   | X   |   |                                      |   |  |  |                            |
|                          | Life Insurance [8570]   | Real Estate [8730]  | General Financial [8770]  | Equity Investment Instruments [8980] | Nonequity Investment Instruments [8990] | Software & Computer Services [9530]    | Technology Hardware & Equipment [9570] |                            |
|                          |   |   |   |                                      |   | X                                      | X                                      |                            |
| KPI                      | ESG 27-3  | ESG 27-4  |   |                                      |   |  |  |                            |
| Description              | Total R&D Expenses or funding of research on ESG to external agents, suppliers or academic research in US \$ or € Corporate   | Total R&D Expenses or funding of research on ESG to external agents, suppliers or academic research as % of revenue Corporate | Total R&D Expenses or funding of research on ESG to external agents, suppliers or academic research as % of revenue Benchmark |                                      |   |  |  |                            |
| Shortname                | \$r&d.extagents.corp  | R&D.extagents.%rev.corp   | R&D.extagents.%rev.bench  |                                      |   |  |  |                            |
| Unit / Calculation       | US \$, €  | Percentage  | Percentage  |                                      |   |  |  |                            |
| Format                   | xxx,xxx,xxx,xxx.--  | xx.xx %, numeric  | xx.xx %, numeric  |                                      |   |  |  |                            |
| Sectors                  | Oil & Gas Producers [0530]  | Oil Equipment, Services & Distribution [0570]   | Chemicals [1350]  | Forestry & Paper [1730]              | Industrial Metals [1750]                | Mining [1770]                          | Construction & Materials [2350]        | Aerospace & Defense [2710] |
|                          |   |   |   |                                      |   |  |  |                            |
|                          | General Industrials [2720]  | Electronic & Electrical Equipment [2730]  | Industrial Engineering [2750]   | Industrial Transportation [2770]     | Support Services [2790]                 | Automobiles & Parts [3350]             | Beverages [3530]                       | Food Producers [3570]      |
|                          |   |   |   | X                                    |   |  |  |                            |
|                          | Household Goods [3720]  | Leisure Goods [3740]  | Personal Goods [3760]   | Tobacco [3780]                       | Health Care Equipment & Services [4530] | Pharmaceuticals & Biotechnology [4570] | Food & Drug Retailer [5330]            | General Retailers [5370]   |
|                          |   |   |   |                                      |   |  |  |                            |
|                          | Media [5550]  | Travel & Leisure [5750]   | Fixed Line Telecommunications [6530]  | Mobile Telecommunications [6570]     | Electricity Utilities [7530]            | Gas, Water & Multiutilities [7570]     | Banks [8350]                           | Nonlife Insurance [8530]   |
|                          |   | X   |   |                                      | X                                       | X                                      |  |                            |
|                          | Life Insurance [8570]   | Real Estate [8730]  | General Financial [8770]  | Equity Investment Instruments [8980] | Nonequity Investment Instruments [8990] | Software & Computer Services [9530]    | Technology Hardware & Equipment [9570] |                            |
|                          |   |   |   |                                      |   |  |  |                            |

| ESG                      | ESG 28 Patents  |  |  |   |   |   |   |                                       |
|--------------------------|---|--|--|---|---|---|---|---------------------------------------|
| Definition and Reference | The amount of resources an organisation is prepared to spent on products which will be marketable in a distant future is one of the most important indicators for future profit growth potentials. Any meaningful KPI in this area will also serve to investors for understanding how current cashflows can be continued when products and services mature. Depending on the industry it may be necessary that KPIs for e.g. products, patents, R&D encompass activities with external agencies such as technological suppliers or academic forms of cooperation. |  |  |   |   |   |   |                                       |
| KPI                      | ESG 28-1  | ESG 28-2   |  | ESG 28-3  | ESG 28-4  |   |   |                                       |
| Description              | Number of patents registered within last 12 months Corporate  | Percentage of patents registered within last 12 months as of total number of patents Corporate | Percentage of patents registered within last 12 months as of total number of patents Benchmark | Number of patents due to expire within next 12 months Corporate   | Percentage of patents due to expire within next 12 months as of total number of patents Corporate | Percentage of patents due to expire within next 12 months as of total number of patents Benchmark |   |                                       |
