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# EUROPEAN COMMISSION

# NEW REGULATIONS CONCERNING ENVIRONMENTAL AND SOCIAL IMPACT REPORTING

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***Abstract**: The European Commission has released a new directive concerning sustainability reporting that must be implemented in thousands of companies by 2017. Many companies already report on sustainability. Thus, the question emerges whether companies already fulfil the requirements for reasons of legitimacy, signalling and authenticity, regardless of the new directive. A multiple comparative case study of exemplary companies with triangulation through qualitative expert interviews has been conducted. Business reports, newspapers and interviews have been coded deductively and inductively. The exemplary companies already fulfil the majority of the new requirements. The result of the coding is a framework of five categories, namely, motives, legitimacy, integration, signalling and authenticity. It has been identified that motives have changed and sustainability reporting has developed into an instrument for legitimacy. The implementation has become more standardised and distinct signals have gained in significance to attain authenticity.*

***Keywords**:*

## Introduction

Companies are confronted with an increasing demand to take more responsibility for their actions because of their influence on the society (Bénabou & Tirole, 2010, pp. 1-2). Stakeholders, such as employees and communities, expect that their interests are included in the decisions and actions of companies (Maas, 2016, p. 1). Therefore, environmental, social and governance (ESG) issues have gained in importance. ESG issues comprise several risks and opportunities, especially in the long run (Fernandez & Elfner, 2015, pp. 64-65; Jackson & Apostolakou, 2009, p. 373). Hence, a growing number of investors screen their possible investments aiming to avoid corporations with potential sustainability risks (Buhmann, 2006, p. 190) and require transparent as well as comprehensible information (Young & Marais, 2012, p. 432). Martin and Moser (2016, p. 252) explain that investors, in particular, prefer companies that report non-financial information to receive a comprehensive picture. Consequently, over 90 percent of the 250 largest companies worldwide report non-financial information (Hahn & Lülfs, 2014, p. 402; KPMG, 2015) with the objective to demonstrate responsible handling of ESG issues (Sethi, Martell, & Demir, 2015, p. 1). Early reports used to be limited to environmental and social topics but the common reports have developed into comprehensive sustainability statements (Qiu, Shaukat, & Tharyan, 2016, p. 102).

Young and Marais (2012, p. 446) show that sustainability reporting is more prevalent in high impact industries like the oil industry, as those companies are under pressure to demonstrate proactive handling of their sustainability policies (Jackson & Apostolakou, 2009, p. 374; Qiu et al., 2016, pp. 102-103). However, other industry sectors are catching up (KPMG, 2015). In 2016, even the discounter Aldi, known for its reticence, has announced the publishing of a sustainability report for better transparency and to fulfil societal expectations (Koch, 2016).

Although corporate sustainability reporting has increased significantly, the gap between intention and practice is often immense (Cho, Laine, Roberts, & Rodrigue, 2015, p. 79). Sethi et al. (2015, p. 16) illustrate that many sustainability reports have a bias towards the demonstration of predominantly positive developments but minimise or omit negative information. In addition, incidents like the recent Volkswagen emission scandal increase scepticism, especially because the company had regularly presented comprehensive sustainability reports. (Mazutis & Slawinski, 2015, pp. 137-138; Menzel, 2016). Thus, increasing scepticism towards companies and their sustainable intention weakens the positive effect of sustainability reports because they are often seen as an instrument for greenwashing (Mazutis & Slawinski, 2015, pp. 137-138; Pérez, 2015, p. 16). However, reliability is an important issue for a company’s reputation, attracting qualified human capital, customer loyalty, supplier relationships and sales (Qiu et al., 2016, pp. 102-103). All these factors have an influence on the competitive capability and, consequently, on the economic success of companies (Weber, 2008, p. 250). Profound violations against environmental principles or human and labour rights can influence buying decisions (Buhmann, 2006, p. 190). The financial burden and legal costs of the Volkswagen emission scandal even threaten the existence of the company (Menzel, 2016).

In addition, sustainability is an important issue for national governments. Socially responsible companies support governmental efforts in addressing goals like social and environmental development. Furthermore, such companies may assist in improving human rights and fighting corruption. As such, several countries, like France and Denmark, have started to introduce legal requirements for companies to publish non-financial issues (Buhmann, 2006, pp. 189-195). However, differing regulations among European countries have made it difficult to compare sustainability reports cross-nationally (European Commission, 2014b; Williamson, Stampe-Knippel, & Weber, 2014). In addition, making comparability more difficult, the quality of sustainability varies within the European Union (EU). Based on a comparison of the top half of Fortune 500 companies, Italian companies produce the qualitatively best sustainability reports in Europe (KPMG, 2013).

The situation explained above has attracted the attention of the European Commission. A debate has started about the role of the EU and how it can improve transparency, reliability and validation (European Commission, 2001). The 2011 strategy has been prepared with the objective of requesting enterprises to take responsibility for their impact on society (European Commission, 2015a). One major point on the agenda is the implementation of mandatory disclosure (European Commission, 2011). In fact, the current EU legislation already prescribes the disclosure of non-financial information for certain companies, but it has been implemented differently throughout the member states of the EU. Moreover, the specifications of the EU legislation are unclear and ineffective. Presently, fewer than 10 percent of the largest EU companies disclose non-financial information on a regular basis (European Commission, 2014b).

For this reason, the European Commission has introduced the directive 2014/95/EU on non-financial reporting with the aim to increase transparency on social and environmental issues (European Commission, 2014c). Furthermore, consistency, comparability and relevance of non-financial information are also important reasons for the new directive (European Commission, 2014a). Public trust is an important factor for the success of economic activities and transparent handling should reduce the loss of confidence in sustainability commitments due to misleading information (European Commission, 2013).

Thus, the aim of this article is to increase the understanding of the future challenges of sustainability reporting. The first step is to determine the theoretical background. As such, in the beginning of the research, the current situation of sustainability reporting is brought into sharp focus.

Neo-institutional theories have been emphasised because they explain the behaviour of organisations and the relationship with their environment (Kraatz & Zajac, 1996). Therefore, in order to shed light on the complexity of sustainability reporting, this article focuses on three theories: legitimacy theory (Milne & Patten, 2002; Suchman, 1995), signalling theory (Connelly, Certo, Ireland, & Reutzel, 2011) and authenticity theory (Mazutis & Slawinski, 2015). In addition, the requirements of the directive are described in this article. An analysis of several representative companies demonstrates the current situation and the required adaptions given to the directive. The practical implementation is another aspect of interest to understand requirements for authenticity.

Two research questions lead this study. The first question scrutinises the consequences for companies due to the implementation of the directive and the second question uses the neo-institutional theories to examine sustainability reporting:

> Q1: Looking at several representative companies, what additional aspects need to be included in future sustainability reporting in response to the European Directive 2014/95/EU?
>
> Q2: How can the neo-institutional concepts of legitimacy, signalling and authenticity help us understand the quality of content and processes in sustainability reporting?

## Theoretical Considerations

As mentioned above, a theoretical investigation is the first step towards understanding the current situation. Three relevant theories have been recognized and included in future considerations. The neo-institutional theories explain the behaviour of organisations and their relationship with their environment (Kraatz & Zajac, 1996). Examining organisational legitimacy is a useful approach in order to understand the development of sustainability reporting (Milne & Patten, 2002; Suchman, 1995). Further, the signalling theory describes the situation of two parties with different access to information that can be improved with reporting (Connelly et al., 2011). However, perception is important to the credibility of sustainability reports and authenticity of reports is increasingly important (Mazutis & Slawinski, 2015). Theories of legitimacy, signalling and authenticity are described in the following sections, followed by a description of the requirements of the directive.

### *Legitimacy Theory*

Legitimacy theory is often mentioned in connection with sustainability reporting (Cho & Patten, 2007, p. 641; Perks, Farache, Shukla, & Berry, 2013, p. 1882). Legitimacy is a general perception that companies' actions comply with society's value system (Cho, Guidry, Hageman, & Patten, 2012, p. 15). Thus, companies and the notion of legitimate behaviour are endogenous to the world-view of the society in which they operate. A company that is acting contradictory to society's expectations has no legitimacy to exist within the social system. As such, they use the disclosure of information as an instrument to demonstrate that they are acting in accordance to society's expectations (Deegan, 2002, p. 292; Zheng, Luo, & Maksimov, 2015, p. 389).

In particular, large companies with above average environmental or social impact and organisations with direct customer contact have higher attentiveness to stakeholders. They are under greater pressure to legitimate their actions and disclose information than their average counterparts (Perks et al., 2013, pp. 1882-1883; Young & Marais, 2012, p. 432). Companies use a variety of legitimation strategies. One is to show a plan for improvement of situations where the company's economic activities have negative effects on society or environment. They seek to demonstrate a willingness to change this situation. Another strategy, instead of changing behaviour, is to try to alter the view of stakeholders about the event or expectations. A third course of action is distraction. Companies focus on positive issues and divert attention from problematic topics (Perks et al., 2013, p. 1883). Transparent reports can increase the trust of stakeholders. Yet, unfortunately, reports that merely mention the positive and omit negative developments are widely spread. Such one-sided sustainability reports aim to improve legitimacy but rarely reduce information asymmetries (Hahn & Lülfs, 2014, p. 402; Reimsbach & Hahn, 2015, p. 218).

According to Luft Mobus (2005, p. 510), mandatory reporting influences legitimacy because companies have limited options to disguise information and present positive descriptions that are only loosely connected with their actual behaviour. Therefore, mandatory reporting presents a possibility for governments to increase reliability of reports (Luft Mobus, 2005, pp. 510-511). Reporting is also a relevant topic for restoring legitimacy, for example, integrated reporting is an important tool for demonstrating a consistent and overall commitment. In addition, external guidelines and inclusion in sustainability indices like the Dow Jones Sustainability Index can help frame the reports and strengthen the legitimacy process (Beck, Dumay, & Frost, 2015).

*Agency and Signalling Theory*

An increasing number of stakeholders are interested in the sustainability activities and performance of companies. In particular, external stakeholders expect transparent communication about companies' behaviour to reduce the discrepancy of asymmetric information. Therefore, reporting of non-financial information has become an important issue for many managers and a standard for many companies (Hahn & Lülfs, 2014, pp. 401-402).

However, it is difficult for stakeholders to verify the declarations and actions of companies. The agency theory describes a situation of asymmetric information in a principal-agent framework. There are different types of problems when a principal delegates work to an agent. The first is the different perception and goals of the two parties. Second, the principal has limited options to oversee the actions of the agent (Pérez, 2015, pp. 16-18). The traditional agency theory presents a picture of agents who are only interested in maximising economic wealth. However, their behaviour depends on several aspects, such as the personnel involved and the cultural background. The theory also offers different possibilities to overcome the information gap between agents and principals. For example, a transparent and monitored system makes it more difficult to act opportunistically. Political interventions such as the commitment of external monitors can also improve the situation (Wiseman, Cuevas-Rodríguez, & Gomez-Mejia, 2012, pp. 203-215).

The signalling theory is related to the agency theory and outlines different levels of information between managers and other stakeholders. It describes the effect of signals from companies that influence the reaction of the market. According to the theory, reporting of information can be recognised as a signal to the market promising the decline of asymmetric information (Pérez, 2015, pp. 18-19). The signal of sustainability activities can also impact reputation and performance of a company and create a competitive advantage (Zerbini, 2015, p. 3). Additionally, the reporting of negative aspects can be a significant signal that strengthens confidence in an environment of proactive and sincere information publicising. If a company does not show negative issues, it can be a trigger for speculation (Hahn & Lülfs, 2014, p. 403; Morsing & Schultz, 2006, p. 323). Most corporations have to handle certain unfavourable economic, ecological or social issues and failure to report such problems can cause distrust (Reimsbach & Hahn, 2015, p. 219). Research results show that stakeholders have a strong tendency to avoid organisations with unethical behaviour. They are more likely to boycott negative examples than reward positive actions (Perks et al., 2013, p. 1882).

*Authenticity Theory*

Many purchasing decisions of consumers are influenced by the behaviour of companies. As such, sustainability performance plays a crucial role in affecting revenue and economic success. While sustainability has a clear positive effect on revenue, it is no guarantee, as customers do not necessarily decide to buy a product from the most sustainable company (Castaldo, Perrini, Misani, & Tencati, 2008, p. 1). Nonetheless, it can help companies to gain different benefits like a better corporate image, customer loyalty or increased sales. However, some organisations try to exploit these benefits and demonstrate irrelevant, meaningless activities, while at the same time, hiding their controversial practices (Perks et al., 2013, p. 1882). Therefore, sustainability reports often do not give a true and fair view of the non-financial situation. Naturally, on one hand negative reporting can compromise the reactions of the market, yet, on the other hand, there is increasing scepticism about the reliability of sustainability reporting. (Hahn & Lülfs, 2014, p. 402).

Sustainability authenticity is becoming more important but is difficult to achieve. Companies need to demonstrate a clear picture of their purpose and values. Two core dimensions are necessary to gain stakeholder confidence – distinctiveness and social connectedness. The following Figure 1 shows the relationship of the two dimensions (Mazutis & Slawinski, 2015, pp. 138-144).

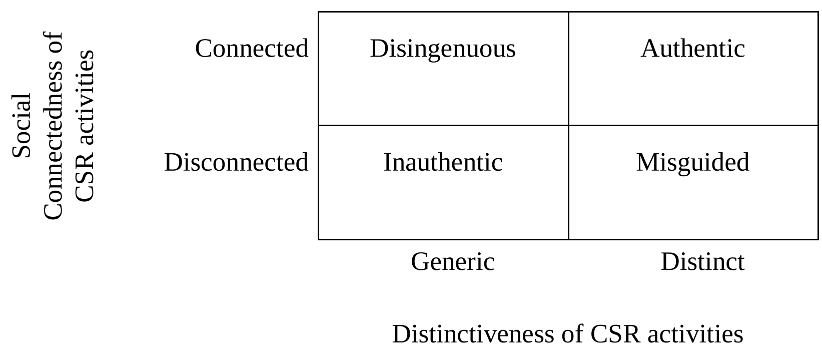


Figure 1. Sustainability authenticity (Mazutis & Slawinski, 2015, p. 144)

Companies can be seen as being authentic to stakeholders when they communicate a believable commitment and capability. If organisations treat non-financial topics as a minor matter, it can imply that they have no strong social or environmental values and that they are disingenuous. Companies that imply sustainability as a central topic but do not convey the information to the stakeholders transparently are misguided. Generally inauthentic organisations are companies that are neither connected nor have a distinct sustainability strategy (Mazutis & Slawinski, 2015, pp. 144-146). However, in the end, authenticity does not represent a tangible fact but rather a subjective opinion (Liedtka, 2007, p. 240).

*Directive 2014/95/EU*

The directive of the European Commission requires a commitment to show a short description of the business model in connection with the overall picture of concepts, outcomes and risks with regard to environmental, social, employee, human rights as well as anti-corruption and bribery matters. In addition, companies should publish data about the due diligence processes. If relevant and applicable, reports should outline information of the supply chain as well (European Commission, 2014a). The obligation to provide information about the diversity of their board of directors, such as gender or age, is compulsory only for listed companies (European Commission, 2014c). If a company does not fulfil one or more of the criteria, a reasoned and clear explanation is necessary. In general, companies are affected by the directive if they are public interest entities with an average number of employees that exceeds 500 (European Commission, 2014a). That includes mainly listed companies but can also concern unlisted financial institutions. EU member states can designate companies because of characteristics like their size or activities (European Commission, 2014b). Subsidiaries do not have to publish a report if they are included in a consolidated or separate report of an undertaking (European Commission, 2014a) and smaller companies are not included to keep the administrative expenditure low. In all, the regulation incorporates approximately 6,000 companies across the EU (European Commission, 2014b).

The financial year 2017 will be the first period when the affected companies will have to report according to the new requirements (European Commission, 2014c). The implementation specification is flexible. Companies can publish the information with an integrated or separated report (European Commission, 2015b). Auditors must check if the companies provide a non-financial statement. An independent assurance of the prepared information is only compulsory if prescribed by the particular member state. Elements can vary between countries because the European Commission gives some leeway to its members with regard to the implementation of the regulation (European Commission, 2014a). While the legislation is not yet in force, several countries have published drafts already. For example, Germany restricts the obligation to capital market-oriented companies with more than 500 employees (Bundesministerium der Justiz und für Verbraucherschutz, 2016). Swedish companies have to report if two of three conditions are fulfilled. These are total assets of SEK 175 million, net sales of SEK 350 million and an average number of 250 employees during the financial year (Justitiedepartementet, 2014). A clear comparison with national legitimation is not currently possible because the implementation process is not yet completed. The EU member states have time until December 2016 to transfer the directive into national law (European Commission, 2015b). In addition, non-binding guidelines that include general and specific indicators will be available by December 2016. Therefore, this article concentrates on the content of the directive across the EU and not on national differences. Although, the directive does not obligate specific indicators, if appropriate, specific aspects should be covered in a report (European Commission, 2014a). An overview of the aspects is provided at Table 12 in the chapter on findings concerning the reports and the directive.

