

# Master's Thesis Internship

A Qualitative Case Study to Explore the Relationship Between  
Stakeholder Engagement and CSR Target Setting

A case study of Canon Europa N.V.

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## Abstract

In this thesis the relationship between level of stakeholder engagement and Corporate Social Responsibility (CSR) target setting practices was explored. In that respect, the main question concerned by this thesis is as below:

How do different levels of stakeholder engagement influence CSR target setting practices of corporations?

To answer this question the thesis developed a framework based on Arnestein ladder of stakeholder participation and Green's model of stakeholder engagement. Stakeholder engagement was evaluated on the basis of three engagement levels (informative, consultative and decisional) that was proposed by Green et al. (2003).

Target setting for sustainability practices were evaluated in regard to three practices: coverage of issues, quality of targets and defining ambitions for targets.

The thesis empirically investigated its research question in four companies from the electronics sector, namely Canon, Philips, Siemens and Samsung. These company were selected on the basis of three main criteria: 1) setting environmental targets, 2) engaging with the stakeholders in different levels; and 3) disclosing information about their target setting and stakeholder engagement practices.

The results indicate the following: Concerning the level of stakeholder engagement across the companies under study the thesis found that stakeholder engagement in the companies occurs in a continuous and relative form. This means that it is not practical to distinguish companies into three distinctive engagement levels according to Green's model.

Concerning target setting the thesis found the following: The companies are generally put the main focus on the climate change issues, particularly CO<sub>2</sub> reduction. Issues such as water efficiency and biodiversity receives the least attention from the companies to be subjected to target setting. Additionally, in term of quality, the targets that were developed for CO<sub>2</sub> reduction are of the highest quality in terms specificity of content, time, measurability, approach and achievability. The results also indicates that companies employ two approaches in defining their targets' ambition. One is to set their approach based on the societal needs and requirements, another approach of setting ambition is based on following companies' regular and yearly improvement pace.

Finally, regarding the relationship between stakeholder engagement and CSR target setting. The thesis found that there is no significant evidence that companies with higher level of stakeholder engagement cover more issues for target setting. Additionally, the findings also doesn't indicate that different levels of stakeholder engagement results in different target quality. However, the targets ambition seems to be the only aspect of target setting practices that is influenced by level of stakeholder engagement. The result show that companies with high level of stakeholder set the most ambitious targets, while the company with lowest level of engagement set the modest targets. This trend could be explained by that fact the targets with higher level are subjected to higher scrutiny and attract more demand for taking bigger steps towards sustainable development .

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## List of Abbreviations

COP	Conference of Parties
CSR	Corporate Social Responsibility
EPA	Environmental Protection Agency
EU	European Union
EU-WEEE	European Union – Waste Electrical and Electronic Equipment
FAO	Food and Agriculture Organization
IPEA - China	Institute of Public and Environmental Affairs - China
IUCN	International Union for Conservation of Nature
SDG	Sustainable Development Goals
UN	United Nations
UNGC	United Nations Global Compact
WBCSD	World Business Council for Sustainable Development
WRI	World Resource Institute

## 1. Introduction

Sustainable development is based on the premise of “meeting the needs of the current generation without compromising the ability of the next generation to meet their needs” (WCED, 1987, p. 43). Such an understanding of development emphasizes a strong interconnectedness of environmental and social concerns with economic growth and wellbeing (Hopwood et al., 2005). Sustainable development is, therefore, advocated as an alternative to the current economic growth. The current growth is distinguished by the dominance of multinational corporations, global trade, excessive resource exploitation and mass production (Hopwood et al., 2005). In this regard, corporations, as the building blocks of such a growth, have been subjected to widespread criticisms and call for change (Benn et al., 2014).

Over time, a consensus has been reached among a wide community of scholars, politicians, the business community, and civil society on the need for changing the current business model to one that is able to create value not only for the business owners and shareholders, but also for the larger society with the ultimate aim to contribute to sustainable development (Stephano Poguts, 2008). As a result of an increased focus on sustainable development in the context of business, the concept of corporate social responsibility (CSR) has been proposed (Steurer et al., 2005) to integrate social and environmental concerns in the business operations in interaction with different stakeholders (Steurer et al., 2005). Described in other terms, CSR calls for corporations to behave responsibly and contribute to sustainable development (Young and Dahnda, 2013).

Initially started as a reaction to various stakeholders’ complains, CSR has undergone several other phases to ultimately becoming proactively a core business strategy and a management approach in a number of corporations (Young and Dahna, 2013). In that respect, strategic CSR means relating CSR activities to the company’s core business through implementation of social and environmental management systems, which involve the cycle of CSR policy development, goal and target setting, program implementation, auditing and reporting (Visser, 2010). As pointed out by Visser (2010), CSR target setting, which is the core focus of this thesis, is an essential part of the cycle of strategic CSR implementation. Target setting is the translation of CSR strategy into measurable indicators, which can provide the corporation with a clear understanding of their desired state in the future with regard to CSR issues (Visser, 2010).

Additionally, CSR targets are used by corporations as thresholds for publicly reporting on CSR performance (Barth and Wolff, 2009). As it is clearly emphasized in the CSR definition provided earlier, stakeholder engagement is a core element of any CSR practice. Stakeholders are “any group or individuals who are affected by or can affect the achievement of an organization’s objectives” (Freeman, 1984. Pp 2). Keeping this in mind, in developing CSR strategies, in general, engaging stakeholders and incorporating their concerns has been an inevitable and essential concern (Miles et al., 2006). This has become even more critical especially with the rising awareness among society about the societal and environmental impacts of corporations’ activities (Linnanen et al., 2002). Managers are well aware of the fact that making any CSR-related decision in isolation from stakeholders can diminish the effectiveness of their decisions and could even be opposed by a wide range of stakeholders when it comes to the practical phase (Miles et al., 2006).

Similarly, when it comes to CSR target setting as an important part of CSR strategy making (Schmitt and Wolff, 2006) understanding and incorporating the concerns of the stakeholders in this process is a challenge for the managers, yet a vital part of the process. Multiple mechanisms of stakeholder engagement have been proposed aiming at incorporating the expectations of the stakeholders in the CSR decision-making, which can also be used for CSR target setting as well (Miles et al., 2006).



However, there are three problematic issues in regard to stakeholder engagement in CSR target setting: First, how corporations can identify the optimum type and level of stakeholder engagement in the process of CSR target setting. Understanding this issue is important, because a high level of engagement is very costly and difficult, and a low level of engagement can lead to poor alignment between stakeholder and company interests (Green et al., 2003) in the sense that targets reflect the expectations of the stakeholders. Therefore, identifying an optimum level of engagement is essential to avoid inefficiency in terms of costs and poor results. Second, how corporations can deal with the diversity of the stakeholders, which often leads to conflicting expectations is equally important. Third, how different level of engagement can influence the CSR target setting process and targets' quality needs to be explored as well.

Problematically, in spite of numerous scientific works on stakeholder engagement and CSR practices, the relationship between different levels of engagement and CSR targets-setting, and also its alignment with the stakeholders' expectations has not yet been explicitly researched. Those few scientific papers that addressed the concept of CSR target-setting either neglected the role of stakeholder engagement in the process (e.g. Schmitt and Wolff, 2006); or approached it in a compartmentalized manner (e.g. McKinnon et al., 2012) where targets were developed separately for every single CSR issue. For example, McKinnon et al. (2014) studied target-setting for reducing carbon emissions from a technical perspective, which is very specific and only relevant for carbon reduction.

From a scientific point of view, there are two limitations in regard to the aforementioned approaches: First, by neglecting the stakeholder perspective, it could be impossible to assess target-setting practices, particularly in terms of its quality. Second, the problem with approaching target-setting in a compartmentalized manner for every single CSR issue (i.e. McKinnon et al., (2012) is that it does not approach target-setting as an independent managerial practice. As a result, studying target-setting in a compartmentalized approach does not generate generalizable implications for a wider range of a sustainability issue. From a societal point of view, it is important to take into account the needs and expectations of the stakeholders in the process of CSR target setting. As Green et al. (2003) pointed out, the quality of any CSR related decision is embodied through the relevance of the decisions to the societal needs. To gain insight about what the societal needs are, engaging stakeholders in all stages of the decision making processes is widely emphasized in a range of literature (Andriof, 2002; Beierle, 2002; Green et al., 2003; Reeds, 2008). The main problem in this regard, however, is to decide what level of engagement can be considered as optimum level in order to achieve the highest quality decisions (CSR targets in case of this study) that is also efficient in terms of engagement costs. Therefore, this study proposes that there is a need to consider this problem. Accordingly, this thesis aims to answer the following research question and sub-questions:

**How do different levels of stakeholder engagement influence CSR target setting practices of corporations?**

To answer this research question, the influence of stakeholder engagement in regard to corporate decisions is explored within three dimensions of targets setting, namely decisions regarding *selection of issues to be subjected to target setting*, decisions regarding quality of the targets, and finally decision regarding determining ambition for targets. Concerning the mentioned issues, the following sub-questions are researched:

- What is the level of stakeholder engagement across the case companies?
- What is the approach of targets setting across the case companies?