| Shortname                | patents.reg.12mths.corp   | % patents.reg.12mths.tot.corp  | % patents.reg.12mths.tot.bench   | patents.expire.12mths.corp  | % patents.expire.12mths.tot.corp  | % patents.expire.12mths.tot.bench   |   |                                       |
| Unit / Calculation       | numerical   | Percentage   | Percentage   | numerical   | Percentage  | Percentage  |   |                                       |
| Format                   | xx,xxx  | xx.xx %, numeric   | xx.xx %, numeric   | xx,xxx  | xx.xx %, numeric  | xx.xx %, numeric  |   |                                       |
| Sectors                  | Oil & Gas Producers [0530]  | Oil Equipment, Services & Distribution [0570]  | Chemicals [1350]   | Forestry & Paper [1730]   | Industrial Metals [1750]  | Mining [1770]   | Construction & Materials [2350]                   | <b>Aerospace &amp; Defense [2710]</b> |
|                          |   |  |  |   |   |   |   | <b>X</b>                              |
|                          | General Industrials [2720]  | <b>Electronic &amp; Electrical Equipment [2730]</b>  | <b>Industrial Engineering [2750]</b>   | Industrial Transportation [2770]                                  | Support Services [2790]   | <b>Automobiles &amp; Parts [3350]</b>   | Beverages [3530]                                  | Food Producers [3570]                 |
|                          |   | <b>X</b>   | <b>X</b>   |   |   | <b>X</b>  |   |                                       |
|                          | <b>Household Goods [3720]</b>   | Leisure Goods [3740]   | Personal Goods [3760]  | Tobacco [3780]  | Health Care Equipment & Services [4530]   | <b>Pharmaceuticals &amp; Biotechnology [4570]</b>   | Food & Drug Retailer [5330]                       | General Retailers [5370]              |
|                          | <b>X</b>  |  |  |   |   | <b>X</b>  |   |                                       |
|                          | Media [5550]  | Travel & Leisure [5750]  | Fixed Line Telecommunications [6530]   | Mobile Telecommunications [6570]                                  | Electricity Utilities [7530]  | Gas, Water & Multiutilities [7570]  | Banks [8350]                                      | Nonlife Insurance [8530]              |
|                          |   |  |  |   |   |   |   |                                       |
|                          | Life Insurance [8570]   | Real Estate [8730]   | General Financial [8770]   | Equity Investment Instruments [8980]                              | Nonequity Investment Instruments [8990]   | <b>Software &amp; Computer Services [9530]</b>  | <b>Technology Hardware &amp; Equipment [9570]</b> |                                       |
|                          |   |  |  |   |   | <b>X</b>  | <b>X</b>  |                                       |
| ESG                      | ESG 29 Investments in Research on New Risk  |  |  |   |   |   |   |                                       |
| Definition and Reference | Understanding risk, especially analysing causal chains which lead to the emergence of new risk is a key activity of any re-insurance and insurance business. Through identifying early warning indicators and also linking seemingly unrelated phenomenon in environment and societies insurance industries seek to arrive at resilient and workable occurrence probabilities to be priced. Hence, any resource spent in the area of understanding new risk may be seen as a genuine investment in the longterm viability of re-insurance companies.              |  |  |   |   |   |   |                                       |
| KPI                      | ESG 29-1  | ESG 29-2   | ESG 29-3   |   |   |   |   |                                       |
| Description              | Total investments in US \$ or € on new risk Corporate   | Total investments in mandays on new risk Corporate   | Total investments in US \$ or € on new risk as % of revenue Corporate                          | Total investments in US \$ or € on new risk as % of revenue Bench |   |   |   |                                       |
| Shortname                | invest.newrisk.\$.corp  | invest.new.risk.mandays.corp   | invest.newrisk.%rev.corp   | invest.newrisk.%rev.bench   |   |   |   |                                       |
| Unit / Calculation       | US \$, €  | Mandays  | Percentage   | Percentage  |   |   |   |                                       |
| Format                   | xxx,xxx,xxx,xxx.--  | xxx,xxx.--   | xx.xx %, numeric   | xx.xx %, numeric  |   |   |   |                                       |
| Sectors                  | Oil & Gas Producers [0530]  | Oil Equipment, Services & Distribution [0570]  | Chemicals [1350]   | Forestry & Paper [1730]   | Industrial Metals [1750]  | Mining [1770]   | Construction & Materials [2350]                   | Aerospace & Defense [2710]            |
|                          |   |  |  |   |   |   |   |                                       |
|                          | General Industrials [2720]  | Electronic & Electrical Equipment [2730]   | Industrial Engineering [2750]  | Industrial Transportation [2770]                                  | Support Services [2790]   | Automobiles & Parts [3350]  | Beverages [3530]                                  | Food Producers [3570]                 |
|                          |   |  |  |   |   |   |   |                                       |