Furthermore, the directive has put forward several proposals for frameworks (European Commission, 2014a). Companies can choose between international, European or national frameworks (European Commission, 2014a). However, some of the suggestions cover only parts of the required aspects (Bundesministerium der Justiz und für Verbraucherschutz, 2016). Therefore, the following section gives a short overview of the frameworks.

The Eco-Management and Audit Scheme (EMAS), developed by the European Commission, is a management instrument for evaluating, reporting and improving of environmental achievements. In addition, an external audit increases the credibility for third parties. EMAS corresponds with the requirements of EN ISO 14001:2004, but has several additional supplements, such as an environmental review (European Commission, 2009).

The United Nations Global Compact (UNGC) consists of ten principles that cover the areas human of rights, labour, environment and anti-corruption (UN Global Compact, 2014b). Launched in 2000, it has developed into the largest corporate sustainability initiative. However, it is not a regulatory instrument and depends on transparency as well as public accountability. A company's chief executive signs the commitment and is expected to integrate the UN Global Compact into the strategy and everyday business of the company. In addition, participants pay an annual contribution to the UN Global Compact office depending on the size and revenue of the company (UN Global Compact, 2014a). Furthermore, companies are required to provide a so-called Communication on Progress (COP). This is an annual disclosure for stakeholders that shows the compliance of the ten principles and is visible on the homepage of Global Compact (UN Global Compact, 2013).

The Guiding Principles on Business and Human Rights implementing the UN 'Protect, Respect and Remedy' Framework (UNPRR) apply to states as well as business participants and has three major aspects. These are states' duty to protect human rights, corporate responsibility to respect human rights and access to remedy. Each point is subdivided into foundational and operational principles (Ruggie, 2011; United Nations Human Rights, 2011).

The Organisation for Economic Co-operation and Development Guidelines for Multinational Enterprises (OECDGME) are recommendations for responsible business conduct. These non-binding guidelines cover the required topics like human rights, employment, the environment and bribery. Additionally, chapters about concepts, general policies and disclosure are included but it does not specify reporting requirements or indicators (OECD, 2011).

ISO 26000 provides guidance on social responsibility. Human rights, labour practices, the environment, fair operating practices, consumer issues and community involvement are its seven core subjects (ISO, 2014). The standard is not like other ISO standards for certification. Further, it is not a typical reporting tool, but it provides guidance for the reporting process. It is a more principles-based guide. The main purpose of the standard is to address social responsibility issues of a company (Tschopp & Nastanski, 2014, pp. 156-159).

The International Labour Organisation's (ILO) Tripartite Declaration of principles concerning multinational enterprises and social policy provides guidance on social policy and workplace practices. It is established in connection with international labour standards. The areas of general policies, employment, training, working conditions and industrial relations are included in the principles. However, the declaration does not offer support for reporting information (International Labour Organization, 2006).

The Global Reporting Initiative (GRI) is the mostly used reporting framework (Tschopp & Nastanski, 2014, p. 157). Generally, all GRI frameworks are subdivided into general standard disclosure and specific standard disclosure. In addition, the guideline has compulsory and optional points. Companies have to demonstrate their identified material aspects and boundaries. The specific standard disclosure depends on the outcome of the materiality analysis because every material aspect must be reported. Furthermore, companies have to present a GRI Content Index that provides information about what standards, aspects and indicators are presented in the report. In version G4, companies can choose between a core and a comprehensive version. The core version demands for at least one indicator to be presented per material aspect. The comprehensive version requires all indicators to be reported per material aspect. If a company cannot report an aspect or indicator, it has to demonstrate the reasons for omission. Furthermore, it offers additional sector disclosures (Global Reporting Initiative, 2013a). GRI has updated the framework several times and has provided documents to guide companies from using G3 and G3.1 to using the updated version G4 (Global Reporting Initiative, 2013b, 2013c). In addition, a linking document demonstrates compatibility with the European directive (Global Reporting Initiative, 2015). The UN Global Compact cooperates with GRI to meet the requirements for the COP but this is not compulsory (Tschopp & Nastanski, 2014, p. 155). The initiative provides links to the ten principles of the UN Global Compact as well as to the OECD Guidelines for Multinational Enterprises and the UN Guiding Principles on Business and Human Rights. Furthermore, comparable to ISO 26000, GRI comprises topics that are required by the directive. The difference between them is that ISO 26000 is a guide for taking action and addressing expectations of stakeholders. GRI merely gives guidance on reporting those topics. The two organisations provide guidance on how to combine both (Global Reporting Initiative & ISO, 2014). Furthermore, GRI collaborates with several other organisations as well. For instance, a linkage document with the Impact Reporting and Investment Standard (IRIS) improves the comparability of both instruments. IRIS is a foundation for impact measurement systems and provides a catalogue of metrics for impact investors to analyse environmental, social and financial performance of investments from several sectors. It is not a certification or rating but rather a support for performance systems, such as scorecards (GRI & IRIS, 2015).

Behnam and MacLean (2011, p. 53) have classified three categories for international accountability standards. These are principle-based standards, certification-based standards and reporting standards. The suggested standards are predominantly principle-based standards that appraise commitment to environmental and social issues. They show norms that should be addressed in decision-making for ethical behaviour. EMAS is a certification-based standard. Additional examples are ISO 14001, SA8000 and AA1000. An external verification can certify the measurement of environmental and social performance. GRI is the only pure reporting standard mentioned that gives guidance as well as scope for international comparison (Behnam & MacLean, 2011, pp. 53-56; Global Reporting Initiative, 2013a). Frameworks like the GRI and ISO 26000 provide advice for companies on how to present information, yet they do not ensure the accuracy of the information presented (Milne & Gray, 2013, pp. 24-25; Sethi et al., 2015, p. 1).

## Methodology

To answer the research questions, a multiple comparative case study (Eisenhardt, 1989) with triangulation through qualitative interviews with experts has been conducted (Bryman, 2012, pp. 392-402). The selection of the cases has focused on companies that are affected by the regulation. Since the directive is limited to large companies, a qualitative sampling has been used to choose exemplary companies. Therefore, the range is limited to the top 500 companies in the world. The ranking lists of Fortune Global 500, the Financial Times Global 500 and the Frankfurter Allgemeine Zeitung provided several alternatives. A further constraint to companies with Swedish, German and Italian origin has reduced the selection to a manageable amount. Consequently, comparable companies from similar industries have been selected from the automotive sector, telecommunication sector and utilities sector. In addition, one Swedish retail company is included. Table 1 presents the selected companies as well as the respective amount of documents that has been analysed. All documents have been numbered and can be found in Appendix I.

Table 1. Selected companies

| Country | Companies | Industry | Amount of documents |
|---|---|---|---|
| Sweden | Volvo Group | Automotive | 18 |
| | Telia Company | Telecommunication | 8 |
| | Vattenfall | Utility | 11 |
| | Hennes & Mauritz | Retail | 15 |
| Germany | Volkswagen | Automotive | 12 |
| | Deutsche Telekom | Telecommunication | 13 |
| | RWE | Utility | 18 |
| Italy | FCA | Automotive | 10 |
| | Telecom Italia | Telecommunication | 13 |
| | Enel | Utility | 11 |

The analysis began with the consideration of a possible comparability throughout the sustainability reports and a comparison via GRI Content Indices restricted over three years has been determined. Appendix III addresses the relevant matters of the directive to distinguish the status of the companies. Further, Appendix II gives an overview of reported content, such as the applied frameworks and included sustainability indices or ratings. In addition, the companies have been contacted to add their internal view and to supplement the content of the reports. Newspaper articles in the Handelsblatt and the Frankfurter Allgemeine Zeitung have been used as well to analyse the samples and get an external view of the companies. The analysis has been concluded with six semi-structured interviews with several sustainability experts to gain a general view of the topic.

All of the collected documents such as reports, newspapers, e-mails and interviews have been included in a coding process. To begin with, a general framework with five the components of motives, legitimacy, implementation, signalling and authenticity has been generated. Next, all documents have been inductively coded and the detected codes have been assigned to the framework. Each category is comprised between four and six codes. Table 14 gives an overview of the codes and categories.

## The Cases

The following pages give a short overview of the selected companies. For each case, the first part provides a general picture of the organisation, followed by the results of the newspaper analyses. It shows that each company has confronted sustainability issues and already had problems with regard to them. In addition, an overview of several reporting contents like frameworks and certifications is provided in Appendix II.

## *Volvo Group*

Table 2. Overview of Volvo Group

| | |
|---|---|
| Industrial sector | Motor vehicles and parts [1] |
| Headquarters | Gothenburg, Sweden [4] |
| Founding year | 1927 [4] |
| Main operating countries | **66 factories in 18 countries: [1]**<br>North America: USA, Canada, Mexico<br>South America: Brasilia<br>Europe: France, Sweden, Germany, Belgium, Russia, UK, Poland<br>Asia: India, Thailand, Japan, China, South Korea<br>Others: Australia, South Africa |
| Employees 2015 | 99,501 [1] |
| Sales 2015 | EUR 34 billion[1] (SEK 312.5 billion) [1] |
| Operating income 2015 (EBIT) | EUR 2.5 billion[1] (SEK 23.3 billion) [1] |

The company started as a car manufacturer in 1927. Ford acquired the Volvo Cars division in 1999 [7]. At present, Volvo Group is a Swedish vehicle manufacturer that produces trucks, construction equipment, buses, marine and industrial applications as well as special-purpose vehicles. The last category includes vehicles for armed forces, governments and police operations [2]. Brands like Volvo Penta, Renault Trucks, Terex Trucks, UD, Prevest, Mack and Nova Bus are part of the group. In addition, they have financial services that provide, for example, insurances. Nonetheless, the truck division generates the major share of net sales with 68 percent of the total sales. The most important markets are Europe and North America with over 70 percent of net sales. The Volvo Group is listed on the Nasdaq Stockholm stock exchange in Sweden. On the basis of voting rights, the largest investors are Industrivärden, Cevian Capital, Norges Bank Investment Management, SHB and Alecta [1].

The company has been confronted with the task of complying with several countries' regulations for emission standards for heavy-duty vehicles. In particular, North America and the EU demand a considerable reduction of nitrogen oxides ($NO_X$) compared to vehicles from the 90s. The optimisations of engines to decrease diesel consumption and the production of electric mobility, especially for public transport systems, are widely used approaches to meet the general sustainability requirements [1]. However, a structural cost reduction program announced in 2013 caused several headlines highlighting a staff reduction involving over 5,000 people in 2015 alone [1, 10, 11, 12, 17]. Furthermore, the Volvo Group had to pay a penalty in 2014 because of a dispute with the US Environmental Protection Agency (EPA) arising from the diesel engines of the model 2005 Volvo Penta which violated the required provisions [15]. The company asserts that the incident in the 90s occurred inadvertently and subsequently introduced the Group Emission Guideline Committee to prevent further irregularities [1]. Another legal conflict is proceeding in Europe. Since 2011, the EU cartel authority has investigated Volvo and other truck companies for alleged price fixing [8, 9]. In 2013, the Group has tried to expand and to merge with the French tank producer Nexter [16] and Renault Trucks defence has been working with the Russian arms company Uralwagonsawod, sanctioned by the US government [14].

[1] 9,1895 ECB Exchange rate per 31.12.15

*Telia Company (formerly: TeliaSonera)*

Table 3. Overview of Telia Company

| | |
|---|---|
| Industrial sector | Telecommunications [19] |
| Headquarters | Stockholm, Sweden [19] |
| Founding year | 2002 (merger) [22] |
| Main operating countries | Denmark, Norway, Sweden, Finland, Spain, Lithuania, Latvia, Estonia, Moldavia, Uzbekistan, Kazakhstan, Tajikistan, Georgia, Azerbaijan, Nepal [19] |
| Employees 2015 | 25,450 [19] |
| Sales 2015 | EUR 9.4 billion[2] (SEK 86.6 billion) [19] |
| Operating income 2015 (EBIT) | EUR 1.6 billion[2] (SEK 14.6 billion) [19] |

The communications company is originally from Sweden and Finland but has expanded into several countries, especially in the Nordic and Baltic regions. It includes several brands like Omnitel, Telia and Sonera. The largest shareholder is the Swedish State with approximately 37 percent ownership. Companies that are publicly owned by the Swedish State must follow an ownership policy of the Swedish Government that promotes sustainability topics, diversity and gender equality. Even without government majority ownership, the Telia Company acts in compliance with the policy [19]. Furthermore, the Swedish government instructs public-owned companies to report sustainability issues in accordance with GRI [20]. The company is listed on Nasdaq Helsinki and Nasdaq Stockholm [19].

Anti-bribery is a major subject because the company has been blamed for corrupt behaviour when accessing the Uzbek market [19, 23, 24, 25]. About 270 million Euros are supposed to have been transferred to an offshore account that is reportedly linked to the daughter of the Uzbek president [24, 25]. As a consequence of the bureaucratic and financial challenge in the region, Telia Company is leaving the Eurasian region and is focusing more on the Nordic and Baltic countries. Mergers with the Norwegian company Tele2 and the Danish company Telenor should strengthen the market position in those regions [19].

*Vattenfall*

Table 4. Overview of Vattenfall

| | |
|---|---|
| Industrial sector | Utilities [27] |
| Headquarters | Solna, Sweden [27] |
| Founding year | 1909 [27] |
| Main operating countries | Sweden, Finland, Denmark, Germany, Netherlands, UK [27] |
| Employees 2015 | 28,567 [27] |
| Sales 2015 | EUR 17.9 billion[3] (SEK 164.4 billion) [27] |
| Operating income 2015 (EBIT) | EUR -2.5 billion[3] (SEK -23 billion) [27] |

Vattenfall is a Swedish utility company that also operates in other European countries. Most of the energy produced is from coal, nuclear power and hydropower. Natural gas, wind power, solar power, biomass and waste are further energy sources used by Vattenfall. In

[2] 9,1895 ECB Exchange rate per 31.12.15

[3] 9,1895 ECB Exchange rate per 31.12.15

addition, the company offers several energy services like charging systems for electric vehicles, solar panels and smart plugs. Customers can also buy and sell electricity at the provided wholesale market. The company is 100 percent owned by the Swedish state. As such, it has to follow several rules like the Swedish State´s own policy or the Swedish Corporate Governance Code [27]. In addition, Swedish state-owned companies must adhere to the guidelines for external reporting by state-owned companies. That includes sustainability matters in accordance with GRI guidelines [30].

The company is subject to a variety of challenges as the energy sector is changing in many countries such as the phase-out of nuclear power in Germany. Hence, high impairment losses have had a negative effect on its profitability [27]. Consequently, the negative financial situation has led to a cost-cutting programme that includes reductions in personnel [27, 31]. In addition, electricity and energy prices in the main markets have decreased over the last years and the demand for low emission production is also a crucial topic for utility companies [27]. This has resulted, for example, in Vattenfall selling the East German lignite-fired power plant [32]. Additionally, political decisions like the nuclear exit in Germany and the phase-out of coal plants in the Netherlands have also had major financial consequences. Furthermore, the EU has set the objective that 27 percent of all energy consumed should stem from renewable sources. Thus, Vattenfall has decided to pursue a sustainable strategy and aims to be climate neutral by 2050 [27]. However, Vattenfall has not accepted the political regulations without resistance and has sued Germany for damages due to the nuclear exit. The lawsuit has already cost the German taxpayers several million Euros [34].

*Hennes & Mauritz*

Table 5. Overview of Hennes & Mauritz

| | |
|---|---|
| Industrial sector | General retailer [38] |
| Headquarters | Stockholm, Sweden [41] |
| Founding year | 1947 [41] |
| Main operating countries | no own factory;<br>over 3,900 stores across 61 markets [44] |
| Employees 2015 | 148,000 [44] |
| Sales 2015 | EUR 22.8 billion[4] (SEK 209.9 billion) [44] |
| Operating income 2015 (EBIT) | EUR 2.9 billion[4] (SEK 26.9 billion) [44] |

The retailer Hennes & Mauritz (H&M) sells mainly clothes and accessories in 61 markets around the world. Brands that are part of the concern include H&M, & Other Stories, Cheap Monday, COS, Monki and Weekday. In 2015, the company had 3,924 stores with 425 new stores planned for 2016. The company is most successful in Germany, followed by the US, the UK, France, China and Sweden [44]. The company is supplied by 820 independent suppliers involving 1,900 factories employing 1.6 million people [38]. Shares of H&M are listed in the Stockholm stock exchange and Nasdaq Stockholm. The major shareholder with 69.7 percent is the Persson family and companies that are related to the family [44].

H&M has followed environmentally friendly trends and promotes initiatives like offering jeans made from recycled cotton [46] as well as clothes made of organic materials [45]. However, the company often comes under criticism for underpaying their supplier [48]. In 2013, the collapse of a garment factory with more than 1100 deaths and 2500 people

[4] 9,1895 ECB Exchange rate per 31.12.15

injured has drawn public attention to the working conditions, safety standards and poor payment in Bangladeshi supply centres. However, construction defects and missing safety checks are prevalent in the garment industry. Several huge clothing companies like H&M source their products from such factories [50]. H&M and other concerned companies have exerted more pressure on suppliers because of the resulting negative image and have donated money to an aid fund to alleviate poor working conditions for their suppliers' employees [49].