- What level of stakeholder engagement influences the level and types of issues to be by targets setting decisions?
- What level of stakeholder engagement influences the quality of the targets?
- How different levels of stakeholder engagement influence companies decision in determining targets' ambition?

This thesis is based on multiple case-study research. Canon Europa N.V. is selected as the main case company. This is because the company is currently involved in setting environmental and social targets for its sustainability plan. The company is also conducting stakeholder analysis project. This makes the company a suitable case where it was possible to closely observe how the targets setting activities are taking place. To make comparison possible, three other companies namely Philips, Siemens and Samsung Electronics from the same sector were also studied. These companies are selected because they are in the same sector as Canon Europe, they are involved in target setting; and also they disclose lot of their information and documents that made the research possible.

All selected companies are considered as multinational corporations in their respected sector. The electronics sector is selected because there is not sufficient investigation concerning stakeholder engagement and target setting in this sector. Electronic sector is associated with complicated and controversial supply chain. For example use of numerous hazardous and toxic material during production phase; and also recycling of the products are sensitive issues (Nidumolu et al., 2009) that makes this sector interesting for this thesis research.

This thesis continues as follow: the next section provides a theoretical background about stakeholder engagement and target setting. The third section address methods of research (consisting of data, analysis and interpretation). Section four deals with findings. Section five provides analysis of the findings. Section six is discussion. And finally in sections seven and eight conclusion and recommendations to the case company are provided.

## 2. Theoretical background

This part explains the main theoretical aspects of the research, namely CSR strategy making and target setting; stakeholder theory and the link between level of stakeholder engagement and CSR decision making and target setting. Furthermore, the key concepts are defined and explained under this section.

### 2.1. Corporate Social Responsibility

The relationship between business and society has been a highly debated topic in the socio-economic discourse (Waren, 2003). While some regard corporations vital for our economic and social development (Siljala, 2009), others warn about consequences that these successes could potentially leave behind in terms of environmental damages and social problems such as global warming, air and water pollution, employees safety, gender inequality, forced labor, etc. (Rayaman-Bacchus, 2006). The main notion of corporate social responsibility (CSR) therefore stems from this paradoxical relationship of business and society, wherein the responsibility of the corporations is expected to cover not only their profit-and-loss statements, but also beyond, which is the wider society around them (Carroll, 1999).

With this notion in mind, the first formal writing on the concept of CSR has begun since 1950s with Howard R. Bowen's book titled *Social Responsibility of the Businessman* (cited by Carroll, 1999). Since then, CSR has evolved as an integral part in the development of new theories aiming to improve our understanding of how contemporary corporations operate, survive and succeed (Kristoffersen et al., 2005). The concept of CSR is evolving constantly over time, mainly parallel to stakeholder claims (Carroll, 1999). As a result, a variety of definitions has been given to it (Steurer et al., 2005), which makes it difficult to build a common understanding on it (Steurer et al., 2005). However, the definition provided by the European Commission (2002, Pp 5) seems to be the most extensively used in the literature published in the recent decade, which defined CSR "a concept whereby corporations integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis." This definition entails three important notions associated to CSR: First, "integration of social, environmental and business operations, which is conceptualized as triple bottom line (Elkington, 1997). Second, interaction with the stakeholders, which is conceptualized as stakeholder engagement (Freeman, 1984, Greenwood, 2007). Third, voluntariness of the CSR practices that is beyond the legal requirements (Woods and Jones, 1995).

The challenging question, however, is how to incorporate CSR in the overall business strategy of a corporation. The concept of strategic CSR is key to address this question. Strategic CSR refers to those sets of decisions and initiatives of the corporation managers to practically incorporate social and environmental measures within their business routines (Bhattacharyya, 2007). A crucial further step in the CSR process is translation of CSR strategies into specific targets (Schmitt and Wolff, 2006), which are termed as CSR targets in this paper.

### 2.2. CSR Targets

The terms target and goal have been used interchangeably in much of the organizational management and CSR literature. Goal is defined as "a desired state of affairs which an organization attempts to realize" (McShane et al., 2011). Target, on the other hand gives "a narrower and time-bound indicators" to that "desired state of affairs" (Kellock, 2012). In this study, CSR targets are defined as "desired specific environmental states" that companies set to achieve within a certain

timeframe. The CSR targets are generally stated with indicators (quantitatively or qualitatively) for every specific aspect of a company's operation. CSR targets are developed within the companies' sustainability and CSR strategic planning. In the companies' documents, different terms have been used for CSR targets, such as sustainability ambition (Heidelberg Cement, 2012), sustainable development ambitions, etc (Holcim, 2012). To provide clarity, some examples of a CSR target are given below:

"Our target is to cut our carbon dioxide emissions in half by as early as 2020" and to be the world's first major industrial company to achieve a net-zero carbon footprint by 2030 (Philips, 2015).

"To reduce 250 million tons of the total compounded GHG emission at the phase of product usage by 2020 that is equal to 56% reduction compared to 2014" (Samsung, 2016).

This thesis is particularly interested in CSR target setting. The thesis narrows down its focus only on environmental issues. The thesis explores target setting practices across three dimensions: coverage of issues to be subjected to targets setting, quality of the targets, and ambition of targets.

Coverage of issues refers to the number of environmental issues that the companies cover under their target setting process. In other words, coverage of issues refer to number of environmental issues that are subjected to target setting. Coverage of issues is evaluated on the basis of the covered environmental issues. Ten environmental issues are concerned across four areas (climate change, biodiversity, waste management and water use and pollution).

Coverage of issues in target setting practices is important because it shows which areas are of high interest to the companies and why.

Quality of targets is about how good the targets are. It is evaluated on the basis of two main criteria namely, (a) specificity, (b) achievability.

Specificity, as an important indicator of target quality means that the targets must clearly specify what is exactly to be achieved in regard to a specific CSR issue (Rietbergen et al., 2010). Specificity is important because it provides clear understanding both for the company and stakeholders on what aspect of sustainability is targeted for improvement; and also it provides clarity the extent of improvement. In this study specificity will be evaluated based on detailed elaboration of the targets on the issues that are going to be addressed. Accordingly, companies may differ in the level of specificity of their targets.

In this thesis, specificity is assessed across five aspects:

- 1) Specificity of the content, which means what exactly is targeted to be achieved.
- 2) Specificity of the time or time boundness. Time boundness means that the targets specifically delineate the time period in which they are expected to be realized.
- 3) Geographical specificity if the targets is for a particular geography.
- 4) Specificity in term of quantity, which indicates how much is going to be achieved.
- 5) Specificity in term of approach, which concerns with how the target is planned to be realized.

Achievability, as another important quality indicator is about how the set targets will be realized. This quality indicator is important mainly due to the fact that setting achievable targets implies that sufficient resources are or must be available. If a company is unable to alter either its resources or degree of the target ambition, then the company needs to alter its target to a lower level, or address

the resource constraint, so that the goal is achievable (Latham, G. P. 2003). In this thesis, achievability is evaluated based on statements and detailed elaborations that companies provided in their documents about availability and allocation of resources (financial, human, technical) by which they intend to achieve targets.

Ambition of the target is about the degree or level of improvement that a target is expected to realize. In this study it is measured in comparison to 1) status quo, 2) comparison to the other peer organizations that are under studied.

### 2.3. Stakeholders

As reflected in the definition of the CSR concept introduced above, “engagement with the stakeholders” is a key aspect of CSR. But who are considered as “stakeholders” in the first place? The term stakeholder is conceptually confused among the scholars of the fields of business ethics and CSR literature in general (Miles, 2012). Miles (2012) argues that the concept of stakeholder is an “essentially contested concept”. Essentially contested concepts (ECC) have been described as ‘vague, ambiguous, general, complex and normative’. It relates to situations where there is a variety of meaning for the concept and it is variously describable (Miles, 2012). “Variously describable” according to Miles (2012) is that different components of the concepts are described in different ways and terms.

With respect to the concept of stakeholder, there are different components related to who the stakeholders are, how the stakeholders impact the organization and vice versa, why are the stakeholders being identified and what the form of a stake is. Some literature proposes a narrower and more instrumental definition of stakeholders (Reed et al., 2009), as those groups or individuals “without whose support the organization would cease to exist” (Bowie, 1988 pp. 112), whilst other definitions propose a broader and more normative view of stakeholders (Reed et al., 2009) as “any naturally occurring entity that is affected by organizational performance”. This may include living and non-living entities, or even mental-emotional constructs, such as respect for past generations or the wellbeing of future generations (Starik, 1995; Hubacek and Mauerhofer, 2008).

Out of numerous definitions given for the concept stakeholders, this thesis draws on the definition of Freeman (1984, Pp 2) as “any group or individual who is affected by or can affect the achievement of an organization’s objectives”. It implies that from the corporate perspective some stakeholders such as employees and customers are critical for corporate survival as they provide the organization with essential resources. This definition provides a basic rationale for the question of why stakeholders concerns should be considered in the way in which organization is directed and controlled (Hansen, 2010). In this thesis, therefore, stakeholder include individuals (i.e. employees, shareholders etc.) and groups (i.e. NGOs, government and community groups) that affect and/or being affected by the operations and achievements of the case companies.