|                          | Household Goods [3720]  | Leisure Goods [3740]   | Personal Goods [3760]  | Tobacco [3780]  | Health Care Equipment & Services [4530]   | Pharmaceuticals & Biotechnology [4570]  | Food & Drug Retailer [5330]                       | General Retailers [5370]              |
|                          |   |  |  |   |   |   |   |                                       |
|                          | Media [5550]  | Travel & Leisure [5750]  | Fixed Line Telecommunications [6530]   | Mobile Telecommunications [6570]                                  | Electricity Utilities [7530]  | Gas, Water & Multiutilities [7570]  | Banks [8350]                                      | <b>Nonlife Insurance [8530]</b>       |
|                          |   |  |  |   |   |   |   | <b>X</b>                              |
|                          | Life Insurance [8570]   | Real Estate [8730]   | General Financial [8770]   | Equity Investment Instruments [8980]                              | Nonequity Investment Instruments [8990]   | Software & Computer Services [9530]   | Technology Hardware & Equipment [9570]            |                                       |
|                          |   |  |  |   |   |   |   |                                       |

| ESG                      | ESG 30 Customer Retention  |   |  |  |   |  |  |                            |
|--------------------------|--|---|--|--|---|--|--|----------------------------|
| Definition and Reference | Monitoring the intake of new customers whilst seeking to retain as many customers as possible is generally seen as the formula for customer-oriented companies. Whilst it seems contradictory in terms to target new customers whilst striving for repeat business through maintaining good business relations with an existing clientele experience shows that successful companies typically have a "natural" turnover of customers with the aim to identify those customers which offer the biggest potential sales and/or profitability. Measuring customer retention and share-of-market is key to maintaining a long-term perspective. |   |  |  |   |  |  |                            |
| KPI                      | ESG 30-1   |   | ESG 30-2   |  | ESG 30-3  |  |  |                            |
| Description              | % of new customers as of existing customers Corporate  | % of new customers as of existing customers Corporate | Average length of time of customer relationship in years Corporate | Average length of time of customer relationship in years Benchmark | Share-of-market by product, segment, productline or total |  |  |                            |
| Shortname                | newcust.existcust.%.corp   | newcust.existcust.%.bench                             | av.custrel.years.corp  | av.custrel.years.bench   | som.[prodline].%.corp                                     |  |  |                            |
| Unit / Calculation       | Percentage   | Percentage  | Years  | Years  | Percentage  |  |  |                            |
| Format                   | xx.x %   | xx.x %  | xx,x   | xx,x   | xx.x %  |  |  |                            |
| Sectors                  | Oil & Gas Producers [0530]   | Oil Equipment, Services & Distribution [0570]         | Chemicals [1350]   | Forestry & Paper [1730]  | Industrial Metals [1750]                                  | Mining [1770]                          | Construction & Materials [2350]        | Aerospace & Defense [2710] |
|                          |  |   |  |  |   |  |  | X                          |
|                          | General Industrials [2720]   | Electronic & Electrical Equipment [2730]              | Industrial Engineering [2750]                                      | Industrial Transportation [2770]                                   | Support Services [2790]                                   | Automobiles & Parts [3350]             | Beverages [3530]                       | Food Producers [3570]      |
|                          | X  | X   |  | X  |   | X                                      | X                                      | X                          |
|                          | Household Goods [3720]   | Leisure Goods [3740]                                  | Personal Goods [3760]  | Tobacco [3780]   | Health Care Equipment & Services [4530]                   | Pharmaceuticals & Biotechnology [4570] | Food & Drug Retailer [5330]            | General Retailers [5370]   |
|                          | X  | X   | X  |  |   | X                                      | X                                      | X                          |
|                          | Media [5550]   | Travel & Leisure [5750]                               | Fixed Line Telecommunications [6530]                               | Mobile Telecommunications [6570]                                   | Electricity Utilities [7530]                              | Gas, Water & Multiutilities [7570]     | Banks [8350]                           | Nonlife Insurance [8530]   |
|                          |  | X   |  |  | X   |  | X                                      | X                          |
|                          | Life Insurance [8570]  | Real Estate [8730]                                    | General Financial [8770]   | Equity Investment Instruments [8980]                               | Nonequity Investment Instruments [8990]                   | Software & Computer Services [9530]    | Technology Hardware & Equipment [9570] |                            |
|                          |  |   |  |  |   |  |  |                            |

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