*Volkswagen*

Table 6. Overview of Volkswagen

| | |
|---|---|
| Industrial sector | Motor vehicles and parts [54] |
| Headquarters | Wolfsburg, Germany [57] |
| Founding year | 1937 [56] |
| Main operating countries | **118 production locations in 31 countries:** [54]<br>North America: USA, Mexico<br>South America: Brazil, Argentina,<br>Europe: France, Turkey, Germany, Spain, Italy, Slovakia, Belgium, Denmark, UK, Poland, Hungary, Russia, Czech Republic, Finland, Sweden, Netherlands, Portugal, Bosnia and Herzegovina, Austria, Switzerland<br>Asia: Thailand, China, India, South Korea, Malaysia, Taiwan<br>Africa: South Africa |
| Employees 2015 | 610,076 [57] |
| Sales 2015 | EUR 213.9 billion [57] |
| Operating income 2015 (EBIT) | EUR -4.1 billion [57] |

Twelve vehicle brands are part of the Volkswagen Group, including Volkswagen, Volkswagen Commercial Vehicles, Audi, Sead, Škoda, and the sports and luxury brands Bentley, Bugatti, Lamborghini and Porsche. In addition, motorcycle brand Ducati as well as the truck and bus producers Scania and MAN are included in the organisation. Its shares are listed on several exchanges like Berlin, Düsseldorf, Frankfurt, Hamburg, Hanover, Munich, Stuttgart, Xetra, Luxembourg, New York and SIX Swiss Exchange. The largest shareholder is Porsche Automobil Holding SE with almost one third of the shares, followed by the State of Lower Saxony and Qatar Holding LLC. According to 2015 data, the Volkswagen Group had 59 production sites in 27 locations across 14 countries. The majority of vehicles and parts are still produced in Europe. In addition, the highest sales are in Europe as well [57].

Despite the group's enormous efforts to present itself as an environmentally sustainable and technologically advanced automobile manufacturer, it has been subjected to a big emission scandal, starting in September 2015. The group has confessed to manipulating emission tests of diesel vehicles using specific software over several years. The University of West Virginia has discovered the higher emission levels when cars are examined under normal conditions, while the software reduces the vehicles' emission levels under test conditions in order to archive the permitted limits. Besides a damaged image, the company is facing enormous financial penalties [62]. Volkswagen used to be included in the Dow Jones Sustainability Index and has even been leading the automobile industry [64]. However, the company has been excluded from the Dow Jones Sustainability Index shortly after the emission scandal has emerged [61]. Just in Europe alone, more than 1.1 million vehicles are affected. In 2016, Volkswagen started to retract the affected cars and began to replace the software [59]. Many jobs are at risk due to the financial difficulties [60]. Although the diesel engine has been an important part in the VW strategy, as a reaction to the sagging reputation of its diesel division, the new CEO, Matthias Müller, is considering stopping investments in this technology altogether [58]. However, even before the scandal, investors and shareholders had scepticism against the automotive industry. In contradiction to their commitment to decrease pollution, car manufacturers have consistently produced bigger cars and heavy off-road vehicles for cities. This trend has been supported due to the current low oil price [63]. Volkswagen has not yet published a group-wide sustainability report for 2015 but has announced to take appropriate measures as a result of the emission scandal [53].

### *Deutsche Telekom*

Table 7. *Overview of Deutsche Telekom*

| | |
|---|---|
| Industrial sector | Telecommunications [65] |
| Headquarters | Bonn, Germany [65] |
| Founding year | 1995 [71] |
| Main operating countries | North America: Canada, Mexico, USA<br>South America: Argentina, Brazil<br>Europe: Albania, Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Former Yugoslav Republic of Macedonia, Finland, France, Germany, Greece, Hungary, Italy, Luxembourg, Montenegro, Netherlands, Poland, Romania, Russia, Sweden, Switzerland, Slovakia, Spain, Turkey, Ukraine, UK<br>Asia: India, Malaysia, Singapore, China<br>Africa: South Africa [65] |
| Employees 2015 | 225,243 [65] |
| Sales 2015 | EUR 69.2 billion [71] |
| Operating income 2015 (EBIT) | EUR 7 billion [71] |

Deutsche Telekom is a German telecommunications company operating around the world. In 2015, T-Mobile US, followed by Telekom Deutschland, achieved the highest revenue within the group. Its shares are traded on several stock exchanges including the Frankfurt Stock Exchange. The Federal Republic of Germany has privatised the majority of the company. However, the republic and KfW (Kreditanstalt für Wiederaufbau) are still the biggest investors, together with more than 30 percent [71]. Additionally, Deutsche Telekom states that investors with strong preference for ESG criteria have held two percent of their shares and around 21 percent at least take it into account [65].

However, the company must comply with several sector-specific market regulations, especially in the EU. For example, roaming surcharges will be eliminated completely within the EU from 2017. Users will pay the same charges across the EU as in their home countries [71]. In addition, compared to its competitors, the former publicly owned company has many employees and a relatively high percentage of public officials. Therefore, personnel cutbacks are a current topic of concern [72]. In 2008, the company was involved in a big scandal concerning eavesdropping on several journalist and members of supervisory boards [75, 77]. Furthermore, the subsidiary Magyar Telekom was accused of paying bribe money in Macedonia and Montenegro. The trial was concluded with a settlement in 2010 [76]. A current controversy is the occupational past of Thomas Kremer, a member of the managing board. Before 2012, he was responsible for compliance at Thyssen-Krupp and has been blamed for covering up cartels [73, 74].

*RWE Group*

Table 8. Overview of RWE

| | |
|---|---|
| Industrial sector | Utilities [78] |
| Headquarters | Essen, Germany [78] |
| Founding year | 1898 [88] |
| Main operating countries | Germany, Netherlands, Belgium, Luxembourg, UK, Czech Republic, Hungary, Poland, Slovakia, Croatia, Slovenia, Romania, Turkey, Spain, Italy, France Portugal<br>Trading locations in other countries: USA, MENA region, India, Singapore [78] |
| Employees 2015 | 59,762 [81] |
| Sales 2015 | EUR 48.6 billion [81] |
| Operating income 2015 (EBIT) | EUR 3.9 billion [81] |

RWE Group is one of the biggest utilities in Europe. The operations of RWE include the whole supply chain from the production of lignite, generation of electricity from several sources, energy trading, the distribution of gas and electricity, to the supply of energy-related services. In 2015, one third of the energy mix used was generated gas along with more than half stemming from hard coal and lignite. The use of nuclear power and renewable energy in production has been under 10 percent each. The German domestic market is the most important one for the RWE group [78]. Its shares are traded on stock exchanges in Germany as well as in the US. RWEB Gmbh, with 15 percent, is the largest single shareholder whereas the remaining shares are held mainly by institutional shareholders [81].

RWE has began relatively late with changes towards renewable energy sources [88]. Meanwhile, the utility company demonstrates its engagement in sustainability topics. Nonetheless, the company is still one of the biggest issuers of carbon dioxide in Europe [85]. Similar to Vattenfall, RWE faces the same changes in the energy industry [84, 93]. These challenges have brought the company into a difficult situation. Goodwill has decreased significantly. Despite a massive reduction of personnel, profitability has declined. The boom of renewable energy and lower energy prices make it hard for RWE, a company that produces energy mainly from hard coal and lignite [84]. A restructuring program resulted in further job cuts and a split of the group [92]. RWE is consolidating its profitable segments, such as renewable energy, grids and distribution into a new, listed company. The sale of new shares should help to make RWE fit for the future [78, 90]. Nonetheless, surface mining is still a part of the group with major consequences for communities. Relocations of entire towns are still possible, even in times of energy transitions. RWE has planned to conduct surface mining in Garzweiler II until 2045 to produce lignite. Twelve villages affected by the company's plan will be replaced by a hole of 45 km circumference and 230 m depth [91, 94].

### *FCA*

Table 9. *Overview of FCA*

| | |
|---|---|
| Industrial sector | Motor vehicles and parts [96] |
| Headquarters | Amsterdam, Netherlands [96] |
| Founding year | 2014 (merger) [97] |
| Main operating countries | **Operations in approximately 40 countries and commercial relationships across 150 countries** [96, 99]<br>North America: USA, Canada, Mexico<br>South America: Brazil, Argentina, Chile, Venezuela<br>Europe: Italy, Netherlands, Germany, UK, Austria, Belgium, Czech Republic, Denmark, Spain, France, Poland, Switzerland, Hungary, Finland, Greece, Portugal, Russia, Serbia, Ireland, Slovakia, Turkey, Luxembourg<br>Asia: China, India, Japan, South Korea, Singapore<br>Others: Australia, South Africa, United Arab Emirates, Egypt, Morocco |
| Employees 2015 | 238,162 [99] |
| Sales 2015 | EUR 110.6 billion [99] |
| Operating income 2015 (EBIT) | EUR 2.6 billion [99] |

The automobile manufacturer Fiat (Fabbrica Italiana Automobili Torino) is the predecessor of FCA (Fiat Chrysler Automobiles). Giovanni Agnelli founded the company in 1899 in Turin, Italy. In 2008/2009 the company began a transformation process to expand outside of Europe and Fiat acquired shares of formerly known Chrysler Group LLC. Until 2014, Fiat has owned 100 percent of the company. Subsequently, the board of directors of Fiat has decided to merge the companies and establish FCA. After the merger with Chrysler the corporate seat was relocated from Turin, Italy to Amsterdam, Netherlands. In addition, the new place of effective management is located in the United Kingdom. In 2015, the group achieved its highest sales in the US, followed by the European market. Its shares are traded at the New York Stock Exchange and the stock exchange in Milan. Exor, the investor group controlled by the Agnelli and Nasi families, descendants of the founder, is the most influential shareholder, with a voting power of around 44 percent.. Brands of the mass vehicle market included in the company are Abarth, Alfa Romeo, Chrysler, Dodge, Fiat, Fiat Professional, Jeep, Lancia, Ram and SRT. In addition, several brands in the component segment and luxury vehicle brands, such as Maserati, are part of the group. Furthermore, Ferrari used to be a brand of FCA but it has spun off in 2016 and is now controlled separately by Exor [99].

The group has to manage several challenges. Despite high revenues, profits have decreased due to penalties and recalls because of defective automatic transmissions, fire risks as well as hack attacks [102, 105]. Luxembourg and the Netherlands have given tax advantaged to Fiat Financial and Trade. The EU has criticised the advancement. Consequently, several million Euros had to be paid back to Luxembourg and the Netherlands [103]. Additionally, Australian authorities are investigating because of tax fraud [104]. Moreover, whitewashing sales results in Chicago [101] and software manipulation à la Volkswagen are further reproaches to be managed by the company [100].

### *Telecom Italia Group*

Table 10. *Overview of Telecom Italia*

| | |
|---|---|
| Industrial sector | Telecommunications [106] |
| Headquarters | Milan, Italy [110] |
| Founding year | 1994 (merger) [111] |
| Main operating countries | Core markets: Italy and Brazil<br>Other markets: Ireland, Argentina, Bolivia, Chile, Columbia, Panama, Peru, Puerto Rico, USA, Venezuela, Israel, Bulgaria, Greece, Turkey, Netherlands, San Marino, Spain, Czech Republic, Romania, Singapore, Slovakia, Belgium, Germany, Switzerland, Austria, France, UK, Luxembourg, Paraguay [110] |
| Employees 2015 | 65,867 [110] |
| Sales 2015 | EUR 19.7 billion [110] |
| Operating income 2015 (EBIT) | EUR 3 billion [110] |

The group is a telecommunication company that offers mobile and fixed communications services as well as ICT solutions. Telecom Italia is listed on the Milan stock exchange. In 2015, Vivedi S.A. was the largest shareholder, replacing Telco S.p.A and the Findim Group S.A. after their exit. The Italian domestic market is the most important one for Telecom Italia. In addition, the group also operates in South America, mainly in Brazil [106].

The former publicly owned company must manage a challenging financial situation with high debt burden and difficulties in its growth [112] caused by a price decline and the recession in Italy [113]. The reputation of Telecom Italia has suffered, especially because of a scandal that became public in 2010. In collusion with the mafia, the subsidiary Sparkle und Fastweb, another telecommunication company, invoiced sham bills to foreign companies to get the turnover tax from the state. The defraudation of the revenue cost the state around 385 million Euros [116, 117]. Furthermore, recurring reports claim that the company takes advantage of its market position [114, 115].

### *Enel*

Table 11. Overview of Enel

| | |
|---|---|
| Industrial sector | Utilities [119] |
| Headquarters | Rome, Italy [119] |
| Founding year | 1962 [123] |
| Main operating Countries | Italy, France, Iberian Peninsula, Belgium, South Africa, Greece, India, Bulgaria, Romania, Slovakia, Russia, Argentina, Brazil, Chile, Colombia, Peru, Mexico, Costa Rica, Guatemala, Panama, Uruguay [119] |
| Employees 2015 | 67,914 [119] |
| Sales 2015 | EUR 75.7 billion [119] |
| Operating Income 2015 (EBIT) | EUR 7.7 billion [119] |

The utility produces energy from several sources. Renewables are, with almost one third of the produced capacity, the leading source, followed by coal, nuclear energy, gas and oil. Several subsidiaries are integrated into the group, including Endesa SA and Edegel SA [122]. The major markets are the Iberian Peninsula, Italy and Latin America [119]. The formerly state-owned company [125] is still largely in the possession of the Italian Ministry of Economy and Finance, which controls over 25 percent of its shares. Additionally, Enel states that 132 socially responsible investors hold 7.7 percent of Enel shares in 2015 [122].

Like other European utilities, Enel is facing challenges of the changing energy sector [127]. However, the company has the objective to be a sustainable utility [126] and its earlier investments in renewable energy have helped Enel to confront the change in trends [124]. In addition, Enel is a partner in the Sustainability Disclosure 2025 project together with GRI. The aim is to analyse trends in reporting and sustainability [119]. The only recent wrongdoing in connection with Enel became public in 2006, where Siemens bribed employees of Enel to acquire contracts to supply turbines [128].

## Findings concerning the Reports and the Directive

The directive makes a general demand for disclosing non-financial information. As already mentioned, the non-binding guidelines of the European Commission have not been published yet. However, GRI offers a linking document that compares their G4 version with the directive and all reports are prepared in accordance with GRI. Therefore, the conformity of the exemplary reports have been analysed with a comparison of the GRI Content Indices, summarised in Appendix III. The companies have mostly used the current G4 version. However, in the previous years, several companies have published their non-financial information in accordance to G3 or G3.1. As mentioned above, GRI provides documents for comparing actual and previous versions that have been used to create Appendix III. Nonetheless, little variations have occurred in the comparison of the previous years because of the usage of different GRI versions in the years 2013 and 2014.

According to the linking document, companies must publish G4-Disclosures on Management Approach (DMA) in the areas of for environmental practices, society, labour practices and decent work, human rights as well as anti-corruption and public policy. The application covers the requested description of policies including due diligence processes, outcome of policies and partly the major risks related to the matters. Further descriptions of risks are provided in the G4-2 specification, which is not compulsory in the core version of GRI. In addition, every category offers several indicators (Global Reporting Initiative, 2013a, 2015).

The analysis of the reports shows that all of the selected companies have provided sustainability reporting over several years already, with the exception of Volkswagen in 2015. Furthermore, every company has published at least one aspect or indicator on the required matters. Telia Company has not shown specific DMA in its GRI Content Index 2015, only a generic DMA. In addition, Vattenfall and RWE can expand their provided information in relation of principle risks related to the required areas because they are the only two companies that do not report G4-2. However, as mentioned, it is compulsory to be in accordance with GRI core version.

In addition to the general requirements, the directive mandates several aspects to be considered in the report, as appropriate. Table 12 provides an overview of the specifications of the directive and a comparison with GRI.

Table 12. Comparison of the directive and GRI (adapted from Global Reporting Initiative 2015)

| Directive | GRI (aspects/indicators) |
|---|---|
| **Environment matters** | |
| • Use of renewable/non-renewable energy | • Energy |
| • Greenhouse gas | • Emissions<br>• Energy |
| • Water use | • Water |
| • Air pollution | • Emissions |
| • Land use | • Biodiversity |
| • Use of materials | • Materials |
| **Social and employee-related matters** | |
| • Actions taken for gender equality | • Non-Discrimination<br>• Diversity and Equal Opportunity |
| • Fundamental implementation of ILO | • Reference to ILO<br>• Category: Labour Practices and Decent Work |
| • Working conditions | • Category: Labour Practices and Decent Work |
| • Social dialogue | • Category: Labour Practices and Decent Work |
| • Right of workers to be informed and consulted | • Labour Practices Grievance Mechanisms<br>• Labour/Management Relations<br>• Training and Education |
| • Trade union rights | • Freedom of Association and Collective Bargaining |
| • Health and safety at work | • Occupational Health and Safety |
| • Relationship with local communities and actions taken | • Local Communities |
| **Human rights** | |
| • Prevention of abuses | • Category: Human Rights |
| **Anti-corruption and bribery** | |
| • Instruments used to fight against it | • Anti-Corruption<br>• Public Policy |

The outcome of the comparison in Appendix III shows that just a few topics have been covered by every company during the last three years. These topics are energy, emissions, occupational health and safety, anti-corruption and the categories of labour practices and decent work as well as human rights.