### 2.4. Stakeholder engagement

Stakeholder engagement is premised on the notion that ‘those groups who can affect or are affected by the achievements of an organization’s objective’ (Freeman, 1984 pp 2) should be given the opportunity to comment and give input into the development of decisions that affect them (Jeffery, 2009). Corporations involve their stakeholders in decision-making processes, making them participants in the business management, sharing information, dialoguing and creating a model of mutual responsibility (Mannetti, 2011) on resolving issues that may emerge in the relations between the corporation and its general and specific environment (Andriof et al., 2002, p. 9). Therefore, according to Andriof et al. (2002) the main feature of stakeholder engagement is not simply the

involvement of stakeholders to 'mitigate' or manage their expectations, but to create a network of mutual responsibility.

Measuring and evaluating the degree of engagement have been the topic of discussion in multiple literatures (Mannetti, 2011). For example, Zadek and Raynard (2002) suggest three dimensions for quality: procedural quality (how the engagement was undertaken and whether it was consistent with the declared purposes), responsiveness quality (how the organization answers to the stakeholder needs), and the quality of outcomes (tangible evidence of policies and practices adopted by managers in line with stakeholder engagement or evidence of stakeholder satisfaction). Similarly, Friedman and Miles (2006) present a model of stakeholder engagement evaluation that is intended to illustrate levels of stakeholder engagement from the stakeholders' perspective. Their model is built on Arnstein's Ladder of Citizen Participation (1969) that conceptually represents the degree of power given to citizens in community decisions, ranging from a "non participation" to a "citizen control". Although this model has been developed broadly for "citizen", it is relevant in this paper to interpret it to "stakeholder", because the notion of affecting and being affected by the company's objectives could be the same for both "citizens" and "stakeholders". Despite being developed in 1969, Arnstein's model is being widely used in stakeholder and CSR literatures, which makes it still relevant to be used for this study as well.

Being the first typology model for stakeholder participation, Arnstein's ladder then became a template for many other typologies of stakeholder engagement and public participation. In a comprehensive literature review study, Green et al. (2003) provided a comparative analysis of the stakeholder typologies that all are based on Arnstein's model as demonstrated in table 1. Green et al. (2003, p. 295) argue that "whilst the 'community' based typologies can provide companies with a certain insight into what constitutes stakeholder engagement, it is important to note that they were developed specifically for use in the public sector. Whilst companies may need a more detailed participation typology for their more specific stakeholder activities, it may be that these are too detailed for use in everyday company activities and decision-making. A more simplified typology of stakeholder participation, with the same descriptive focus is needed". Therefore, they propose a company-relevant typology by identifying three key levels of participation for companies: informative, consultative and decisional (Table 2).

Informative participation is used to describe processes that involve information being passed from company to stakeholders. An example of this would be advertising used to inform stakeholders of future plans. At this level, the role of stakeholder is only to receive the communication and the participation is passive; the organization has complete control over how stakeholders are informed and what they are told (Green et al., 2003).

Consultative participation refers to a higher level of involvement between the organization and the stakeholder(s). At this level, stakeholders are asked for their views and perspectives on an issue or an organization's plans and/or proposals but at a deeper and more exploratory level than with for example, a qualitative research method may be used to explore the stakeholders' attitudes and values (Green et al., 2003).

Level of engagement		Description
Citizen Power	Citizen Control	Stakeholders obtain the majority of decision-making seats or full managerial power in an organization.
	Delegated Power	Stakeholders have sufficient decision-making authority and the intention of the engagement is minority representation of stakeholders in decision-making process through multi-way dialogue, such as board representation.
	Partnership	At this level stakeholders are involved in planning and in the decision-making processes
Tokenism	Placation	The emphasis is either on a one-way flow of information or, where there is two-way communication, the received views may not be used or acted on. Managers maintain the right of decision and veto.
	Consultation	
	Informing	
Nonparticipation	Therapy	These levels refer to the control, skilful management, or maneuvering of stakeholders' opinion. In this context, managers try to brainwash stakeholders through intensive bombardment of self-laudatory corporate information until they are indoctrinated with the same principles of the corporation.
	Manipulation	

Table 1. Description of Arnstein's model (Manneti, 2011)

Increasing levels of involvement	Community					Risk Management	Company
	Arnstein (1969)	Dorsey <i>et al.</i> (1994)	Wilcox (1994)	Pretty & Shah (1994)	UNDP (1997)	Fischhoff (1998)	
	Citizen control	Ongoing involvement	Supporting	Self mobilisation	Self-management	All of below	Decisional
	Delegated power	Seek consensus		Interactive participation	Partnership	All we have to do is make them partners	
	Partnership	Test ideas, seek advice	Acting together		Risk-sharing	All we have to do is treat them nice	
	Placation	Define issues	Deciding together	Functional participation	Decision-making	All we have to do is show them it's a good deal for them	Consultative
	Consultation	Consult on reactions		Participation by consultation	Consensus-building	All we have to do is show them that they've accepted similar risks in the past	
	Informing	Gather info perspectives	Consultation	Participation by information giving	Consultation	All we have to do is explain what we mean by the numbers	Informative
	Therapy	Educate	Information	Passive participation	Information	All we have to do is tell them the numbers	
	Manipulation	Inform			Manipulation	All we have to do is get the numbers right	

Table 2. Green's model of stakeholder typology based on Arnstein's ladder of participation

Decisional participation refers to the level at which stakeholders actually participate in the decision making process. Organizations may involve and interact with stakeholders from the beginning of their project or plan. This means that more views and knowledge can be shared and considered at an earlier stage and any disparate objectives reconciled (Green et al., 2003).

As demonstrated in table 2, seven typologies of stakeholder engagement are presented from three perspectives: community participation, risk management and company. This thesis uses the typology that is based on the company perspective proposed by Green et al. (2003). This thesis explores whether different levels of stakeholder engagement (informative, consultative and decisional) in the process of CSR target setting differently influence target setting practices in terms of their alignment with stakeholders expectations, quality of the targets and level of ambition that are defined for targets.

## 2.5. Relationship between level of stakeholder engagement and CSR target setting

The relationship between level of stakeholder engagement and CSR target setting is not directly and explicitly addressed by either CSR or business management literature. The mainstream literature in the field of stakeholder, instead, have a broader perspective, where the focus is on how different levels of stakeholder engagement can result to different types of CSR strategies and different qualities of corporate sustainability decision-makings (Green et al., 2003, Mitchell et al., 1997; Henriques and Sadorsky, 1999; Thornton et al., 2003). Therefore, given that CSR target setting is a form of decision-making and it is also a part of CSR strategy making in the context of business, it is relevant to argue that the influence of stakeholder engagement on the CSR strategy making can also provide implication for the CSR target setting as well.

There is a consensus among the mainstream literature that different levels of stakeholder engagement lead to different qualities of corporate CSR strategy (Mitchell et al., 1997; Henriques and Sadorsky, 1999; Thornton et al., 2003). However, 'the different qualities of CSR strategies' needs further elaboration to understand what quality aspects could be influenced by stakeholder engagement. Relevant to this, Beierel (2002) studied the influence of stakeholder engagement on four quality aspect of strategy making including 'cost effectiveness', 'joint gains for both parties' and 'accurate and knowledge-rich' strategies. Considering these quality indicators, Beierel (2002) found out that 'more intensive' stakeholder engagement are more likely to produce high quality strategies. The majority of the cases that Beierel (2002) investigated contains evidence that stakeholders are also making better decisions, contributing new information and ideas, and utilizing technical resources in their decision making process. Similarly, Reeds et al. (2008) argue that higher level of engagement can lead to higher quality of decisions and strategies, as they can be based on more complete information, anticipating and ameliorating unexpected negative outcomes before they occur.

In addition, Brouhle et al. (2009) studied 292 firms in order to investigate whether different levels of stakeholder engagement influence the quality of the firms' CSR strategy differently, particularly in regard to environmental issues. He found out that higher level of engagement significantly resulted to higher quality of environmental strategies in terms of alignment of the strategies with the expectations of the stakeholder. However, they investigated engagement with only one major stakeholder, not a diversity of the stakeholders. This is indeed arguable, because engagement of multiple and diverse range of stakeholders according to Brouhle et al. (2009) can produce contradictory results and influence the quality of strategies and decisions differently.



Sprengel and Busch (2010) also argue that different types of stakeholder engagement determine the type of corporate strategic response to the CSR issues. However, several scholars identified additional factors beyond levels of stakeholder engagement, such as company size, industry affiliation, organizational structure and the type of CSR challenges that the firm faces (Delmas and Toffel, 2004; Clemens et al., 2008; González-Benito et al., 2010).

In regard to selecting issues that are aligned to societal needs, Buysse et al. (2003) argue that broader and deeper engagement with the stakeholders is critical in order to cover those issues that concerned by the widest range of the stakeholder.' Buysse et al. (2003) also emphasize that identifying salient stakeholders and engaging them in the process of strategy development are crucial steps in order to make the selected CSR issues relevant to the needs and expectations of the stakeholders. Delmas et al. (2004), however, asserts that in most cases selection of the CSR issues to be covered in the CSR strategy is mainly determined by the resources that the company poses to meet them, not always due to more interaction with the stakeholders.

Considering the quality of the CSR target such as specificity, and achievability, Sprengel and Busch (2010) states that high level of engagement with the stakeholders (i.e. financial providers, consumers) resulted the of demand of the stakeholder for more clear statements on the emission reduction targets these companies set and how they plan to implement sound carbon management in order to reach these targets. This has pushed companies towards consideration of more specificity in their strategies and targets regarding their different environmental aspects, particularly CO<sub>2</sub> emissions.

Overall, although majority of the literature suggest that there is a direct and positive relationship between the level of stakeholder engagement and quality of CSR decision-making, it has not yet been explored whether this relationship is applicable to the CSR target setting in particular (given that CSR target setting is a form of decision making). Furthermore, none of the reviewed literature provided a clear distinction between different levels of stakeholder engagement in regard to its influence on the quality of CSR decision-making, and target setting. Therefore, building on the framework of Green et al. (2003), this paper explores whether the three levels of stakeholder engagement (informative, consultative and decisional) differs significantly in term of their influence CSR target setting practices.

### 3. Conceptual model

The model below visualizes the relationship between the main concepts of this study. As demonstrated in the model (figure 1), the study looks at how different levels of stakeholder engagement influence companies decision in regard to setting CSR targets.

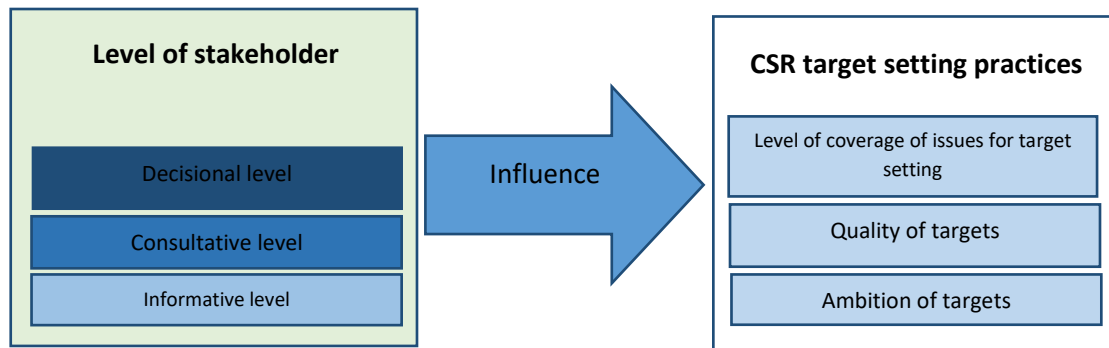


Figure 1. Conceptual Model

#### 3.1. Operational definition of the concepts

Although the concepts were theoretically defined in the previous section, multiple definitions are associated to the concepts, which result in more ambiguity. It is important to clarify how they are defined and measured in the context of this study.

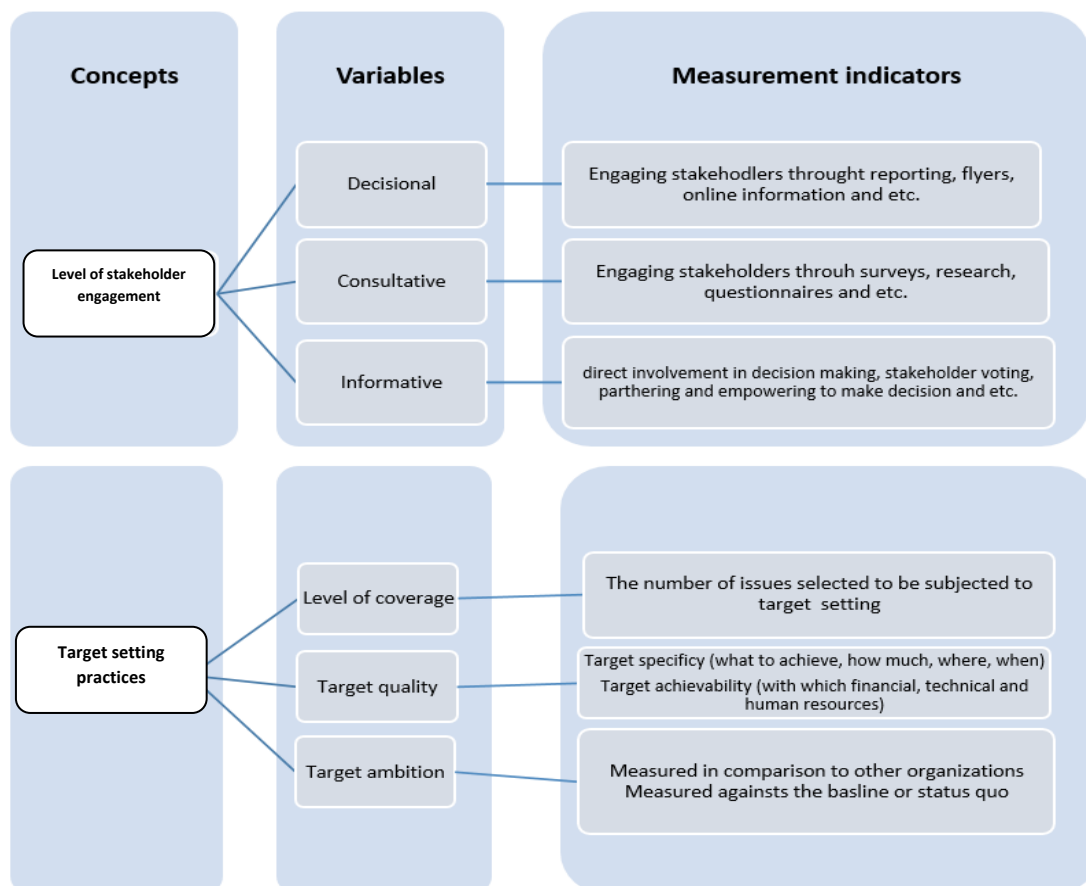


Figure 2. Operationalization of the concepts

## 4. Methods

This section describes how the research question is answered and elaborates on the research strategy & design, data collection and analysis/interpretation.

### 4.1. Research design

This research is based on a multiple case study approach. According to Yin (2009) case study approach is suitable if the research topic meets two criteria:

1) The researcher has little or no control on the behavior and variations, 2) if the study focuses on contemporary events. With respect to the first criterion, a complex set of decisions and activities are

involved in the process of stakeholder engagement and setting CSR targets, which cause emerging of numerous variables in measuring and exploring the process, which can't be controlled by the researcher as it could be in the case of laboratory research, for instance. With regard to the second criterion, the research question is concerned with a contemporary topic and contemporary sets of events and data sources, not historical events.

As shown in the figure 3, the research was carried out in three phases: First, the theory phase in which a literature review is done in order to document in detail the mainstream literature in regard to engagement of the stakeholders in the process of CSR target setting. Particularly, the relevant literature that addresses the relationship between different levels of stakeholder engagement and the quality of CSR related decision makings, specifically CSR target setting. Second, the methods phase in which the methods of data collection and methods of data analysis is presented. Third, the findings, analysis and conclusion, is presented where the paper provides an answer to the research question based on the obtained data and compatible with the pre-discussed proposition and reviewed literature.

### 4.2. Selection of companies

This thesis is based on case study research and conducted in Canon Europa N.V., a subsidiary of Canon Inc. This company was selected because it was involved in setting environmental and social targets for its sustainability plan. The company was also conducting stakeholder analysis project. This made the company a suitable case where it was possible to closely observe how the targets setting activities are taking place. Alongside the main case company, three more companies from the same sector namely Philips, Siemens and Samsung Electronics were also studied. This is done because the researcher assumed that the companies can have different levels of

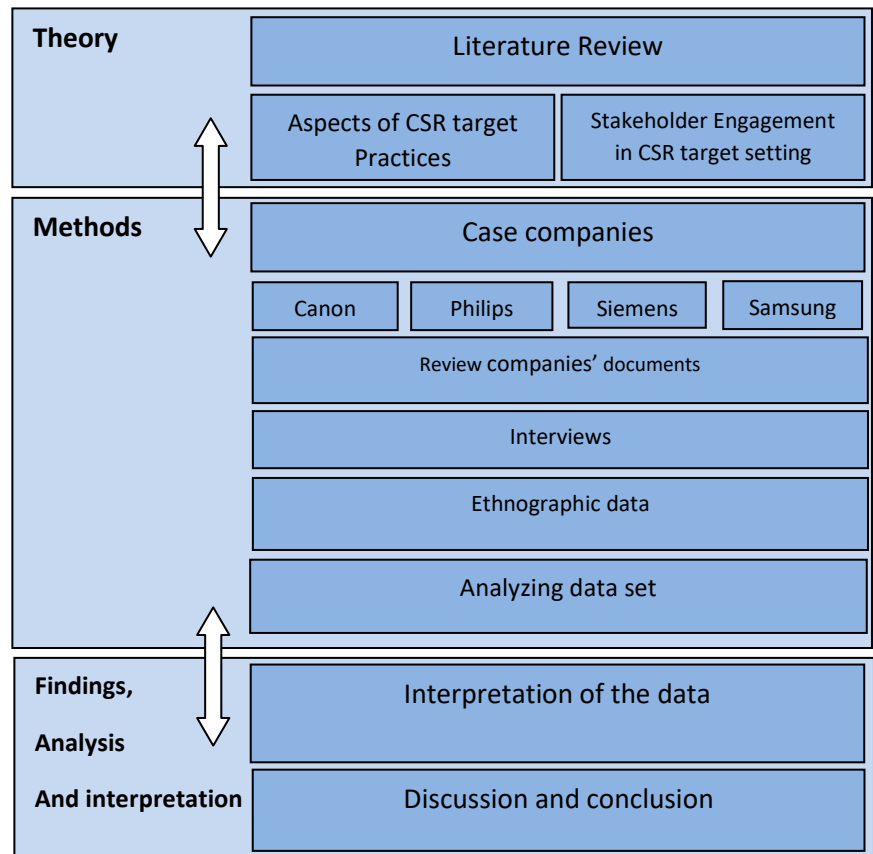


Figure 3. Research design

stakeholder engagement, which was necessary to find out how companies with different levels of stakeholder differ in setting targets.