A comparison by industry shows that the automotive companies have published almost all required issues of the directive with the exception of Volkswagen in 2015 and of Volvo on biodiversity and public policy. The automotive industry is also known as a massive energy user and one of the major contributors to global $CO^2$ emissions. It is therefore under public pressure to demonstrate action towards change [126]. The Italian companies have the most comprehensive report at the country-comparison level. However, the small sample does not represent enough companies to extrapolate these findings to a global level. Furthermore, the extent of reporting is not conclusive with regard to the value of the strategy and the quality of sustainability actions.

In addition, the priority of issues varies among companies as illustrated in the companies' individual materiality matrix. Thus, the companies have concentrated on topics that are relevant to their business environment. Their focus depends on factors such as industry and operating countries [130, 131, 132]. For example, Vattenfall and RWE have reported relatively little in the category of human rights as both operate mainly in European countries with higher living and work standards. Therefore, topics like child labour are already covered by national and supra-national legislation. The companies have thus focused on evaluating the human rights conditions of their supplier [27, 78]. Another example in the telecommunications sector shows the lack of significance of materials in this sector. In the GRI Content Index for 2013, Deutsche Telekom has published the following statement on materials:

> *"The amount of materials we use such as raw materials, supplies and semi-finished products is very small for Telekom as a service company and is therefore not relevant."* [70]

Telia Company has published a similar statement [21] and Telecom Italia does not demonstrate a need for materials either [106]. In general, the telecommunication companies have published relatively few environmental aspects as those issues have little relevance for this industry compared to other industries [19, 65, 106]. Nonetheless, Telecom Italia has used the comprehensive GRI G4 version and demonstrates the most extensive result within the telecommunication sector [118].

The comparison shows that the exemplary companies are largely on the way to conform to the directive. Nonetheless, the directive cannot force companies to be sustainable. The more specific regulations are, the more limited are the possibilities of companies to create sustainable solutions for the future. However, several companies have to rethink their strategies because of the mandatory reporting. While many companies recognise sustainability reporting as an opportunity, others interpret it as a duty. Distinguishing between these two types of companies is difficult [132, 133, 134, 135]. Therefore, the next section deals with possible distinguishing features by using qualitative coding.

## Findings of the Qualitative Coding

As explained in the methods chapter, all collected data, including sustainability reports, newspaper articles, interviews and email questionnaires sent to companies have been used to create the following coding table, Table 13. Further, the categories and codes are described in the following section.

Table 13. Coding table

| Codes | References | Category |
|---|---|---|
| Pioneer | 118, 129, 130, 131, 132, 133 | Motives for reporting |
| Competitors | 130, 131, 132, 134 | |
| Stakeholder demand | 18, 26, 37, 95, 118, 129, 130, 131, 132, 133, 134, 135 | |
| Risk management | 26, 129, 130, 131, 135 | |
| Legal obligation | 26, 37, 130, 131, 132, 133, 134, 135 | |
| Strategy | 1, 2, 3, 18, 19, 20, 21, 26, 27, 28, 29, 37, 38, 39, 40, 54, 55, 65, 66, 67, 78, 79, 80, 95, 96, 97, 98, 106, 107, 108, 119, 120, 121, 129, 132, 134 | Legitimacy (requirement) |
| Values | 1, 2, 3, 19, 20, 21, 27, 28, 29, 38, 39, 40, 54, 55, 65, 66, 67, 78, 79, 80, 96, 97, 98, 106, 107, 108, 119, 120, 121 | |
| Ambitions/goals | 1, 2, 3, 18, 19, 20, 21, 26, 27, 28, 29, 38, 39, 40, 54, 55, 65, 66, 67, 78, 79, 80, 95, 96, 97, 98, 106, 107, 108, 118, 119, 120, 121, 129, 130, 133 | |
| Sustainability reporting | 1, 2, 3, 19, 20, 21, 27, 28, 29, 38, 39, 40, 54, 55, 65, 66, 67, 78, 79, 80, 96, 97, 98, 106, 107, 108, 119, 120, 121, 132, 133 | |
| Integration | 1, 2, 3, 18, 19, 20, 21, 26, 27, 28, 29, 38, 39, 40, 54, 55, 65, 66, 67, 78, 79, 80, 96, 97, 98, 106, 107, 108, 118, 119, 120, 121, 129, 130, 131, 132, 134 | Implementation |
| Guidelines | 1, 2, 3, 19, 20, 21, 27, 28, 29, 38, 39, 40, 54, 55, 65, 66, 67, 78, 79, 80, 96, 97, 98, 106, 107, 108, 119, 120, 121, 131 | |
| Frameworks | 1, 2, 3, 19, 20, 21, 26, 27, 28, 29, 37, 38, 39, 40, 54, 55, 65, 66, 67, 78, 79, 80, 95, 96, 97, 98, 106, 107, 108, 118, 119, 120, 121, 129, 131, 132, 133, 134, 135 | |
| Supply/value chain | 1, 2, 3, 19, 20, 21, 27, 28, 29, 38, 39, 40, 54, 55, 65, 66, 67, 78, 79, 80, 96, 97, 98, 106, 107, 108, 118, 119, 120, 121, 132, 133, 134, 135 | |
| Sustainability matters | 1, 2, 3, 19, 20, 21, 26, 27, 28, 29, 37, 38, 39, 40, 54, 55, 65, 66, 67, 78, 79, 80, 95, 96, 97, 98, 106, 107, 108, 118, 119, 120, 121, 131, 132, 133, 135 | Signals in reports (internal potentials) |
| Stakeholder engagement | 1, 2, 3, 19, 20, 21, 26, 27, 28, 29, 37, 38, 39, 40, 54, 55, 65, 66, 67, 78, 79, 80, 96, 97, 98, 106, 107, 108, 118, 119, 120, 121, 129, 130 | |
| Corporate governance | 1, 2, 3, 19, 20, 21, 27, 28, 29, 38, 39, 40, 54, 55, 65, 66, 67, 78, 79, 80, 96, 97, 98, 106, 107, 108, 119, 120, 121, 132 | |
| External audit and certifications | 1, 2, 3, 19, 20, 21, 27, 28, 29, 38, 39, 40, 54, 55, 65, 66, 67, 78, 79, 80, 96, 97, 98, 106, 107, 108, 119, 120, 121, 131, 133, 135 | |
| Cooperation/memberships in connection with sustainability | 1, 2, 3, 19, 20, 21, 27, 28, 29, 38, 39, 40, 54, 55, 65, 66, 67, 78, 79, 80, 96, 97, 98, 106, 107, 108, 119, 120, 121 | |
| Sustainability indicators | 1, 2, 3, 19, 20, 21, 27, 28, 29, 37, 38, 39, 40, 54, 55, 65, 66, 67, 78, 79, 80, 95, 96, 97, 98, 106, 107, 108, 118, 119, 120, 121, 130, 131, 132, 133, 134, 135 | |
| Social and environmental footprint | 1, 2, 3, 19, 20, 21, 27, 28, 29, 38, 39, 40, 54, 55, 65, 66, 67, 78, 79, 80, 88, 93, 96, 97, 98, 106, 107, 108, 119, 120, 121, 130, 131, 132, 133, 134 | Authenticity of reports (external recognition) |
| Legal compliance in connection with sustainability | 1, 2, 3, 8, 9, 19, 20, 21, 23, 24, 25, 27, 28, 29, 38, 39, 40, 54, 55, 58, 59, 62, 65, 66, 67, 73, 74, 76, 77, 78, 79, 80, 85, 89, 96, 97, 98, 100, 101, 102, 103, 104, 106, 107, 108, 114, 115, 116, 117, 119, 120, 121, 128, 130, 131, 132, 133 | |
| Indices/ratings/awards in connection with sustainability | 1, 2, 3, 19, 20, 21, 27, 28, 29, 31, 32, 33, 35, 36, 38, 39, 40, 54, 55, 58, 59, 61, 62, 64, 65, 66, 67, 78, 79, 80, 81, 82, 83, 96, 97, 98, 106, 107, 108, 119, 120, 121, 130, 135 | |

| | |
|---|---|
| External perception about actions taken in connection with sustainability | 1, 2, 3, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 19, 20, 21, 26, 27, 28, 29, 38, 39, 40, 45, 46, 47, 48, 49, 50, 51, 52, 54, 55, 59, 60, 61, 62, 63, 64, 65, 66, 67, 72, 73, 74, 75, 76, 77, 78, 79, 80, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 96, 97, 98, 106, 100, 101, 102, 103, 104, 105, 106, 107, 108, 112, 113, 114, 115, 116, 117, 119, 120, 121, 124, 125, 126, 127, 128, 130 |

*Motives*

The main motives for companies to report non-financial information have changed over time. Since the 90s, early movers began to publish non-financial information. Particularly, enterprises operating in heavy industries like chemical companies, utilities and automotive manufacturers have been pressurised early to report on environmental impacts [131, 132, 133]. Industries with issues in areas of resource management or the handling of employees within a supply chain have been put under supervision by several stakeholders early on [132]. The pioneers have been able to create an advantage over their competitors without reporting as they have shown that they proactively deal with their negative effects. However, competitors have adopted the tactic and caught up with the first movers [132].

Environmental and social awareness has developed into an important factor for many stakeholders who demand an appropriate supply of information from companies. Consequently, violations of expected behaviours can have a major impact on the financial situation because of reputational damages and decreasing customer demand [130, 131, 132, 133, 134, 135]. In addition, statutory violations can cause considerable penalties, demonstrated by the Volkswagen emission scandal [62]. Hence, the integration of ESG risks and subsequently the demonstration of the considered risk should show stakeholders an effective management. More and more companies have become aware that sustainability is a relevant topic for their legitimacy [26, 130, 132]. In addition to the motives mentioned, several countries have introduced mandatory regulations to report non-financial information within the annual report or in a separate statement. Consequently, the awareness of reporting sustainability information has been broadening [132].

The following Figure 2 gives an overview of the remaining categories and components that should be considered for an authentic sustainability report.

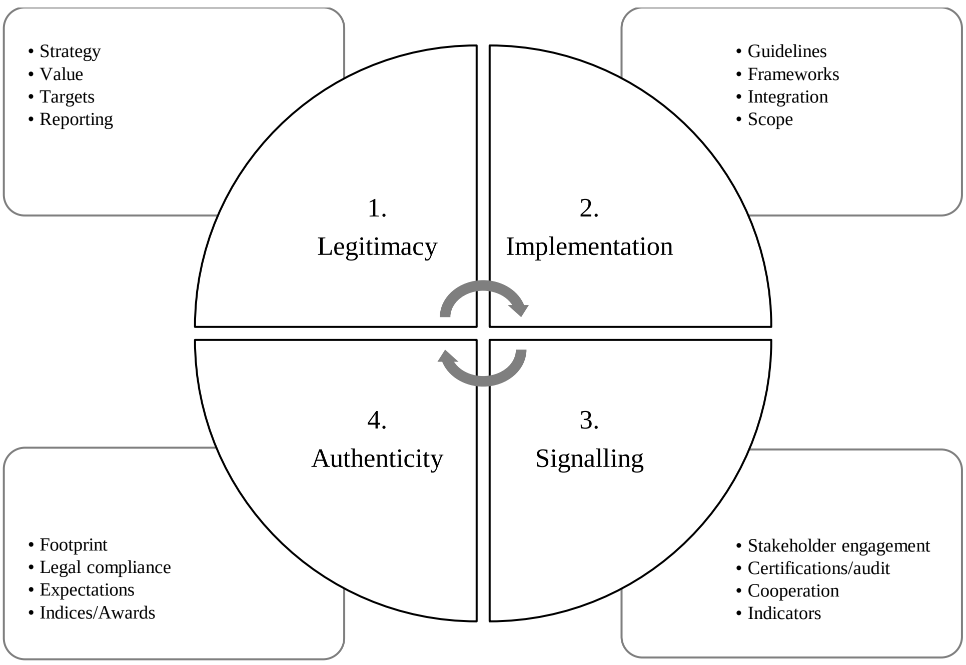


Figure 2. Authenticity loop, source: author

*Legitimacy*

Stakeholder demand and legal obligation make it mandatory for many companies to demonstrate non-financial information for their legitimation [131, 133]. As mentioned in the legitimacy theory, companies must act in accordance with the value system of society. Therefore, they use sustainability reporting to demonstrate that their strategy, values and targets are in line with the expectations of stakeholders [1, 19, 27, 38, 65, 78, 96, 106, 119, 129]. The third legitimacy strategy, mentioned in the theoretical section, is limited due to mandatory reporting. It is more difficult to present information that is loosely related to real action. However, a sustainability report does not necessarily mean that a company is sustainable [134]. Sustainability considerations have to be integrated into the strategy, values and future goals to demonstrate reliability and a long-term approach [130, 314]. In general, reporting has become more restricted as reporting is standardised [131, 133].

Standardisation of sustainability reporting has increased the importance of the individual elements of a sustainability programme. Therefore, companies can focus more on topics like strategy, adequate values and measurable goals [131, 132, 133]. Reporting should describe the of sustainability issues. It should not be an image booklet but rather a controlling or management instrument that ensures advancement and communication [133, 134, 135]. Reporting demonstrates that companies pay attention to their role within society and adapt their business models according to the expectations of their stakeholders [134].

*Implementation*

The right implementation is an important factor to prepare a transparent and comparable report for stakeholders. The reporting format and relevance within companies has changed as well. Early reports had no specifications on what information should be included and how it should be presented. It was a widespread practice allowing advertising consultants to write non-transparent, irrelevant and incomprehensible reports without specific indicators in order to paint a picture of sustainable performance. Therefore, the comparability used to be very limited, especially without indicators. The integration and the importance of the reporting within the corporate hierarchy have changed over the years. A CEO’s commitments and the creation of specific sustainability departments have raised the reliability of reports and have demonstrated the integration of sustainability topics in the business strategy. It is important that a company does not engage in a sustainability strategy disconnected from its corporate plan [131, 132, 134].

Several guidelines, like the UN Global Compact, help demonstrate how policies are applied and give an impression of the factors included in decision-making. Furthermore, reporting frameworks like GRI have increased the comparability and understanding of reports because of defined requirements. By now, GRI is one of the fastest growing frameworks. The American SASB (Sustainability Accounting Standards Board) is another relevant reporting framework for companies operating in the US [135]. National frameworks like the German Sustainability Codex with reduced reporting requirements make it easier for smaller companies to report their outcome. However, GRI is still the dominant framework, especially for large companies [134]. Mandatory reporting and the support of frameworks have strengthened the standardisation. Some regulations have even stated specific frameworks like Sweden for state-owned companies [30]. The guidelines provide a system of specifications about general requirements and specific indicators. Therefore, the performance itself gains much more attention and highlights the efforts instead of the reporting layout [131, 132, 133].

To be in accordance with the requirements of GRI or the directive, the implementation and the representation of sustainability reports can vary, within a limited scope. For example, more and more companies do not publish a separate report but integrate non-financial information in their annual report. That should demonstrate that sustainability is not a separate topic but rather part of the strategy and daily business [26, 131, 134, 135]. Telia Company and Vattenfall have had a combined annual and sustainability report for years [19, 27]. The Volvo Group has changed its reporting from the year 2015, from a separate to an integrated report [1].

Additionally, companies can decide the scope of their considerations and reporting. It can be limited to the company itself or it can be extended to incorporate the supply chain as well, thus providing a broader picture of commitments [132, 133, 134, 135]. While this is not compulsory, it has been increasingly significant in GRI G4 compared to the previous versions. The directive also states that the supply chain should be when appropriate. Even the update of ISO 14000 gives the supply chain a greater significance. Consequently, large companies are increasingly including their value chain and are forcing many suppliers to demonstrate their sustainability actions. Therefore, a growing number of small and medium-sized enterprises are encouraged to report their sustainability outcomes, even though they do not have a legal obligation to do so [134, 135].