Companies were selected based on three main criteria. First, the companies engage in CSR target setting. Second, they engage stakeholders and that there is variation in the level of stakeholder engagement. Third, companies disclose information regarding their stakeholder engagement practices and the documents are available for review. Detailed information regarding each one of the case companies is provided in the next chapter.

The electronics sector is selected because this sector is associated with complicated and controversial supply chain. For example use of numerous hazardous and toxic material during production phase; and also recycling of the products are sensitive issues (Nidumolu et al., 2009) that makes this sector important and interesting to be selected for this thesis. In addition to that, this sector is not sufficiently addressed in stakeholder engagement and target setting studies. The result of this study can provide policy implications for the CSR managers in this sector regarding stakeholder engagement, CSR planning and target setting activities.

#### 4.3. Selection of targets

The thesis studied a set of targets from four environmental area, namely climate change, waste management, biodiversity, water use efficiency and pollution. Out of these four environmental aspects, ten issues were concerned.

Environmental issues									
Climate Change			Waste Management			Biodiversity		Water use efficiency & water pollution	
CO <sub>2</sub> reduction	SOx and NOx emission reduction	Energy efficiency	Recycling	Waste reduction	Waste water reduction	Land Conservation.	Species conservation.	Water use efficiency.	Water pollution.

Table 3. Environmental issues addressed in the study

The targets were selected from various sustainability documents of the companies. In some documents a clear list of targets were available, which made it easy for the researcher to identify those statements as targets, whereas in some other documents the targets needed to be found and picked up with a level of uncertainty. To do so, any statement that had a notion of a commitment to realize a certain state in the future was acknowledged as targets. However, for the purpose of this study, only those statements that were related to the environmental issues were reviewed as shown in the table 3. The selected targets are listed in the table 4.

CSR topic subjected to target setting	Canon	Philips	Siemens	Samsung
Climate Change	<p>"3 % improvement in CO2 emissions by 2017 compared to the previous year"</p> <p>"Improve energy consumption basic unit at operational sites by 1.2% by 2017 compared to the previous year"</p>	<p>"Philips is committed to becoming carbon neutral by 2020"</p> <p>"Employing 100% renewable electricity by 2020"</p>	<p>"Our goal is to cut our carbon dioxide emissions in half by as early as 2020" and to be the world's first major industrial company to achieve a net-zero carbon footprint by 2030.</p> <p>"We will also install our own distributed and renewable-energy systems at a growing number of our facilities"</p>	<p>"To reduce 250 million tons of the total compounded GHG emission at the phase of product usage by 2020"</p> <p>56% reduction compared to 2014 - 70 % compared to 2008</p> <p>Continuously improve energy efficiency in manufacturing processes 2020</p>

Waste Management	<i>Improve total waste generation basic unit at operational sites by 1% compared to 2014)</i>	<i>Recycle 90% of operational waste recycled and send zero waste to landfill by 2020</i>	<i>Improve waste efficiency by 2020</i>  <i>Reduce waste for disposal</i>	<i>95% waste recycled by 2020</i>  <i>3.2 % increase compared to 2014</i>
Biodiversity	<i>Canon actively works to reduce the impact on biodiversity associated with various business activities, and to conduct social-contribution activities that lead to biodiversity</i>	<i>We aim to minimize any negative impact and actively promote ecosystem restoration activities including biodiversity restoration projects</i>	N/A	<i>We are committed to minimizing the negative impacts on biodiversity and promoting the activities to conserve the ecosystem.</i>
Water efficiency/pollution	<i>Improve basic unit of water usage for production</i>  <i>by 1% by 2017 compared to 2014</i>	<i>The reduction of water withdrawal is part of our Green Manufacturing program, setting a 25% reduction goal in the period 2007 – 2015. We have achieved this goal ahead of target, reaching a 46% reduction of water withdrawal volume in 2014. This has been possible with the implementation of several reduction programs.</i>	N/A	<i>22 % water efficiency of water use compared to 2014</i>  <i>Achieve a water resource use intensity of 50 tons/KRW 100 million</i>

Table 4. List of targets set by the case companies

#### 4.4. Data collection

Companies' documents were the main sources of data gathering for this research. Companies publish a series of documents in which medium and long term targets are set for relevant sustainability issues. Other relevant documents of the companies were reviewed to find out about the mechanisms of target setting and that factors that could possibly influence the decisions of the target developers. On the basis of these documents exploring target setting practices and evaluating the quality of the targets. Furthermore, documents were also a source of data to gather information about stakeholder engagement practices of the case companies. The type of document and the type of data collected from them is shown in the table 5.

Document title	Company	Year	Purpose of use
Annual Report	Philips	2015	Identifying CSR targets and level of stakeholder engagement
Our Stakeholder Relationship	Canon	2015	Identifying level of stakeholder engagement
Sustainability Report	Canon	2016	Identifying CSR targets
Sustainability Report	Samsung	2016	Identifying CSR targets and level of stakeholder engagement

Sustainability Report	Siemens	2015	
Annual Report	Siemens	2015	Sustainability strategy
Materiality Analysis	Samsung		Identifying Level of stakeholder engagement
Stakeholder engagement	Samsung	2015	Identifying level of stakeholder engagement
Green Policy	Samsung	2015	Identifying CSR targets
Practicing Sustainability	Siemens	2015	Identifying CSR targets
Ambition 2020	Philips	2016	Identifying CSR targets
Sustainable Planet	Philips	2016	Identifying CSR targets
Corporate Philosophy	Canon	2016	Stakeholder engagement, target setting, information about company
Growth Strategy and Sustainability	Canon	2016	Information about the company
Environmental Charter	Canon	2010	Environmental principals

Table 5. List of the companies' documents reviewed as data source

Another source of information was interviews with the CSR managers and other relevant employees. Majority of the interviewees were from the main case company, Canon. Only one of the interview was from the Philips (Philips Sustainability Manager). The researcher could not access to interview people at Siemens and Samsung. The interviewees were selected based on their involvement in various CSR activities such as CSR strategy development, CSR target setting and stakeholder engagement. The interviews were semi-structured and open-ended. Every interview took about one hour. The interview question is available in (Appendix 1).

Interviewees	Position	Company	Date of interview
A	Senior Sustainability Director	Philips	08/07/2016
B	Sustainability Director	Canon Europe Amstelveen	23/06/2016
C	European Audit and Performance Specialist	Canon Europe	22/06/2016
D	Regional Sustainability Officer	Canon Europe	22/09/2016
E	Head of Imaging Department	Canon Europe	03/08/2016
F	Service Manager	Canon Europe	29/07/2016
G	Product Manager	Canon Europe	22/06/2016
H	Sales Manager	Canon Europe	22/06/2016

Table 6. List of the interviewees

The third source of data collection was ethnographical data. Ethnographic data was gathered during six months of working as intern with one of the case organizations, Canon Europa. During this period, the researcher attended regularly in the meetings that were conducted weekly, face-to-face discussions with the sustainability team, conferences, stakeholder visiting. During these meetings, researcher noted relevant data and information. Data was categorized in the coding processes to be used for analysis.

#### 4.5. Methods of Analysis

This part describes how level of stakeholder engagement was identified, how the target setting practices was assessed; and finally how the relationship between level of stakeholder engagement and target setting practices is analyzed.

#### 4.5.1. Identifying level of stakeholder engagement

In order to identify the level of stakeholder engagement across the selected companies, 45 stakeholder engagement practices and initiatives were randomly picked up from the companies' documents. This number is considered because it covers more than 80 percent of all stakeholder engagement activities of the companies related to environmental issues. These engagement practices are then classified into major engagement levels namely informative, consultative and decisional (Appendix B1 – B4). Distributing the engagement practices among these levels is done based on the nature of the engagement activities. Considering the definitions that Green et al. (2003) gave to every level of stakeholder engagement, table 7 is developed which demonstrates where every engagement practices is distributed.

Since level of stakeholder engagement is also very relative within one level, sub-levels are also created and are defined within the major three levels (informative, consultative and decisional), according to table 7.

Levels of engagement		Description of each level
Informative	1	Ad hoc information sharing (i.e. announcements, leaflets etc...)
	2	Regular information sharing (i.e. sustainability reports, websites, ...)
	3	Basic surveys (i.e. basic surveys to gather information about number and types of stakeholders)
Consultative	4	Surveys (i.e. to find out about needs and expectations of the stakeholders)
	5	Regular surveys of researches (i.e. materiality analysis, dialogue, participation in the events and conferences.)
	6	Empowering stakeholders (i.e. funding, campaigning, conducting events and etc...)
Decisional	7	Stakeholders partly influence the decisions (partnering, joint projects, collaborations etc...)
	8	Stakeholders have direct influence on the decisions (i.e. ideas of stakeholders are implemented in the decisions and projects)
	9	Stakeholders control the decisions (i.e. decisions are made through stakeholders' democratic voting, stakeholders plan and execute the projects)

Table 7. Description of levels and sub-levels of stakeholder engagement

After classifying stakeholder engagement practices and initiatives, they were counted to find out how these engagement practices are spread out across the stakeholder engagement spectrum. In the finding section, the result is shown through radar charts.

#### 4.5.2. Assessing target setting practices

Three issues were concerned regarding target setting practice: 1) coverage of issues, 2) quality of the targets, 3) ambition level of target.

To identify companies' coverage of issues for targets setting the companies' documents were reviewed. Ten environmental issues were concerned across four areas (climate change, waste management, biodiversity and water). All the environmental targets of the case companies were reviewed to find out how many issues out of ten were covered or addressed within the target setting process. The result is exhibited in the finding section.

The quality of the target are assessed across six indicators that are explained in the table 8. Five out six of these indicators are associated with target specificity, and the last indicator is associated with achievability of that targets. Considering these indicators, the targets are graded between 0 – 4. Table 9 describes how indicators are graded for every targets.

Considering the indicators and grading method, targets were assessed through the companies' documents to find out to what extent a given target meets the mentioned indicators. The result is demonstrated in the figures 10 –13, in section 5.

Indicators	code	Description of the indicators
Specific content	Ind1	Target is specific on what exactly going to be achieved and/or accomplished
specific quantity	Ind2	A measurable indication of the target is stated in quantitative term
Specific Geography	Ind3	The geographical and sector context of the target is clearly indicated
Specific Tim/ deadline	Ind4	The time-bound is clearly stated
Specific approach	Ind5	The approaches, mechanism and strategies and constraints are identified and stated
Realistic	Ind6	Financial, technical and human resources to achieve the targets are identified and stated

Table 8. Description of quality indicators of CSR targets

0	Indicator not found for the target
1	Poor: Indicator is poorly visible in the target
2	Moderate: some aspects of the indicator are visible
3	High: Most aspects of the indicator is visible and clear
4	Excellent: All aspects of the indicator is visible and clear

Table 9. Grading system of the indicators

Target ambition is measured based on the improvement that each companies projects for every CSR targets. Three levels of ambition is considered: high, medium and low. Table 10 describes how the ambition is determined.

Highly ambitious	The targeted improvement is 50 % higher than the status quo
Medium ambition	The targeted improvement is less than 50 % than the status quo
Low ambition/modest	The targeted improvement is less than 10% than status quo
No clear data	Quantitative data is not available

Table 10. Description of levels of target ambition

The main purpose of the analysis was to find out whether there is a difference in target setting practice between the companies with the highest and lowest level of stakeholder engagement. This is done by comparing the companies stakeholder engagement and target setting practices. Other complementary information such as interviews and ethnographic data are used to explore other factors which may influence target setting practices across the selected companies.

#### 4.6. Research quality

Yin (2009) introduced a set of indicators to assess the quality of a case study research. These indicators are construct validity, internal validity, external validity and reliability. Therefore, in the case of this re-search, the quality will be ensured with regard to these indicators.

1. Construct validity: Construct validity can be ensured by use of multiple sources of evidence, and also getting the interview scripts and reports reviewed by key informants. To increase construct validity in this paper, four companies were studied in order to make comparative analysis possible. In addition to that 45 stakeholder engagement practices per each company was assessed. Besides, a wide range of CSR targets that covers four aspects of CSR issues were reviewed and assessed. The interview scripts will be sent to the interviewees for review and correction.

2. Internal validity: According to Yin (2009) the best tactic to ensure internal validity in exploratory case study research is pattern-matching logic. "Such a logic compares an empirically based pattern with a predicted one. If patterns coincide, the result can help a case study to strengthen its internal validity" Yin (2009, pp. 136). In this paper, the main patterns are "levels of stakeholders' engagement" and "target setting practices (coverage, quality and ambition)" in the process of CSR target setting. It was compared whether these patterns coincides.



3. External validity: According to Yin (2009) it is about whether a study's findings are generalizable beyond the immediate case study. In this paper, external validity is limited only the electronics sector, because the study will be carried out in the context of only one sector. However, main findings and results can provide a kind of comparative and analytical template for similar studies that may take place in similar contexts.

4. Reliability: To increase the reliability of the study, all the data and information were made available for scrutiny. The interviewees were asked to review the interview scripts. Moreover, university supervisors check the collection process regularly during the course of the internship, so that any discrepancies will try to be identified at an early stage.

#### 4.7. Description of the case companies

##### 4.7.1. Canon Europe

Canon Europe is a subsidiary of Canon Inc. of Japan, a global producer of printing, imaging and healthcare solutions. Canon Europe was established in 1957 and employs about 18,000 people. The company sells its products in more than 110 countries across Europe, Middle East and Africa (EMEA). Canon Europe contributes around one third of Canon's global sales revenue (Canon Inc., 2016).

Canon Europe embraced with a core philosophy called "Kyosei". Kyosei is Canon's corporate philosophy and lies at the heart of their business activities. Kyosei is a Japanese word that means "living and working together for the common good" – a principle that is embraced by all Canon employees. It shapes their mission and their value by which they treat their people and conduct their business (Canon Inc., 2016).

Concerned with the environmental issues, the company focuses to minimize the need for new natural resources, reducing environmental impacts from design to end of product life and throughout their operations. Furthermore, the company developed its central environmental policy and principles that are supported across seven rules: 1) establishing and operating an environmental management system, 2) increasing environmental awareness among the employees and supporting initiatives in the personal and company level, 3) giving priority to the low impact materials during purchases, 4) aligning operations with the environmental laws, 5) actively pursuing pollution prevention, energy efficiency, resource conservation and elimination of hazardous substances, 6) encouraging recycling of the products, 7) actively engaging with the stakeholders such as government, NGOs and communities. (Canon Europa, 2015)

##### 4.7.2. Philips

Koninklijke Philips N.V. (Royal Philips, commonly known as Philips) is a Dutch electronics company. It was founded in 1891. It is one of the largest electronics companies in the world and employs around 105,000 people across more than 60 countries with a revenue of about 24 billion Euro (2016).

Philips claims to have a long sustainability history stretching all the way back to foundation of the company. In 1994, they launched their first program and set sustainability targets for their own operations. In terms of environmental aspects, Philips are mainly focused on green innovations, circular economy. (Philips, 2015)

##### 4.7.3. Siemens

Siemens AG is a German company headquartered in Berlin and Munich. Siemens and its subsidiaries employ approximately 362,000 people worldwide and reported global revenue of around €75.6 billion in 2015 (Siemens, 2015).

Sustainability at Siemens is approached based on people, planet and profit. In the environmental aspect, energy efficiency, emissions reduction and recycling are the main focused issues.

#### 4.7.4. Samsung

Samsung is a South Korean multinational company headquartered in Seoul. It comprises numerous subsidiaries and affiliated businesses,[1] most of them united under the Samsung brand. Samsung was founded in 1938, and entered into the electronics industry in 1969. Samsung employs more than 325000 employees in more than 80 countries. The company's revenue for 2014 was about 200 billion USD. (Samsung, 2016)

Sustainability at Samsung is approached based on people, profit planet approach. In term of environmental issues, emissions reduction and recycling are the core aspects of its environmental strategy. (Samsung, 2016)

#### 4.7.5. An overview of stakeholder engagement across the selected companies

All four companies emphasize that stakeholder engagement is an essential aspect of their CSR strategies and initiatives.

##### **Quote 2: Philips –SE approach**

*In organizing ourselves around customers and markets, we create dialogues with our stakeholders in order to explore common ground for addressing societal challenges, building partnerships, and jointly supporting ecosystems for our innovations around the world. Working in partnerships is crucial in developing on our vision to make the world healthier and more sustainable through innovation (Philips, 2015. Pp 38).*

##### **Quote 1: Canon – SE approach**

*“Under its corporate philosophy of kyosei, Canon aspires to be a truly excellent global company that is admired and respected by all stakeholders. We know that in order to achieve this, it is important for us to share our beliefs with customers, shareholders, investors, suppliers, employees, and other stakeholders, and to deepen mutual understanding by listening intently to feedback from stakeholders”. (Canon Inc., 2016. Pp 130 )*

##### **Quote 3: Siemens – SE approach**

*We believe that close collaboration with stakeholders supports us in addressing complex, interlocking sustainability challenges. Maintaining an intensive dialogue with partners along the supply chain and with external stakeholder groups and organizations is important for us. We listen to our stakeholders and integrate their perspectives into our business priorities and decision-making processes (Siemens, 2015. Pp 6)*

##### **Quote 4: Samsung Electronics – SE approach**

*Samsung is well aware of the fact that communication with various stakeholders is essential to fulfill its social responsibility as a global corporate citizen. In this regard, we operate diverse communication channels to form a consensus on sustainability management issues and to establish a long-term cooperative relationship (Samsung, 2016. Pp 32)*

All four selected companies listed their key stakeholder groups as follow: customers, employees, shareholders, suppliers, national and local government, local communities, NGOs and research institutes. None of the companies categorize their stakeholders in term of their importance and salience.