*Signalling*

Companies with sustainability reports are not necessarily sustainable. Even the right implementation and the required transparency do not ensure a sustainable business concept. Companies need to demonstrate their policies and action to signal their efforts [134]. The entire implementation can be interpreted as a signal, especially if the implementation exceeds the minimum requirements. Companies can manage signals to represent a modern and sustainable organisation. Signs are published by companies to decrease the knowledge gap between them and their stakeholders. Furthermore, signals are used to distinguish companies from their competitors [26, 37, 95]. It is an important signal to demonstrate that a company covers all relevant topics because it is a negative sign to omit significant industry topics [135]. To a certain degree, following the directive or other guidelines pre-specifies what is included in reports. It emphasises the importance of environmental, social, employee, human rights as well as anti-corruption and bribery matters. GRI also includes a materiality analysis, which implies that it is important for companies to concentrate on their significant economic, environmental and social influences. Large companies have several potential topics and the way to generate materiality aspects is not specified. However, the integration of stakeholders in the selection of material factors is a strong signal for stakeholder engagement [131, 132, 134, 135]. For example, Deutsche Telekom has used the results of an internal workshop and a stakeholder survey as well as an external analysis for material aspects in the information and communications technology sector. Furthermore, it applies the AA1000 principles of materiality, inclusivity and responsiveness to guarantee stakeholder engagement [65, 66, 67].

However, signals do not have to be positive. A description of risks related to sustainability matters shows a proactive handling of problems and supports a company's credibility [135]. Signals do not necessarily have to involve action. For example, Volkswagen has not yet published a group-wide sustainability report for 2015. However, this should not be interpreted as a negative yet as it would not be credible for Volkswagen to provide a report without a new strategy [134, 135]. The topic of governance should not be overlooked and is an important signal in sustainability reports. The integration within the organisation and the internal control of possible risks are important signs for a comprehensive sustainability process [132].

Other signals that can be sent by companies to verify their sustainable efforts are certifications. As already shown, the majority of the analysed companies comply with several International Organisation for Standardisation (ISO) norms, such as ISO 14001 – Environmental Management and ISO 50001 – Energy Management systems. OHSAS 18001, an occupational health and safety assessment, is also common in the mentioned organisations. In addition to certifications, an external audit of the reports is a also widespread way to signal credibility [1, 19, 27, 38, 54, 65, 78, 96, 106, 119]. The practice can be different between auditors. In some countries, verification of the indicators is common and in others, auditors are asked for an overall picture [131]. Partnerships and cooperation with non-governmental organisations are also signs that demonstrate voluntary engagement in environmental and social matters. Volvo Group emphasises in its reports to be the only automotive manufacturer that has a membership in the WWF Climate Savers Program [1, 2, 3].

Very effective signals are indicators because they show the result of the policies and the development of sustainable actions. In addition, stakeholders are more able to compare companies [95, 131, 132, 133]. The following example, Table 14, shows environmental indicators in gram per kilowatt hour (g/kWh) from 2015 of the analysed utilities:

Table 14. Emissions

| | **Vattenfall** [27] | **RWE** [78] | **Enel** [119] |
|---|---|---|---|
| $CO^2$ emissions g/kWh | 426 | 708 | 409 |
| $NO_X$ emissions g/kWh | 0.264 | 0.54 | 0.78 |
| $SO_2$ emissions g/kWh | 0.253 | 0.25 | 1.07 |

In general, indicators can be used to compare several companies and also the development of one company a period of years. In fact, according to GRI, it is obligatory to present at least one indicator per material aspect, however, companies can decide to increase the supply of quantitative information at their discretion. Telecom Italia and FCA report according to the comprehensive version of GRI G4. Consequently, every given indicator of material aspects has to be reported [96, 97, 98, 106, 107]. Besides negative outcomes like emissions, positive impacts can be presented as indicators. Foremost companies with more experience in sustainability reporting present positive impact indicators [134, 135]. For example, Telecom Italia demonstrates the impact of investments in broadband as well as ultrabroadband network on the percentage share of GDP growth and the potential number of jobs created [106, 107, 110]. Impact measurement is an upcoming but a methodically difficult topic. At the moment, it is complicated to get adequate information but big data and access to information can help to advance the area [131, 133, 134, 135].

*Authenticity*

Authenticity is an impression that is evaluated from an external view [26]. Stakeholders have to be convinced that companies show an honest picture of their situation. Therefore, all of the above mentioned aspects are important. The strategy, values and targets have to be in line with the expectations. In addition, the implementation has to be transparent and standardised to communicate the information comprehensibly. Regulations like the directive require several specifications of implementation [131, 133, 134]. Therefore, specific signals are increasingly important. They have to be clear and coherent. The result of the indicators as well as the policies should be ambitious but assessable. External certification, audits and cooperation as well as stakeholder engagement support the credibility [130, 135].

In particular, companies with huge influences on society and the environment have to show a conclusive strategy because they have been observed with more scepticism [130]. Additionally, sectors with direct customer contact, like the food industry, have recognised the need for more attention and have increased their efforts. In contrast, mainly business-to-business companies have not placed great significance on sustainability issues because they have less influence on their business model [134].

Ratings and Indices like the Dow Jones Sustainability Index are external signs that can help to estimate the authenticity of companies. It is almost standard for large international companies to be part of an index, rating or on a list of award winners [1, 38, 65, 96, 106, 119]. Thus, it decreases the authenticity of a company to be eliminated from an index like Volkswagen after the emission case [61].

The example of Volkswagen shows that even an acknowledged company with a comprehensive report and many signals in areas like occupational health as well as social engagement can have a compliance and governance problem [132, 133, 134, 135]. The sustainability strategy must be integrated into the whole company. An internal control system is important to recognise misbehaviour before wrong conduct escalates. It does not matter how much effort has been made to demonstrate a sustainable picture if there is a problem in the internal implementation. Violations against legal compliance or self-imposed regulation can destroy the trust of stakeholders [134]. Volkswagen was not the first automobile manufacturer to manipulate emission software but the public reaction has been enormous. The reasons for this are multifaceted. One factor is that the company has emphasised its sustainability efforts in the past [15, 54, 131]. Nonetheless, it is crucial that the company has to manage the situation. However, once authenticity is destroyed, it is very hard to get back to the previous status. A company in such a position must rework its whole sustainability strategy and communicate the modifications in a clear way. Thus, sustainability reporting is an important instrument to demonstrate changing processes and illustrate legitimacy [134, 135].

## Discussion

An increasing number of companies report their sustainability actions and strategies. The findings cooperate with the literature that states that sustainability reporting has developed from a niche strategy to a general requirement [132, 133, 134]. In the past, highlighting sustainability efforts used to be a voluntary tool to support corporate goals [132]. Although sustainability reporting is compulsory for many companies, smaller companies can decide if and how to report non-financial information. However, a relatively new trend is the widening of the reporting scope. An increasing number of organisations report on their entire value chain and this puts pressure on suppliers to report non-financial information as well [134, 135]. Reporting by choice has often been motivated by competition against other companies, by the desire to prevent risk and by the demand of stakeholders. Furthermore, sustainability reports have developed from a communication device to a controlling tool that defines information needed to support business decisions [133, 134, 135].

The findings are in line with the statement of Young and Marais (2012) that high impact industries are under more pressure to demonstrate non-financial information [133, 135]. As the comparison of the companies in Appendix III shows, the three automotive companies have the most comprehensive reports compared to the other industries. Furthermore, Appendix III illustrates that the Italian companies have the most extensive reports in comparison by country, which is in line with the results of KPMG (2013). However, the Scandinavian companies, specifically, have a good reputation and countries like Sweden or

Denmark are early adopters in the legal integration of mandatory reporting of non-financial information [131, 133, 135].

Nonetheless, as the literature and the newspaper analysis shows, the difference between corporate statements and practice is still often wide. While Luft Mobus (2005) argues that mandatory reporting limits the possibilities to disguise negative information, it is still feasible to use a distraction strategy as described by Perks et al. (2013). Examples like Volkswagen show that companies that present comprehensive reports can display a sugar-coated image of their sustainability strategy [54, 131, 134, 135]. However, there are signals that can increase credibility and authenticity. External audits, certifications, high rankings and listings on sustainability indices are important signs for stakeholders. Nonetheless, a proper examination is a prerequisite for deciding, on an individual basis, if a sustainability strategy and reporting is authentic. Standards and frameworks with a massive selection of indicators make it easier to compare the results of companies' actions. Despite the value of comparability and indicators, an overwhelming report with many indicators can distract from the essential message. Therefore, an overload of information does not necessarily make a report authentic [131, 133, 135].

As the literature illustrates, integrated reporting is an important instrument to demonstrate a continuous commitment (Beck et al., 2015). The findings show that integrated reporting is a trend observed in the behaviour of the exemplary companies from Sweden [1, 19, 27]. In general, a clear and comprehensible demonstration of material issues and the integration of stakeholders are important signs for authenticity [131, 132, 133, 134, 134]. The directive enforces more transparency of sustainability reports and increases the number of companies required to report sustainability issues. However, transparency does not guarantee that the companies are more sustainable. It is down to the individual company to take the directive as an opportunity or just as an expensive duty [134, 135].

## Conclusion

The motives for sustainability reporting have changed. Due to stakeholder demand and legal obligations, it has become a factor for legitimacy. Increasingly, companies are expected to include sustainability issues in their value systems, strategies and targets. In addition, actions must be presented via sustainability reporting. Implementation has become more specified because of the creation of expected standards, specified frameworks and legal requirements. However, companies can still decide between several implementation possibilities, for example, what framework to use or whether to include the entire supply chain. Transparency has increased due to the guidelines and reporting frameworks. Further, recent reports are more standardized and comparable for stakeholders.

Nonetheless, companies can distinguish themselves with signals that are not compulsory or try to demonstrate better results than competitors. Consequently, stakeholders assess the authenticity of the communicated information and determine if the information matches up with their values and the actual behaviour of the companies. If stakeholders are not convinced of the authenticity, the motives are scrutinised and legitimacy can be damaged. Then, companies need to review their strategy and implementation to show that they have changed to be in line with the expectations.

The directive increases the number of companies that have to report non-financial information within the EU. However, the requirements are not specific and therefore, give member states and companies room for interpretation. Companies that already publish sustainability reports in accordance with GRI do not have to adapt to overwhelming supplements. However, they can stand out by emphasising their authentic intentions.

This article contributes to three streams. First, it contributes to literature as it shows the possibility of analysing companies with the aid of a framework that is in line with legitimacy, signalling and authenticity theories. Second, it contributes to the study of sustainability reporting because it illustrates the trend from voluntary to mandatory publishing and the differentiation signals of standardised reports as well as authentic characteristics. Third, it contributes to practice because it demonstrates requirements as well as impacts of the directive 2014/95/EU and gives companies direction on what to consider when following the directive.

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# Appendix I: Documents for Analyses

| No | Title | Type/Source | Year |
|---|---|---|---|
| | **Volvo Group** | | |
| 1 | The Volvo Group Annual and Sustainability Report 2015 | Annual and Sustainability Report | 2015 |
| 2 | The Volvo Group Sustainability Report 2014 | Sustainability Report | 2014 |
| 3 | The Volvo Group Sustainability Report 2013 | Sustainability Report | 2013 |
| 4 | Volvo Group - GRI G4 Supplement to the Annual and Sustainability Report 2015 | GRI Index | 2015 |
| 5 | GRI Index | GRI Index | 2014 |
| 6 | GRI Index | GRI Index | 2013 |
| 7 | Volvo Group - Our history - 1999 | Web document: http://www.volvogroup.com/group/global/en-gb/volvo%20group/history/ourhistory/1990/Pages/1999.aspx | retrieved June 30, 2016 |
| 8 | EU ermittelt gegen Daimler & Co. Lkw-Kartell droht Milliardenstrafe | Handelsblatt | 30.05.16 |
| 9 | Lastwagenherstellern droht Rekordkartellstrafe | Frankfurter Allgemeine Zeitung | 21.11.14 |
| 10 | Volvo Trucks plant weiteren Stellenabbau | Handelsblatt | 13.11.14 |
| 11 | Stellenstreichungen - Volvo will noch profitabler werden | Handelsblatt | 12.11.14 |
| 12 | Schwedischer LKW-Bauer - Volvo spart weiter trotz Gewinnsprung | Handelsblatt | 24.10.14 |
| 13 | Alternative Technik - Grüne Welle für Stadtbusse | Handelsblatt | 26.09.14 |
| 14 | Schöne neue Rüstungswelt | Frankfurter Allgemeine Zeitung | 29.07.14 |
| 15 | Volvo Group ordered by US Court to pay penalties in engine emission case | Press release AB Volvo | 19.07.14 |
| 16 | Volvo wirbt um Panzerbauer Nexter | Handelsblatt | 18.10.13 |
| 17 | Volvo plant umfassendes Sparpaket | Handelsblatt | 25.09.13 |
| 18 | Volvo | E-mail | 2016 |
| | **Telia Company** | | |
| 19 | What we did in 2015 - Annual + Sustainability Report 2015 | Annual and Sustainability Report incl. GRI Index | 2015 |
| 20 | 2014 Annual + Sustainability Report | Annual and Sustainability Report incl. GRI Index | 2014 |
| 21 | Step by step shaping a sustainable TeliaSonera - Sustainability Report 2013 | Annual and Sustainability Report incl. GRI Index | 2013 |
| 22 | Towards sustainability through telecommunications services - CSR report 2004 | Sustainability Report | 2004 |
| 23 | Verloren in Usbekistan | Frankfurter Allgemeine Zeitung | 05.03.16 |
| 24 | Telia Sonera sucht den Neuanfang | Frankfurter Allgemeine Zeitung | 15.04.13 |
| 25 | Telia-Sonera-Chef tritt wegen Schmiergeldaffäre zurück | Handelsblatt | 04.02.13 |
| 26 | Telia Company | E-mail | 2016 |

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|---|---|---|---|
| | **Vattenfall** | | |
| 27 | Energy you want - Vattenfall Annual and Sustainaility Report 2015 | Annual and Sustainability Report incl. GRI Index | 2015 |
| 28 | Toward a more sustainable energy portfolio - Annual and Sustainaility Report 2015 | Annual and Sustainability Report incl. GRI Index | 2014 |
| 29 | Continued positioning for tomorrow’s energy market - Annual and Sustainaility Report 2015 | Annual and Sustainability Report incl. GRI Index | 2013 |
| 30 | Guidelines for external reporting by state-owned companies | Others | 2007 |
| 31 | Entlassungen bei Vattenfall | Frankfurter Allgemeine Zeitung | 03.05.16 |
| 32 | Braunkohle zum Spottpreis | Handelsblatt | 19.04.16 |
| 33 | Vattenfall hat genug von Greenpeace | Handelsblatt | 03.11.15 |
| 34 | Atomausstieg - Vattenfall-Klage kostet Deutschland schon jetzt Millionen | Handelsblatt | 24.10.15 |
| 35 | Unbegrenzte Haftung | Handelsblatt | 03.09.15 |
| 36 | Vattenfall stiehlt sich aus Atom-Risiko | Handelsblatt | 19.05.14 |
| 37 | Vattenfall | E-mail | 2016 |
| | **H&M** | | |
| 38 | H&M Conscious actions - Sustainability Report 2015 | Sustainability Report | 2015 |
| 39 | H&M Conscious actions - Sustainability Report 2014 | Sustainability Report | 2014 |
| 40 | H&M Conscious actions - Sustainability Report 2013 | Sustainability Report | 2013 |
| 41 | GRI Index | GRI Index | 2015 |
| 42 | GRI Index | GRI Index | 2014 |
| 43 | GRI Index | GRI Index | 2013 |
| 44 | H&M Annual Report 2015 | Annual Report | 2015 |
| 45 | Die sieben Todsünden des Kapitalismus | Handelsblatt | 29.04.16 |
| 46 | H&M verkauft Jeans mit recycelter Baumwolle | Frankfurter Allgemeine Zeitung | 22.08.15 |
| 47 | H&M in Kritik | Handelsblatt | 30.10.14 |
| 48 | Grün, grün, grün sind alle meine Kleider | Frankfurter Allgemeine Zeitung | 11.05.14 |
| 49 | Feuersturm in der Textilbranche | Frankfurter Allgemeine Zeitung | 24.04.14 |
| 50 | "Tödliche Arbeit" in Bangladesch geht weiter | Handelsblatt | 02.12.13 |
| 51 | H&M distanziert sich von Tierquälerei | Handelsblatt | 28.11.13 |
| 52 | Der Stoff aus dem die Armut ist | Frankfurter Allgemeine Zeitung | 03.05.13 |
| | **Volkswagen** | | |
| 53 | Sustainability and Responsibility | Web document: http://www.volkswagenag.com/content/vwcorp/content/en/sustainability_and_responsibility.html | retrieved July 31, 2016 |
| 54 | Sustainability Report 2014 | Sustainability Report incl. GRI Index | 2014 |
| 55 | Strategy, Economy, People, Environment, Indicators - Sustainability Report 2013 | Sustainability Report incl. GRI Index | 2013 |
| 56 | Sustainability Report 2005/2006 - Moving Generations | Sustainability Report incl. GRI Index | 2006 |

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|---|---|---|---|
| 57 | Moving people - Annual Report 2015 | Annual Report | 2015 |
| 58 | "VW ist mehr als Diesel" | Handelsblatt | 21.06.16 |
| 59 | Diesel-Rückruf rollt an | Frankfurter Allgemeine Zeitung | 11.06.16 |
| 60 | Viele Arbeitsplätze bei VW bedroht | Frankfurter Allgemeine Zeitung | 11.03.16 |
| 61 | „Zehn Prozent von null ist null“ | Handelsblatt | 03.12.15 |
| 62 | Knock-out in den USA | Handelsblatt | 21.09.15 |
| 63 | In die Sackgasse | Handelsblatt | 22.01.15 |
| 64 | Gute Ökobilanz | Handelsblatt | 13.09.13 |
| | **Deutsche Telekom** | | |
| 65 | Corporate Responsibility Report 2015 | Sustainability Report | 2015 |
| 66 | Corporate Responsibility Report 2014 | Sustainability Report | 2014 |
| 67 | Corporate Responsibility Report 2013 | Sustainability Report | 2013 |
| 68 | GRI Index | GRI Index | 2015 |
| 69 | Corporate Responsibility Report 2014 - GRI Index | GRI Index | 2014 |
| 70 | Corporate Responsibility Report 2013 - GRI Index | GRI Index | 2013 |
| 71 | The 2015 financial year - answers for the digital future | Annual Report | 2015 |
| 72 | Das schwere Erbe einer Ex-Behörde | Handelsblatt | 24.05.16 |
| 73 | Schweige-Kartell | Handelsblatt | 04.05.16 |
| 74 | Ermittlungen gegen Telekom-Vorstand Kremer | Frankfurter Allgemeine Zeitung | 02.04.16 |
| 75 | Der vergessene Konsument | Handelsblatt | 28.10.15 |
| 76 | Telekom legt Schmiergeld-Affäre mit Millionenzahlung bei | Handelsblatt | 31.12.11 |
| 77 | Telekom gesteht massenhafte Rechtsbrüche | Handelsblatt | 11.02.10 |
| | **RWE** | | |
| 78 | Our Responsibility. Report 2015 - Securing the future. | Sustainability Report incl. GRI Index | 2015 |
| 79 | Our Responsibility. Report 2014 | Sustainability Report incl. GRI Index | 2014 |
| 80 | Our Responsibility. Report 2014 - Earning trust. | Sustainability Report incl. GRI Index | 2013 |
| 81 | Annual Report 2015 | Annual Report | 2015 |
| 82 | Annual Report 2014 | Annual Report | 2014 |
| 83 | Annual Report 2013 | Annual Report | 2013 |
| 84 | Eon, RWE, Vattenfall - Energieriesen ziehen Sparschraube an | Handelblatt | 24.06.16 |
| 85 | Die sieben Todsünden des Kapitalismus | Handelblatt | 29.04.16 |
| 86 | Atomlasten, fair geteilt | Frankfurter Allgemeine Zeitung | 28.04.16 |
| 87 | „Unglaubliche juristische Fehler“ | Frankfurter Allgemeine Zeitung | 21.04.16 |
| 88 | Den Kraftwerken geht die Kraft aus | Handelblatt | 19.04.16 |
| 89 | RWE soll Schadensersatz leisten | Frankfurter Allgemeine Zeitung | 14.04.16 |
| 90 | Rettungsplan für RWE | Handelblatt | 13.04.16 |
| 91 | Die Kratzer am "Klima-Vorbild" Deutschland | Frankfurter Allgemeine Zeitung | 02.11.15 |
| 92 | Der taumelnde Stromriese | Frankfurter Allgemeine Zeitung | 17.08.15 |

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|---|---|---|---|
| 93 | Wendemanöver: Wie Energieerzeuger in die neue Energiewelt starten | Frankfurter Allgemeine Zeitung | 10.04.15 |
| 94 | Müssen Bürger der Braunkohle weichen? | Frankfurter Allgemeine Zeitung | 05.06.13 |
| 95 | RWE | E-mail | 2016 |
| | **FCA** | | |
| 96 | 2015 Sustainability Report | Sustainability Report incl. GRI Index | 2015 |
| 97 | 2014 Sutainability Report - Economic, Environmental and Social Responsiblity | Sustainability Report incl. GRI Index | 2014 |
| 98 | 2013 Sutstainability Report - Economic, Environmental and Social Responsiblity (FIAT) | Sustainability Report incl. GRI Index | 2013 |
| 99 | 2015 Annual Report | Annual Report | 2015 |
| 100 | Fiat und Ministerium streiten über Abgaswerte | Frankfurter Allgemeine Zeitung | 23.05.16 |
| 101 | Neuer Aufruhr in der Autowelt | Frankfurter Allgemeine Zeitung | 15.01.16 |
| 102 | Fiat Chrysler ruft 570.000 Fahrzeuge zurück | Handelsblatt | 28.12.15 |
| 103 | EU bittet Konzern-Trickser zur Kasse | Handelsblatt | 22.10.15 |
| 104 | Steuertricks bei Fiat Chrysler? | Handelsblatt | 18.08.15 |
| 105 | Fiat Chrysler: Amerikanischer Albtraum | Handelsblatt | 28.07.15 |
| | **Telecom Italia** | | |
| 106 | 2015 Sustainability Report | Sustainability Report incl. GRI Index | 2015 |
| 107 | Sustainability Report 2014 | Sustainability Report incl. GRI Index | 2014 |
| 108 | Sustainability Report 2013 | Sustainability Report | 2013 |
| 109 | G3.1 Content Index | GRI Index | 2013 |
| 110 | 2015 Annual Report | Annual Report | 2015 |
| 111 | Telecom Italia Group Annual Report 2000 | Annual Report | 2000 |
| 112 | In Italien fehlt der Motor für technische Entwickliung | Frankfurter Allgemeine Zeitung | 02.07.14 |
| 113 | Fitch stuft Bonitätsnote der Telecom Italia herab | Frankfurter Allgemeine Zeitung | 06.08.13 |
| 114 | Vodafone verklagt Telecom Italia auf eine Milliarde Euro | Handelsblatt | 04.08.13 |
| 115 | Durchsuchung bei Telecom Italia | Handelsblatt | 25.06.10 |
| 116 | Italiens griechische Tragödie | Handelsblatt | 11.03.10 |
| 117 | Ermittlungen im italienischen Telekommunikationsgeschäft | Frankfurter Allgemeine Zeitung | 25.02.10 |
| 118 | Telecom Italia | E-mail/interview | 2016 |
| | **Enel** | | |
| 119 | Seeding energy -  Sustainability Report 2015 | Sustainability Report incl. GRI Index | 2015 |
| 120 | Sustainability Report 2014 | Sustainability Report incl. GRI Index | 2014 |
| 121 | Sustainability Report 2013 | Sustainability Report incl. GRI Index | 2013 |

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|---|---|---|---|
| 122 | Annual Report 2015 | Annual Report | 2015 |
| 123 | Sustainability Report 2011 - Fifty Years | Sustainability Report incl. GRI Index | 2011 |
| 124 | An der italienischen Börse sind die alten Helden müde geworden | Frankfurter Allgemeine Zeitung | 10.05.16 |
| 125 | Eisenbahnen zu verkaufen | Handelsblatt | 24.11.15 |
| 126 | Falsches Signal | Handelsblatt | 04.11.15 |
| 127 | Energiekonzerne klagen über fehlende Perspektiven | Frankfurter Allgemeine Zeitung | 23.05.13 |
| 128 | Korruption rechnet sich nicht | Frankfurter Allgemeine Zeitung | 05.02.13 |
| 129 | Enel | E-mail | 2016 |
| | **Interviews** | | |
| 130 | Michael Viehs | Hermes EOS Services | 2016 |
| 131 | Christine Jasch | Ernst & Young Wien | 2016 |
| 132 | Georg Lahme | Klenk & Hoursch AG | 2016 |
| 133 | Sabine Braun | Akzente Kommunikation und Beratung GmbH | 2016 |
| 134 | René Schmidpeter | Cologne Business School | 2016 |
| 135 | Karl Resel | Denkstatt | 2016 |

# Appendix II: Content overview of the sustainability reports

| | | **Volvo** | | | **Telia Company** | | | **Vattenfall** | | | **H&M** | | | **Volkswagen** | | | **Deutsche Telekom** | | | **RWE** | | | **FCA** | | | **Telecom Italia** | | | **Enel** | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Sustainability Report since | 2007 [2] | | | 2004 [20] | | | 2003 [24] | | | 2002 [34] | | | 2005/2006 [52] | | | 2003 (1996: various publications) [61] | | | 2001 [77] | | | Fiat: 2004 (1992: environmental report) [93] | | | 2002 (1997: social report) [105] | | | 2002 [115] | | |
| | Year | **15** | **14** | **13** | **15** | **14** | **13** | **15** | **14** | **13** | **15** | **14** | **13** | **15** | **14** | **13** | **15** | **14** | **13** | **15** | **14** | **13** | **15** | **14** | **13** | **15** | **14** | **13** | **15** | **14** | **13** |
| | Reference | [1, 4] | [2] | [3] | [19] | [20] | [21] | [27] | [28] | [29] | [38] | [39] | [40] | [53] | [54] | [55] | [65] | [66] | [67] | [78] | [79, 82] | [80, 83] | [96] | [97] | [98] | [106] | [107] | [108] | [119] | [120] | [121] |
| | int - integrated sep - separate | int | sep | sep | in | in | in | in | in | in | sep | sep | sep | | sep | sep | sep | sep | sep | sep | sep | sep | sep | sep | sep | sep | sep | sep | sep | sep | sep |
| | GRI | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes |
| | Sector specific GRI | | | | yes | yes | yes | yes | yes | yes | yes | yes | yes | | | | | | yes | yes | yes | yes | | | | | | | yes | yes | yes |
| | UNGC | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | | yes | yes | yes | yes | yes | yes | yes | yes | | | | yes | yes | yes | yes | yes | yes |
| | UNPRR | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | | | | yes | yes | yes | | | | yes | yes | yes | yes | yes | yes | yes | yes | yes |
| | OECDGME | yes | yes | yes | yes | yes | yes | yes | yes | yes | | | | | yes | yes | yes | yes | yes | | | | yes | yes | yes | yes | yes | yes | | | |
| | ISO 26000 | | | | | yes | yes | | | | | | | | | | | | | | | | | yes | yes | yes | yes | yes | | | |
| | EMAS | | | | | | | | | | | | | | yes | yes | | | | | | | | | | | | | yes | yes | yes |
| | ILO | | | yes | yes | yes | yes | | | | yes | yes | yes | | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes |
| | Code of conduct | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes |
| Indices/Ratings | DJSI World/Europe | yes | yes | yes | | | | | | | yes | yes | yes | | yes | yes | yes | | | | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes |
| | CDP | yes | yes | | yes | yes | yes | | State-owned | | | yes | yes | | yes | yes | yes | yes | yes | | yes | | yes | yes | yes | yes | yes | | yes | yes | yes |
| | STOXX® ESG | | | yes | | | | | | | | | | | yes | yes | yes | yes | yes | | | | | yes | yes | yes | | | yes | yes | |
| | FTSE4good | | | | | yes | yes | | | | yes | yes | yes | | | yes | yes | yes | yes | | | | | yes | yes | yes | yes | yes | yes | yes | yes |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ESI Excellence Europe | | | | | | | | | | | | | yes | yes | | | | | | | | yes | yes | yes | yes | yes | | | |
| | Euronext Vigeo | | | | | | | | | | | | | yes | | | | | | | | | yes | yes | yes | yes | yes | | | |
| | Global Compact 100 | | | | | | | | | | yes | yes | yes | yes | yes | yes | yes | yes | | | | | | | | | | | | |
| | Folksam Index | | | yes | | | yes | | | | | | | | | | | | | | | | | | | | | | | |
| | ECPI | | | | | | | | | | | | | yes | yes | | | | | | | | yes | | yes | yes | yes | yes | | |
| | oekom research | | | yes | | yes | | | | | | | | yes | yes | yes | yes | yes | | | | | | | yes | yes | yes | | | |
| | further | | | yes | yes | yes | yes | | | | yes | yes | yes | yes | | | | yes | | | | | | yes | yes | yes | yes | | | |
| Certifications | ISO 14001[5] | yes | yes | yes | yes | yes | yes | yes | | yes | | | | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes |
| | ISO 50001[6] | yes | yes | yes | | | | yes | | | | | | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | | | |
| | ISO 9001[7] | yes | yes | yes | | yes | yes | | | | | | | yes | | | | yes | | | | | | | yes | yes | yes | yes | yes | yes |
| | OHSAS 18001[8] | | | | yes | yes | | | | | | | | yes | yes | yes | yes | yes | | | | yes | yes | yes | yes | yes | yes | yes | yes | yes |
| | SA8000[9] | | | | | | | | | | | | | yes | yes | | | | | | | | | | yes | yes | yes | | | |
| | AA1000[10] | | | | | | | | | | | | | yes | yes | yes | yes | yes | | | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes |
| | Further | | | yes | | | | | | | | | | yes | yes | | | | | | | yes | yes | yes | yes | yes | yes | | | |
| | External assurance | no | no | no | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes |

[5] Environmental management - Requirements with guidance for use
[6] Energy management systems - Requirements with guidance for use
[7] Quality management systems – Requirements
[8] Occupational Health and Safety Assessment Systems
[9] Social accountability
[10] AccountAbility Principles Standard

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# Appendix III: GRI Indices – specific GRI aspects and indicators

# (adapted from Global Reporting Initiative 2013a, 2015)

| | n = new in G3.1/G4<br>(x) = partially reported | | Volvo | | | Telia Company | | | Vattenfall | | | H&M | | | VW | | | Deutsche Telekom | | | RWE | | | FCA (Fiat) | | | Telecom Italia | | | Enel | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Year** | | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 |
| | **Reverence** | | [4] | [5] | [6] | [19] | [20] | [21] | [27] | [28] | [29] | [41] | [42] | [43] | [53] | [54] | [55] | [68] | [69] | [70] | [78] | [79] | [80] | [96] | [97] | [98] | [106] | [107] | [108] | [119] | [120] | [121] |
| | **GRI version** | | GRI G4 (Core) | GRI G4 (Core) | GRI G3.1 (Level B) | GRI G4 (Core) | GRI G4 (Core) | GRI G3.1 (Level B+) | GRI G4 (Core) | GRI G4 (Core) | GRI G4 (core) | GRI G4 (Core) | GRI G4 (Core) | GRI G4 (Core) | no report | GRI G4 (Comprehensive) | GRI G3 (Level A+) | GRI G4 (Core) | GRI G4 (Core) | GRI G3 (level A+) | GRI G4 (Core) | GRI G4 (Core) | GRI G3 (Level A+) | GRI G4 (Comprehensive) | GRI G4 (Comprehensive) | GRI G4 (Comprehensive) | GRI G4 (Comprehensive) | GRI G4 (Comprehensive) | GRI G3.1 (Level A+) | GRI G4 (Core) | GRI G3.1 (Level A+) | GRI G3.1 (Level A+) |
| | | x | 10 | 9 | 9 | 0 | 4 | 5 | 5 | 6 | 3 | 7 | 7 | 7 | | 12 | 9 | 5 | 7 | 8 | 10 | 10 | 7 | 12 | 12 | 12 | 1 | 1 | 6 | 9 | 9 | 8 |
| | | (x) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | **Environmental matters/aspects** | **Σ** | **10** | **9** | **9** | **0** | **4** | **5** | **5** | **6** | **5** | **7** | **7** | **7** | | **12** | **9** | **5** | **7** | **8** | **10** | **10** | **7** | **12** | **12** | **12** | **1** | **1** | **6** | **9** | **9** | **8** |
| | G4-EC1 – G4-EC34 | x | 13 | 13 | 16 | 7 | 8 | 7 | 3 | 3 | 1 | 10 | 10 | 11 | | 28 | 27 | 6 | 8 | 11 | 17 | 18 | 16 | 34 | 34 | 34 | 9 | 9 | 13 | 26 | 25 | 25 |
| | | (x) | 0 | 0 | 8 | 3 | 3 | 4 | 5 | 6 | 7 | 4 | 4 | 4 | | 6 | 1 | 3 | 3 | 9 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 1 |
| | **indicators** | **Σ** | **13** | **13** | **24** | **10** | **11** | **11** | **8** | **9** | **8** | **14** | **14** | **15** | | **34** | **28** | **9** | **11** | **20** | **19** | **19** | **17** | **34** | **34** | **34** | **9** | **9** | **15** | **26** | **26** | **26** |
| **DMA** | ***Materials*** | | **x** | **x** | **x** | | | | | | | **x** | **x** | **x** | | **x** | **x** | | | | | | **x** | **x** | **x** | **x** | | | | **x** | **x** | **x** |