All four companies prioritize the expectations of their stakeholders through materiality surveys. Table 11 summarize issues that matter the most to the stakeholders across the selected companies. In the table the order of importance of issues for the stakeholders from left to right.

Company	Important issues to the stakeholders
Canon	CO <sub>2</sub> emission – Waste reduction – energy efficiency
Philips	Waste management – energy efficiency – CO <sub>2</sub> emission – biodiversity – water – Water and air pollution
Siemens	Energy efficiency – CO <sub>2</sub> emission – waste management
Samsung	Waste reduction – CO <sub>2</sub> emission – energy efficiency – water – waste recycling

Table 11. Environmental issues that matter the most to the stakeholders derived from the materiality matrixes of the case companies

Since the main focus of this study is on the stakeholders that are engaged in environmental decision making and target setting, table 12 shows explicitly the main influential external stakeholders in regard to target setting for every company and also in regard to every issue.

Companies	Stakeholders with most influence on the target setting practices			
	Climate Change	Waste Management	Biodiversity	Water
Canon	Government of Japan	Governments EPA	COP10	Governments WRI
Philips	EU UNGC - SDG	EU-WEEE COP21	EU IUCN WBCSD	EU IPE – China
Siemens	EU UNGC - SDG	Government Society	n/a	UN Water Mandate
Samsung	EU UNGC - SDG	Local government EU-WEEE	Local governments Forest Stewardship Council	Local governments UN-FAO UN-Water

Table 12. Companies' most influential stakeholders regarding environmental issues

#### 4.7.6. An overview on CSR target setting practices across the selected companies

The case companies employ different approaches for target setting practices. Depending on the CSR issue subjected to target setting, their approaches differ largely as well.

For climate change, the studied companies express their targets in terms of CO<sub>2</sub> reduction and energy efficiency. As shown in the table 4, only in the case of CO<sub>2</sub> emission there are explicit targets with exact quantity and time, while for energy efficiency, the targets of two companies namely Canon and Philips are explicit in terms of time and quantity.

For waste management, Canon and Philips and Samsung are the companies with explicit targets where they focus on waste reduction and recycling. Siemens doesn't set any target in regard to waste management at all.

For biodiversity, although three companies (Canon, Philips, and Samsung) considered it within their target setting scheme, none of these companies are adequately explicit about it.

For water efficiency and water pollution, Canon and Samsung have explicit targets while Philips and Siemens present them in a general sense without time and quantitative indications.

## 5. Findings

This chapter describes the results. The results are presented based on the research questions. Although the particular focus is on the case company (Canon Europe), relevant findings gathered from peer companies in the technological sector are presented as well. These companies include Philips, Siemens and Samsung.

### 5.1. Identifying level of stakeholder engagement

Level of stakeholder engagement is identified based on the stakeholder engagement practices that are listed in the attachment B. Level of stakeholder engagement is presented for every company as follow:

#### 5.1.1. Identifying level of stakeholder engagement - Canon

Figure 4 is shaped based on stakeholder engagement activities and initiatives that are categorized in Appendix B1. As demonstrated in the figure 4 majority of the stakeholder engagement practices of Canon is concentrated in the consultative level with bigger a lean towards informative level.

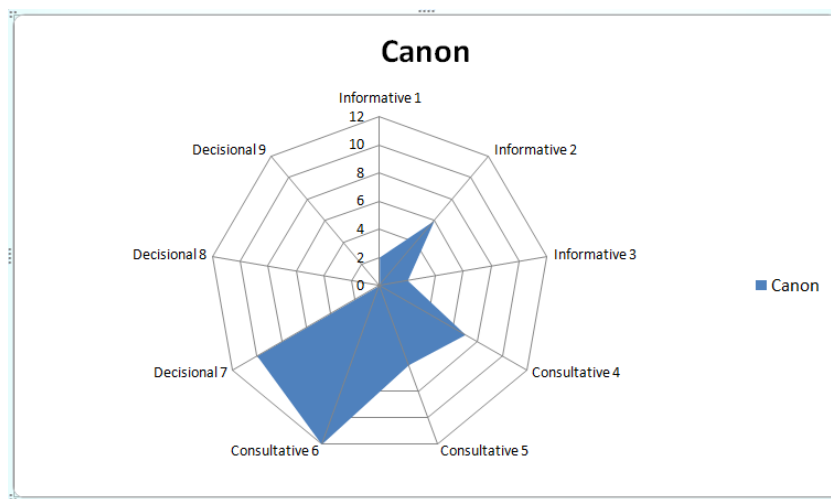


Figure 4. Canon's level of stakeholder engagement

#### 5.1.2. Identifying level of stakeholder engagement – Philips

Figure 5 is shaped based on stakeholder engagement activities and initiatives that are categorized in Appendix B2. As demonstrated in the figure 5 a significant majority of the stakeholder engagement practices of Philips is concentrated in the consultative and decisional level.

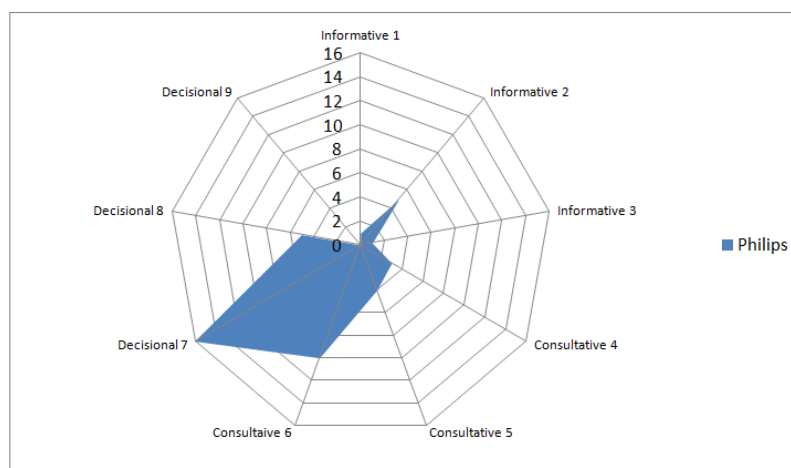


Figure 5. Philips' level of stakeholder engagement

### 5.1.3. Identifying level of stakeholder engagement – Siemens

Figure 6 is shaped based on stakeholder engagement activities and initiatives that are categorized in Appendix B3. As demonstrated in the figure 6 majority of the stakeholder engagement practices of Siemens is concentrated in the consultative level with more lean towards decisional.

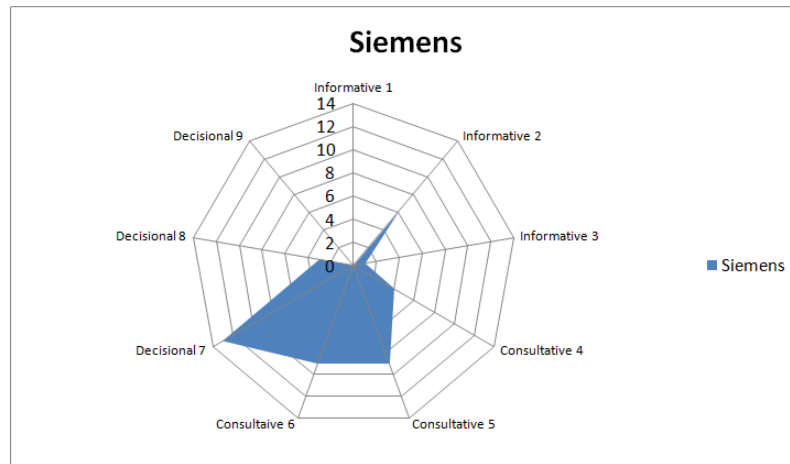


Figure 6. Siemens' level of stakeholder engagement

### 5.1.4. Identifying level of stakeholder engagement – Samsung

Figure 7 is shaped based on stakeholder engagement activities and initiatives that are categorized in Appendix B4. As demonstrated in the figure 7 majority of the stakeholder engagement practices of Samsung is concentrated in the consultative level with highest lean towards informative level compared to other three companies.