| | n = new in G3.1/G4<br>(x) = partially reported | Volvo | | | Telia Company | | | Vattenfall | | | H&M | | | VW | | | Deutsche Telekom | | | RWE | | | FCA (Fiat) | | | Telecom Italia | | | Enel | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Year** | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 |
| G4-EN1 | *Materials by weight or volume* | x | | (x) | | | | | | | (x) | (x) | (x) | | x | x | | | | | | x | x | x | x | | | | x | x | x |
| G4-EN2 | *Percentage of materials used that are recycled input materials* | | x | x | | | | | | | x | x | x | | x | x | | | | | | | x | x | x | | | | x | x | x |
| **DMA** | ***Energy*** | **x** | **x** | **x** | | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | | | **x** | **x** | **x** | **x** |
| G4-EN3 | *Energy consumption within the organisation* | x | x | (x) | (x) | (x) | x | (x) | (x) | (x) | x | x | x | | x | x | (x) | (x) | x | x | x | x | x | x | x | x | x | x | x | x | x |
| G4-EN4 | *Energy consumption outside the organisation* | | | n[11] | | | n | | | | x | x | x | | (x) | n | | | n | | | n | x | x | x | | | n | | n | n |
| G4-EN5 | *Energy intensity* | x | x | n | x | x | n | | | | x | x | x | | x | n | x | x | n | | | n | x | x | x | x | x | n | | n | n |
| G4-EN6 | *Reductions of energy consumption* | x | x | (x) | x | x | (x) | | | | | | x | | x | x | | | x | | | | x | x | x | x | x | x | x | x | x |
| G4-EN7 | *Reductions in energy requirements of products and services* | x | x | x | | | (x) | | | | | | | | x | x | | | x | | | | x | x | x | | | x | x | x | x |
| **DMA** | ***Water*** | **x** | **x** | **x** | | | **x** | **x** | **x** | **(x)** | **x** | **x** | **x** | | **x** | **x** | | | **x** | **x** | **x** | **x** | **x** | **x** | **x** | | | **x** | **x** | **x** | **x** |
| G4-EN8 | *Total water withdrawals by source* | | | (x) | | x | x | (x) | (x) | (x) | (x) | (x) | (x) | | x | x | | | (x) | x | x | x | x | x | x | x | x | x | x | x | x |
| G4-EN9 | *Water sources significantly affected by withdrawal of water* | | | (x) | | | | | | | (x) | (x) | (x) | | x | x | | | x | | | | x | x | x | | | x | x | x | x |
| G4-EN10 | *Percentage and total volume of water recycled and reused* | | | | | | | | | | (x) | (x) | (x) | | (x) | x | | | (x) | | | | x | x | x | | | | x | x | x |
| **DMA** | ***Biodiversity*** | | | **x** | | | | | **x** | **x** | | | | | **x** | **x** | | | **x** | **x** | **x** | **x** | **x** | **x** | **x** | | | | **x** | **x** | **x** |
| G4-EN11 | *Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high* | | | | | | | | (x) | (x) | | | | | x | x | | | (x) | x | x | x | x | x | x | | | | x | x | x |

| | n = new in G3.1/G4<br>(x) = partially reported | Volvo | | | Telia Company | | | Vattenfall | | | H&M | | | VW | | | Deutsche Telekom | | | RWE | | | FCA (Fiat) | | | Telecom Italia | | | Enel | | |
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| | **Year** | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 |
| | *biodiversity value outside protected areas* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| G4-EN12 | *Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas* | | | (x) | | | | | | | | | | | x | x | | | (x) | x | x | x | x | x | x | | | | x | x | x |
| G4-EN13 | *Habitats protected or restored* | | | | | | | | | | | | | | x | x | | | (x) | | | x | x | x | x | | | | x | x | x |
| G4-EN14 | *Total number of IUCN red list species and national conservation list species with habitats in areas affected by operation, by level of extinction risk* | | | | | | | | | | | | | | x | x | | | | | | | x | x | x | | | | x | x | x |
| **DMA** | ***Emissions*** | **x** | **x** | **x** | | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | | | **x** | **x** | **x** | |
| G4-EN15 | *Direct greenhouse gas (GHG) emissions (Scope 1)* | x | x | x | x | x | x | (x) | (x) | (x) | x | x | x | | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| G4-EN16 | *Energy indirect GHG emissions (Scope 2)* | x | x | x | x | x | x | | | | x | x | x | | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| G4-EN17 | *Other indirect GHG emissions (Scope 3)* | | x | x | x | x | x | | | | x | x | x | | x | x | x | x | x | x | x | x | x | x | x | | | x | x | x | x |
| G4-EN18 | *GHG emissions intensity* | | | n | x | x | n | (x) | (x) | (x) | | | | | x | n | | | n | x | x | n | x | x | x | | | n | | n | n |
| G4-EN19 | *Reduction of GHG emissions* | x | x | x | x | x | x | | | | | | | | x | x | | | x | x | x | x | x | x | x | x | x | x | x | x | x |
| G4-EN20 | *Emissions of ozone-depleting substances (ODS)* | | | x | | | | | | | | | | | x | x | | | | x | x | x | x | x | x | | | x | x | x | x |

| | n = new in G3.1/G4<br>(x) = partially reported | **Volvo** | | | **Telia Company** | | | **Vattenfall** | | | **H&M** | | | **VW** | | | **Deutsche Telekom** | | | **RWE** | | | **FCA (Fiat)** | | | **Telecom Italia** | | | **Enel** | | |
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| | **Year** | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 |
| G4-EN21 | *$NO_X$, $SO_X$ and other significant air emissions* | x | x | x | | | | (x) | (x) | (x) | | | | | x | x | | | | x | x | x | x | x | x | | | | x | x | x |
| **DMA** | ***Effluents and Waste*** | **x** | **x** | **n** | | **x** | **n** | **x** | **x** | **(x)** | **x** | **x** | **x** | | **x** | **n** | **x** | **x** | **n** | **x** | **x** | **n** | **x** | **x** | **x** | | | **n** | **x** | **n** | **n** |
| G4-EN22 | *Total water discharge by quality and destination* | | | x | | | | x | x | x | x | x | x | | x | x | | | (x) | x | x | x | x | x | x | | | | x | x | x |
| G4-EN23 | *Total weight of waste by type and disposal method* | | | x | (x) | (x) | (x) | x | x | (x) | | | | | x | x | (x) | (x) | (x) | x | x | x | x | x | x | x | x | (x) | x | x | x |
| G4-EN24 | *Total number and volume of significant spills* | | | x | | | | | | | | | | | x | x | | | | x | x | x | x | x | x | | | x | x | x | x |
| G4-EN25 | *Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel convention, Annex I, II, III, and VIII, and percentage of transported waste shipped internationally* | | | x | | | | | | | | | | | (x) | (x) | | | | | | | x | x | x | | | | | | |
| G4-EN26 | *Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the organisation's discharges of water and runoff* | | | (x) | | | | | | | | | | | x | x | | | | | | | x | x | x | | | | x | x | x |
| **DMA** | ***Products and Services*** | **x** | **x** | **x** | | | **x** | | | | **x** | **x** | **x** | | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | | | **x** | | **x** | **x** |
| G4-EN27 | *Extent of impact mitigation of environmental impacts of products and services* | x | x | x | | | (x) | | | | x | x | x | | x | x | x | x | x | (x) | x | (x) | x | x | x | | | x | | x | x |

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| | n = new in G3.1/G4<br>(x) = partially reported | **Volvo** | | | **Telia Company** | | | **Vattenfall** | | | **H&M** | | | **VW** | | | **Deutsche Telekom** | | | **RWE** | | | **FCA (Fiat)** | | | **Telecom Italia** | | | **Enel** | | |
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| | **Year** | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 |
| G4-EN28 | *Percentage of products and packaging materials that are reclaimed by category* | | | x | | | | | | | | | | | x | x | | | (x) | | | | x | x | x | | | x | | | |
| **DMA** | ***Compliance (Environmental)*** | **x** | **x** | **x** | | | **x** | | | | | | | | **x** | **x** | | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | | **x** | **x** |
| G4-EN29 | *Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations* | | x | x | | | x | | | | | | | | x | x | | x | x | x | x | x | x | x | x | x | x | | | (x) | (x) |
| **DMA** | ***Transport*** | **x** | **x** | **x** | | | | | | | | | | | **x** | **x** | | **x** | **x** | | | | **x** | **x** | **x** | | | **x** | **x** | **x** | **x** |
| G4-EN30 | *Significant environmental impacts of transporting products and other goods and materials for the organisation's operations, and transporting members of the workforce* | x | | x | | | | | | | | | | | x | x | | x | x | | | | x | x | x | | | (x) | x | x | x |
| **DMA** | ***Overall*** | | | **x** | | | | | | | | | | | **x** | **x** | | | **x** | **x** | **x** | | **x** | **x** | **x** | | | | **x** | **x** | **x** |
| G4-EN31 | *Total environmental protection expenditures and investments by type* | | | (x) | | | | | | | | | | | x | x | | | (x) | x | x | | x | x | x | | | | x | x | x |
| **DMA** | ***Supplier Environmental Assessment*** | **x** | **x** | **n** | | **x** | **n** | **x** | **x** | | **x** | **x** | **x** | | **x** | **n** | **x** | **x** | **n** | **x** | **x** | **n** | **x** | **x** | **x** | | | **n** | **x** | **n** | **n** |
| G4-EN32 | *Percentage of new suppliers that were screened using environmental criteria* | x | | n | (x) | (x) | n | x | x | | x | x | x | | (x) | n | (x) | (x) | n | x | x | n | x | x | x | | | n | x | n | n |

| | n = new in G3.1/G4<br>(x) = partially reported | | Volvo | | | Telia Company | | | Vattenfall | | | H&M | | | VW | | | Deutsche Telekom | | | RWE | | | FCA (Fiat) | | | Telecom Italia | | | Enel | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Year** | | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 |
| G4-EN33 | *Significant actual and potential negative environmental impacts in the supply chain and actions taken* | | x | x | n | | | n | | | | | | | | (x) | n | x | x | n | (x) | (x) | n | x | x | x | | | n | x | n | n |
| **DMA** | ***Environmental Grievance Mechanisms*** | | **x** | | **n** | | | **n** | | | | | | | | **x** | **n** | | | **n** | **x** | **x** | **n** | **x** | **x** | **x** | | | **n** | | **n** | **n** |
| G4-EN34 | *Number of grievances about environmental impacts filed, addressed, and resolved through formal grievance mechanisms* | | | | n | | | n | | | | | | | | (x) | n | | | n | | | n | x | x | x | | | n | | n | n |
| | Employee (E) | x (E) | 7 | 6 | 5 | 0 | 4 | 4 | 4 | 3 | 3 | 7 | 7 | 7 | 0 | 7 | 5 | 8 | 8 | 5 | 8 | 8 | 4 | 8 | 8 | 8 | 7 | 7 | 5 | 8 | 5 | 5 |
| | | (x) (E) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Social (S) | x (S) | 2 | 1 | 3 | 0 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 0 | 5 | 3 | 1 | 3 | 3 | 5 | 5 | 2 | 5 | 5 | 5 | 4 | 4 | 3 | 4 | 3 | 3 |
| | | (x) (S) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | **Social and employee matters/aspects (E+S)** | **Σ** | **9** | **7** | **8** | **0** | **7** | **7** | **6** | **5** | **5** | **8** | **8** | **8** | **0** | **12** | **8** | **9** | **11** | **8** | **13** | **13** | **6** | **13** | **13** | **13** | **11** | **11** | **8** | **12** | **8** | **8** |
| | E: G4-LA1 – 16 | x (E) | 4 | 2 | 3 | 2 | 1 | 5 | 2 | 0 | 0 | 3 | 3 | 3 | 0 | 6 | 9 | 7 | 7 | 5 | 5 | 6 | 5 | 15 | 15 | 15 | 16 | 16 | 8 | 13 | 11 | 11 |
| | | (x) (E) | 0 | 0 | 4 | 2 | 3 | 3 | 2 | 3 | 3 | 6 | 6 | 6 | 0 | 10 | 2 | 5 | 5 | 7 | 4 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 1 |
| | S: G4-SO1 – 2; G4-SO7 – 11 | x (S) | 2 | 0 | 3 | 2 | 2 | 3 | 2 | 2 | 1 | 1 | 1 | 0 | 0 | 4 | 3 | 1 | 3 | 3 | 5 | 5 | 2 | 7 | 7 | 7 | 5 | 5 | 2 | 5 | 4 | 4 |
| | | (x) (S) | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 3 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |

| | n = new in G3.1/G4<br>(x) = partially reported | | Volvo | | | Telia Company | | | Vattenfall | | | H&M | | | VW | | | Deutsche Telekom | | | RWE | | | FCA (Fiat) | | | Telecom Italia | | | Enel | | |
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| | **Year** | | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 |
| | **indicators** | **Σ** | **6** | **2** | **10** | **7** | **7** | **11** | **6** | **5** | **5** | **10** | **10** | **10** | **0** | **23** | **14** | **13** | **16** | **15** | **15** | **15** | **8** | **22** | **22** | **22** | **21** | **21** | **13** | **18** | **16** | **16** |
| **DMA** | ***Employment (L)*** | | **x** | **x** | **x** | | | **x** | | | | **x** | **x** | **x** | | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| G4-LA1 | *Total number and rates of new employee hires and employee turnover by age group, gender and region*<br>*(mentioned at diversity section)* | | | | | | | x | | | | | | | | (x) | (x) | (x) | (x) | (x) | (x) | (x) | x | x | x | x | x | x | (x) | x | x | x |
| G4-LA2 | *Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation* | | | | x | | | | | | | (x) | (x) | (x) | | (x) | | | | x | | | | x | x | x | x | x | | | (x) | (x) |
| G4-LA3 | *Return to work and retention rates after parental leave, by gender* | | | | | | | | | | | | | | | (x) | n | | | n | | | n | x | x | x | x | x | (x) | | | |
| **DMA** | ***Labour/Management Relations (L)*** | | **x** | **x** | **x** | | | **x** | | | | **x** | **x** | **x** | | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| G4-LA4 | *Minimum notice periods regarding operational changes, including whether these are specified in collective agreements* | | | | | | | x | | | | (x) | (x) | (x) | | x | x | (x) | (x) | (x) | x | x | x | x | x | x | x | x | x | x | x | x |

| | n = new in G3.1/G4<br>(x) = partially reported | **Volvo** | | | **Telia Company** | | | **Vattenfall** | | | **H&M** | | | **VW** | | | **Deutsche Telekom** | | | **RWE** | | | **FCA (Fiat)** | | | **Telecom Italia** | | | **Enel** | | |
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| | **Year** | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 |
| **DMA** | ***Occupational Health and Safety (L)*** | **x** | **x** | **x** | | **x** | | **x** | **x** | **x** | **x** | **x** | **x** | | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| G4-LA5 | *Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs* | | | | | | x | | | | (x) | (x) | (x) | | x | x | x | x | (x) | | | | x | x | x | x | x | | x | x | x |
| G4-LA6 | *Type of injury and rates of injury, occupational disease, lost days, absenteeism, and total number of work-related fatalities, by region and by gender* | x | x | (x) | (x) | (x) | (x) | x | (x) | (x) | | | | | (x) | (x) | x | x | x | (x) | (x) | (x) | x | x | x | x | x | x | x | x | x |
| G4-LA7 | *Workers with high incidence risk of diseases related to their occupation* | | | (x) | | | | | | | | | | | x | x | | | (x) | x | x | x | x | x | x | x | x | x | | x | x |
| G4-LA8 | *Health and safety topics covered in agreements with trade unions* | | | (x) | | | x | | | | x | x | x | | x | x | | | x | | | | x | x | x | x | x | x | x | x | x |
| **DMA** | ***Training and Education (L)*** | **x** | **x** | **x** | | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | | | **x** | **x** | **x** | **x** | **x** | **x** | | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| G4-LA9 | *Average hours of training per year per employee by gender, and by employee category* | | | | | | (x) | | | | (x) | (x) | (x) | | (x) | x | x | x | (x) | | | | x | x | x | x | x | x | x | x | x |
| G4-LA10 | *Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings* | x | x | x | | | | | | | | | | | x | x | x | x | x | x | x | | x | x | x | x | x | x | x | x | x |
| G4-LA11 | *Percentage of employees receiving regular performance and career* | x | | x | x | x | (x) | (x) | (x) | (x) | (x) | (x) | (x) | | (x) | x | x | x | (x) | | | | x | x | x | x | x | x | x | x | x |

| | n = new in G3.1/G4<br>(x) = partially reported | Volvo | | | Telia Company | | | Vattenfall | | | H&M | | | VW | | | Deutsche Telekom | | | RWE | | | FCA (Fiat) | | | Telecom Italia | | | Enel | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Year** | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 |
| | *development reviews, by gender and by employee category* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **DMA** | ***Diversity and equal opportunity (L)*** | **x** | **x** | **x** | | | **x** | **x** | **x** | **x** | **x** | **x** | **x** | | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| G4-LA12 | *Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity*<br><br>*(mentioned at diversity section)* | | | (x) | | | x | (x) | (x) | (x) | x | x | x | | x | x | (x) | (x) | x | (x) | x | x | x | x | x | x | x | x | x | x | x |
| **DMA** | ***Equal Remuneration for Women and Men (L)*** | | | **n** | | | **n** | | | | | | | | **x** | **n** | **x** | **x** | **n** | **x** | **x** | **n** | **x** | **x** | **x** | **x** | **x** | **n** | **x** | **n** | **n** |
| G4-LA13 | *Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation* | | | | | | | | | | | | | | (x) | x | (x) | (x) | (x) | x | x | x | | | | x | x | | x | x | x |
| **DMA** | ***Supplier Assessment for Labour Practices (L)*** | **x** | | **n** | | **x** | **n** | **x** | | | **x** | **x** | **x** | | **x** | **n** | **x** | **x** | **n** | **x** | **x** | **n** | **x** | **x** | **x** | | | **n** | **x** | **n** | **n** |
| G4-LA14 | *Percentage of new suppliers that were screened using labour practices criteria* | | | n | (x) | (x) | n | x | | | x | x | x | | (x) | n | (x) | (x) | n | x | x | n | x | x | x | x | x | n | x | n | n |
| G4-LA15 | *Significant actual and potential negative impacts for labour practices in the supply chain and actions taken* | x | | n | | | n | | | | | | | | (x) | n | x | x | n | (x) | (x) | n | x | x | x | x | x | n | x | n | n |

| | n = new in G3.1/G4<br>(x) = partially reported | Volvo | | | Telia Company | | | Vattenfall | | | H&M | | | VW | | | Deutsche Telekom | | | RWE | | | FCA (Fiat) | | | Telecom Italia | | | Enel | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Year** | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 |
| **DMA** | ***Labour Practices Grievance Mechanisms (L)*** | **x** | **x** | **n** | | **x** | **n** | | | | **x** | **x** | **x** | | **x** | **n** | **x** | **x** | **n** | **x** | **x** | **n** | **x** | **x** | **x** | **x** | **x** | **n** | **x** | **n** | **n** |
| G4-LA16 | *Number of grievances about labour practices filed, addressed, and resolved through formal grievance mechanisms* | | | n | x | (x) | n | | | | (x) | (x) | (x) | | (x) | n | x | x | n | | | n | x | x | x | x | x | n | x | n | n |
| **DMA** | ***Local communities (S)*** | **x** | **x** | **x** | | **x** | **x** | **x** | **x** | **(x)** | **x** | **x** | **x** | | **x** | **x** | | | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| G4-SO1 | *percentage of operations with implemented local community engagement, impact assessments, and development programs* | | | x | (x) | (x) | | | x | (x) | x | x | (x) | | x | x | | | x | x | x | x | x | x | x | x | x | x | x | x | x |
| G4-SO2 | *Operations with significant actual and potential negative impacts on local communities* | | | | | | x | x | | | | | | | x | n | | | n | x | x | n | x | x | x | x | x | x | x | x | x |
| **DMA** | ***Anti-competitive behaviour (S)*** | **x** | | **x** | | **x** | **x** | **x** | **x** | **x** | | | | | **x** | **x** | | **x** | **x** | **x** | **x** | | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| G4-SO7 | *Total number of legal actions for anti-competitive behaviour, anti-trust, and monopoly practices and their outcomes* | x | | x | x | x | x | x | x | x | | | | | x | x | | x | x | x | x | | x | x | x | x | x | (x) | x | x | x |
| **DMA** | ***Compliance (S)*** | | | **x** | | **x** | **x** | | | | | | | | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| G4-SO8 | *Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations* | x | | x | x | x | x | | | | | | | | x | x | x | x | x | x | x | x | x | x | x | x | x | | x | x | x |
| **DMA** | ***Supplier assessment for impacts on society (S)*** | | | **n** | | | **n** | | | | | | | | **x** | **n** | | **x** | **n** | **x** | **x** | **n** | **x** | **x** | **x** | | | **n** | | **n** | **n** |

| | n = new in G3.1/G4<br>(x) = partially reported | | Volvo | | | Telia Company | | | Vattenfall | | | H&M | | | VW | | | Deutsche Telekom | | | RWE | | | FCA (Fiat) | | | Telecom Italia | | | Enel | | |
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| | **Year** | | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 |
| G4-SO9 | *Percentage of new suppliers that were screened using criteria for impacts on society* | | | | n | | | n | | | | | | | | (x) | n | | (x) | n | x | x | n | x | x | x | | | n | | n | n |
| G4-SO10 | *Significant actual and potential negative impacts on society in the supply chain and actions taken* | | | | n | | | n | | | | | | | | (x) | n | | x | n | (x) | (x) | n | x | x | x | | | n | | n | n |
| **DMA** | ***Grievance mechanisms for impacts on society (S)*** | | | | **n** | | | **n** | | | | | | | | **x** | **n** | | | **n** | **x** | **x** | **n** | **x** | **x** | **x** | **x** | **x** | **n** | **x** | **n** | **n** |
| G4-SO11 | *Number of grievances about impacts on society filed, addressed, and resolved through formal grievance mechanisms* | | | | n | | | n | | | | | | | | (x) | n | | | n | | | n | x | x | x | x | x | n | x | n | n |
| | | x | 7 | 7 | 6 | 0 | 7 | 5 | 1 | 1 | 1 | 8 | 8 | 8 | 0 | 10 | 7 | 7 | 8 | 6 | 2 | 2 | 4 | 10 | 10 | 10 | 10 | 10 | 7 | 6 | 7 | 7 |
| | | (x) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | **respect for Human rights/aspects** | **Σ** | **7** | **7** | **6** | **0** | **7** | **5** | **1** | **1** | **1** | **8** | **8** | **8** | **0** | **10** | **7** | **7** | **8** | **6** | **2** | **2** | **4** | **10** | **10** | **10** | **10** | **10** | **7** | **6** | **7** | **7** |
| | G4-HR1 – G4-HR12 | x | 2 | 2 | 4 | 7 | 5 | 8 | 1 | 1 | 0 | 7 | 7 | 7 | 0 | 7 | 9 | 7 | 8 | 7 | 1 | 1 | 5 | 12 | 10 | 10 | 12 | 12 | 8 | 7 | 5 | 5 |

| | n = new in G3.1/G4<br>(x) = partially reported | | Volvo | | | Telia Company | | | Vattenfall | | | H&M | | | VW | | | Deutsche Telekom | | | RWE | | | FCA (Fiat) | | | Telecom Italia | | | Enel | | |
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| | **Year** | | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 |
| | | (x) | 0 | 0 | 4 | 1 | 3 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 5 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 2 | 2 | 0 | 0 | 2 | 0 | 4 | 4 |
| | **indicators** | **Σ** | **2** | **2** | **8** | **8** | **8** | **9** | **1** | **1** | **1** | **8** | **8** | **8** | **0** | **12** | **9** | **8** | **9** | **8** | **2** | **2** | **5** | **12** | **12** | **12** | **12** | **12** | **10** | **7** | **9** | **9** |
| **DMA** | ***Investment*** | | **x** | **x** | **x** | | **x** | **x** | | | | **x** | **x** | **x** | | **x** | **x** | | **x** | **x** | | | **x** | **x** | **x** | **x** | **x** | **x** | **x** | | **x** | **x** |
| G4-HR1 | *Total number of significant investment agreements and contracts that include human rights clauses or that underwent human rights screening* | | | | x | x | x | (x) | | | | x | x | x | | x | x | | | x | | | x | x | x | x | x | x | x | | x | x |
| G4-HR2 | *Total hours of employee training on human rights policies or procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained* | | | | x | x | (x) | x | | | | | | | | (x) | x | | x | x | | | | x | x | x | x | x | x | | x | x |
| **DMA** | ***Non-discrimination*** | | **x** | **x** | **x** | | **x** | **x** | | | | **x** | **x** | **x** | | **x** | **x** | **x** | **x** | **x** | | | | **x** | **x** | **x** | **x** | **x** | **x** | | **x** | **x** |
| G4-HR3 | *Total number of incidents of discrimination and corrective actions taken* | | | | (x) | x | x | x | | | | x | x | x | | x | x | x | x | x | | | | x | x | x | x | x | x | | x | x |
| **DMA** | ***Freedom of association and collective bargaining*** | | **x** | **x** | **x** | | **x** | **x** | | | | **x** | **x** | **x** | | **x** | **x** | **x** | **x** | **x** | | | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| G4-HR4 | *Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and measures taken to support these rights* | | | | x | x | x | x | | | | x | x | x | | x | x | x | x | x | | | x | x | x | x | x | x | x | x | (x) | (x) |
| **DMA** | ***Child labour*** | | **x** | **x** | **x** | | **x** | **x** | | | | **x** | **x** | **x** | | **x** | **x** | **x** | **x** | **x** | | | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |

| | n = new in G3.1/G4<br>(x) = partially reported | Volvo | | | Telia Company | | | Vattenfall | | | H&M | | | VW | | | Deutsche Telekom | | | RWE | | | FCA (Fiat) | | | Telecom Italia | | | Enel | | |
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| | **Year** | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 |
| G4-HR5 | *Operations and suppliers identified as having significant risk for incidents of child labour, and measures taken to contribute to the effective abolition of child labour* | | | (x) | x | x | x | | | | x | x | x | | x | x | x | x | x | | | x | x | x | x | x | x | x | x | (x) | (x) |
| **DMA** | ***Forced or compulsory labour*** | **x** | **x** | **x** | | **x** | **x** | | | | **x** | **x** | **x** | | **x** | **x** | **x** | **x** | **x** | | | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| G4-HR6 | *Operations and suppliers identified as having significant risk for incidents of forced or compulsory labour, and measures to contribute to the elimination of all forms of forced or compulsory labour* | x | | (x) | x | x | x | | | | x | x | x | | x | x | x | x | x | | | x | x | x | x | x | x | x | x | (x) | (x) |
| **DMA** | ***Security practices*** | | | **x** | | | | | | | | | | | **x** | **x** | | | **x** | | | | **x** | **x** | **x** | **x** | **x** | **x** | | **x** | **x** |
| G4-HR7 | *Percentage of security personnel trained in the organisation's human rights policies or procedures that are relevant to operations* | | | (x) | | | | | | | | | | | (x) | x | | | (x) | | | | x | (x) | (x) | x | x | | | | |
| **DMA** | ***Indigenous rights*** | | | | | | | | | | | | | | **x** | **x** | | | | | | | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| G4-HR8 | *Total number of incidents of violations involving rights of indigenous peoples and actions taken* | | | | | | | | | | | | | | x | x | | | | | | | x | x | x | x | x | (x) | x | x | x |
| **DMA** | ***Assessment*** | | | **n** | | | **n** | | | | **x** | **x** | **x** | | **x** | **n** | **x** | **x** | **n** | | | **n** | **x** | **x** | **x** | **x** | **x** | **n** | | **n** | **n** |
| G4-HR9 | *Total number and percentage of operations that have been subject* | | | | | | x | | | | x | x | x | | x | n | x | x | n | | | n | x | (x) | (x) | x | x | x | | | |

| | n = new in G3.1/G4<br>(x) = partially reported | | Volvo | | | Telia Company | | | Vattenfall | | | H&M | | | VW | | | Deutsche Telekom | | | RWE | | | FCA (Fiat) | | | Telecom Italia | | | Enel | | |
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| | **Year** | | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 |
| | *to human rights reviews or impact assessments* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **DMA** | ***Supplier human rights assessment*** | | **x** | **x** | **n** | | **x** | **n** | **x** | **x** | **x** | **x** | **x** | **x** | | **x** | **n** | **x** | **x** | **n** | **x** | **x** | **n** | **x** | **x** | **x** | **x** | **x** | **n** | **x** | **n** | **n** |
| G4-HR10 | *Percentage of new suppliers that were screened using human rights criteria* | | | x | x | (x) | (x) | x | x | x | (x) | x | x | x | | (x) | x | (x) | (x) | x | x | x | x | x | x | x | x | x | x | x | (x) | (x) |
| G4-HR11 | *Significant actual and potential negative human rights impacts in supply chain and actions taken* | | x | | n | | | n | | | | | | | | (x) | n | x | x | n | (x) | (x) | n | x | x | x | x | x | n | x | n | n |
| **DMA** | ***Human rights grievance mechanisms*** | | **x** | **x** | **n** | | **x** | **n** | | | | **x** | **x** | **x** | | **x** | **n** | **x** | **x** | **n** | **x** | **x** | **n** | **x** | **x** | **x** | **x** | **x** | **n** | **x** | **n** | **n** |
| G4-HR12 | *Number of grievances about human rights filed, addressed, and resolved through formal grievance mechanisms* | | | x | | x | (x) | x | | | | (x) | (x) | (x) | | (x) | n | x | x | n | | | n | x | x | x | x | x | (x) | x | x | x |
| | | x | 1 | 1 | 2 | 0 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | | (x) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | **Anti-corruption and bribery matters/aspects** | **Σ** | **1** | **1** | **2** | **0** | **2** | **2** | **1** | **1** | **1** | **2** | **2** | **2** | **0** | **2** | **2** | **2** | **2** | **2** | **2** | **2** | **2** | **2** | **2** | **2** | **2** | **2** | **2** | **2** | **2** | **2** |
| | G4-S03 – SO6 | x | 1 | 1 | 4 | 2 | 3 | 4 | 1 | 1 | 0 | 4 | 4 | 4 | 0 | 2 | 4 | 3 | 3 | 3 | 1 | 1 | 2 | 4 | 4 | 4 | 4 | 4 | 1 | 4 | 4 | 4 |
| | | (x) | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 1 | 1 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| | n = new in G3.1/G4<br>(x) = partially reported | | Volvo | | | Telia Company | | | Vattenfall | | | H&M | | | VW | | | Deutsche Telekom | | | RWE | | | FCA (Fiat) | | | Telecom Italia | | | Enel | | |
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| | **Year** | | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 |
| | **indicators** | **Σ** | **1** | **1** | **4** | **3** | **4** | **4** | **1** | **1** | **1** | **4** | **4** | **4** | **0** | **4** | **4** | **4** | **4** | **4** | **3** | **3** | **3** | **4** | **4** | **4** | **4** | **4** | **1** | **4** | **4** | **4** |
| **DMA** | ***Anti-corruption*** | | **x** | **x** | **x** | | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| G4-SO3 | *Total number and percentage of operations assessed to risks related to corruption and the significant risk identified* | | | | x | x | x | x | | | | x | x | x | | (x) | x | x | x | x | (x) | (x) | x | x | x | x | x | x | | x | x | x |
| G4-SO4 | *Communications and training on anti-corruption policies and procedures* | | x | x | x | (x) | (x) | x | x | x | (x) | x | x | x | | (x) | x | x | x | x | (x) | (x) | (x) | x | x | x | x | x | | x | x | x |
| G4-SO5 | *Confirmed incidents of corruption and actions taken* | | | | x | x | x | x | | | | x | x | x | | x | x | (x) | (x) | (x) | | | x | x | x | x | x | x | x | x | x | x |
| **DMA** | ***Public Policy*** | | | | **x** | | **x** | **x** | | | | **x** | **x** | **x** | | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| G4-SO6 | *Total value of political contributions by country and recipient/beneficiary* | | | | x | | x | x | | | | x | x | x | | x | x | x | x | x | x | x | | x | x | x | x | x | | x | x | x |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Diversity G4-38, G4-40, G4-LA1, G4-DMA, G4-LA12 and Reasons for omission | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | x | 2 | 2 | 4 | 2 | 2 | 6 | 1 | 1 | 1 | 3 | 3 | 3 | 0 | 5 | 5 | 3 | 3 | 5 | 2 | 3 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 6 | 6 | 6 |
| | | (x) | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| | **Aspects (same as at employee matters) + Indicators** | **Σ** | **2** | **2** | **5** | **2** | **2** | **6** | **2** | **2** | **2** | **3** | **3** | **3** | **0** | **6** | **6** | **5** | **5** | **6** | **4** | **4** | **6** | **6** | **6** | **6** | **6** | **6** | **6** | **6** | **6** | **6** |

| | n = new in G3.1/G4<br>(x) = partially reported | **Volvo** | | | **Telia Company** | | | **Vattenfall** | | | **H&M** | | | **VW** | | | **Deutsche Telekom** | | | **RWE** | | | **FCA (Fiat)** | | | **Telecom Italia** | | | **Enel** | | |
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| | **Year** | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 | 2015 | 2014 | 2013 |
| G4-38 | *Composition of the board and its committees* | | | x | x | x | x | | | | | | | | x | x | | | x | | | x | x | x | x | x | x | x | x | x | x |
| G4-40 | *Nomination and selection processes for the board and its committees* | | | x | x | x | x | | | | | | | | x | x | x | x | x | | | x | x | x | x | x | x | x | x | x | x |
| | ***Employment*** | x | x | x | | | x | | | | x | x | x | | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| G4-LA1 | *Total number and rates of new employee hires and employee turnover by age group, gender and region* | | | | | | x | | | | | | | | (x) | (x) | (x) | (x) | (x) | (x) | (x) | x | x | x | x | x | x | (x) | x | x | x |
| | ***Diversity and equal opportunity*** | x | x | x | | | x | x | x | x | x | x | x | | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| G4-LA12 | *Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity* | | | (x) | | | x | (x) | (x) | (x) | x | x | x | | x | x | (x) | (x) | x | (x) | x | x | x | x | x | x | x | x | x | x | x |