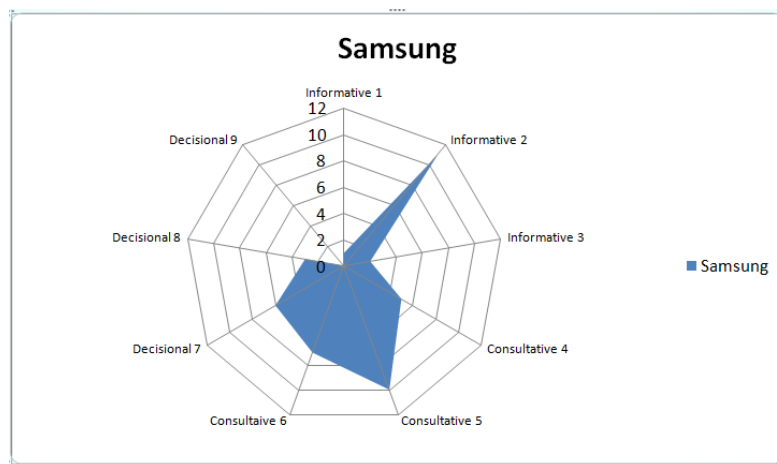


Figure 7. Samsung's level of stakeholder engagement

### 5.1.5. Summary

Stakeholder engagement practices occurs at all three levels across the case companies, but with different proportions at each level

A comparison of all four companies are shown in figure 8. Although engagement practices across all four companies are concentrated in consultative level, there is still away to distinct between the companies with highest and lowest level of engagement. According to the figure 8, Philips is the company with the highest level of stakeholder engagement because majority of the engagement practices occurred in the consultative and decisional levels. Samsung is identified with

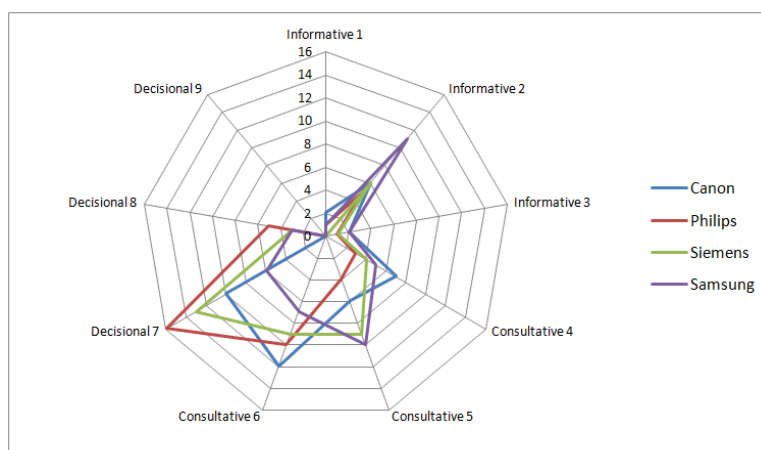


Figure 8. Level of stakeholder engagement. Comparison of all four companies

the lowest level of stakeholder engagement because most of its engagement practices are spread around consultative and informative levels.

The findings show that stakeholder engagement is spread at all three levels, however most of the practices are concentrated at the consultative levels. Multiple reasons could explain this trend:

First, keeping stakeholder engagement at the consultative level is a purposeful strategic and decision for all the large corporations. Keeping engagement at consultative level, companies can systematically gather information about the desires and concerns of their stakeholders. This enables them to align their decisions with the demand of their stakeholders and maintain a stronger partnership their vital stakeholders.

Second, keeping stakeholder engagement at the consultative and decisional level is costly and time consuming that needs substantive resources, which only large companies are capable of doing it. For instance, for activities such as mobilizing stakeholders, conducting surveys and launching training and awareness programs companies require to allocate sufficient resources for their CSR departments.

#### Quote 5: Philips – Identifying level of SE

*“If we only keep our engagement in an information level and change nothing based on the stakeholder’s opinion, the stakeholders for example Green and others will have no interest to engage with us and the value will be nothing for us”.  
(Interviewee A)*

## 5.2. Assessing target setting practices across the selected companies

Three aspect of target setting practices is addressed in this part: 1) coverage of issues under target setting, 2) quality of the targets, 3) ambition level of the targets.

### 5.2.1. Coverage of issues for target setting

Figure 9 demonstrates the number of environmental issues covered by each company for target setting. According to figure 9 Canon covered the highest number of environmental issues for target setting, whereas Siemens covered the lowest number of environmental issues. Furthermore, CO<sub>2</sub> emission is the only issue that is fully covered by all companies, while water pollution is the issues the is left uncovered by all companies.

Companies	Issues covered in the target setting									
	Climate Change			Waste Management			Biodiversity		Water	
	CO <sub>2</sub> em	SOx and NOx em	Energy efficiency	Recycling	Waste reduction	Waste water reduction	Land Cons.	Species cons.	Water use eff.	Water pollution.
Canon										
Philips										
Siemens										
Samsung										

Figure 9. Level of coverage of issue for target setting across the case companies

The results indicate that Canon and Philips respectively covered the highest number of issues for target setting. Siemens covered the lowest number of issues according to Figure 9.

On the other hand, climate change is the highest covered aspect amongst the four concerned environmental issues. As shown in figure 9, CO<sub>2</sub> reduction is the only environmental issue within climate change that is fully covered and subjected to explicit target setting by all companies. Water use efficiency is the second most covered issue, while a range of other environmental issues such as water pollution, waste and waste-water reduction; and non-CO<sub>2</sub> emissions are the one with lowest coverage.

### 5.2.2. Assessing quality of the targets

As described in the methods section, the quality of the targets is assessed across six indicators. The indicators are graded based on the extent that a target meets an indicator.

Indicators	Environmental Issues									
	Climate Change			Waste Management			Biodiversity		Water	
	CO <sub>2</sub> em	SOx and NOx em	Energy efficiency	Recycling	Waste reduction	Waste water reduction	Land Conservation.	Species conservation.	Water use efficiency.	Water pollution.
Ind1										
Ind2										
Ind3										
Ind4										
Ind5										
Ind6										

Figure 10. Quality of the targets based on the indicators – Canon

Indicators	Environmental Issues									
	Climate Change			Waste Management			Biodiversity		Water	
	CO <sub>2</sub> em	SOx and NOx em	Energy efficiency	Recycling	Waste reduction	Waste water reduction	Land Cons.	Species cons.	Water use eff.	Water pollution.
Ind1										
Ind2										
Ind3										
Ind4										
Ind5										
Ind6										

Figure 11. Quality of the targets based on the indicators – Philips

Indicators	Environmental Issues									
	Climate Change			Waste Management			Biodiversity		Water	
	CO <sub>2</sub> em	SOx and NOx em	Energy efficiency	Recycling	Waste reduction	Waste water reduction	Land Cons.	Species cons.	Water use eff.	Water pollution.
Ind1										
Ind2										
Ind3										
Ind4										
Ind5										
Ind6										

Figure 12. Quality of the targets based on the indicators – Siemens

Indicators	Environmental Issues									
	Climate Change			Waste Management			Biodiversity		Water	
	CO <sub>2</sub> em	SOx and NOx em	Energy efficiency	Recycling	Waste reduction	Waste water reduction	Land Cons.	Species cons.	Water use eff.	Water pollution.
Ind1										
Ind2										
Ind3										
Ind4										
Ind5										
Ind6										

Figure 13. Quality of the targets based on the indicators – Samsung

The quality of the targets vary widely across the issues. For all four companies, targets set for climate change, and particularly for CO<sub>2</sub> reduction scored highest for quality. Apart from the CO<sub>2</sub> reduction, the quality of the targets for rest of the issues vary across the companies (figures 10 – 13).

### 5.2.3. Assessing ambitiousness of the targets

As demonstrated in the figure 14, Philips set the most ambitious targets, especially for climate change and recycling. Canon set the lowest level of ambition. For waste management (figure 14) Samsung set the most ambitious targets. Three of the case companies set 2020 as their deadline for achieving the targets, while Canon is the only company that put a short-term deadline (2017).

Companies	Issues covered in the target setting									
	Climate Change			Waste Management			Biodiversity		Water	
	CO <sub>2</sub> em	SOx and NOx em	Energy efficiency	Recycling	Waste reduction	Waste water reduction	Land Cons.	Species cons.	Water use eff.	Water pollution.
Canon										
Philips										
Siemens										
Samsung										

Figure 14. Level of target ambition across the case companies



Another aspect of determining the ambition of the targets is to link and calculate the ambition of the targets based on global targets. In that regard, Philips, Siemens and Samsung aligned their targets with the UN Sustainable Development Goals. Canon, on the other hand set its targets following the usual trend and progress pace. Companies took different approaches in defining their targets. In regard to climate change, Philips, Siemens and Samsung set science-based targets which are in line with the scale of reductions required to keep global temperature increase below 2°C compared to pre-industrial temperatures.

	Ambition level	Deadline	Aligning targets with the stakeholders	Applying science-based targets
Canon	Low	2017	None	No
Philips	High	2020	UNGC - SDG	only for CO <sub>2</sub>
Siemens	Medium	2020	UNGC - SDG	only for CO <sub>2</sub>
Samsung	Medium	2020	UNGC - SDG	Only for CO <sub>2</sub>

*Table 13. Level of target ambition and application of science-based targets for CO<sub>2</sub> reduction*

## 6. Analysis

### 6.1. Level of stakeholder engagement and coverage of issue for target setting

The level of coverage for target setting is analyzed in relation to the level of stakeholder engagement of each company. As shown in the figure 9, the companies with highest and lowest level of stakeholder engagement respectively Philips (highest); and Canon and Samsung (lowest) are similar in their level of issue coverage for target setting. Canon covered the most issues for target setting, however it is the lowest in term of level of stakeholder engagement alongside Samsung. On the other hand, Siemens with the second highest level of stakeholder engagement after Philips covers the least number of issues for target setting. This implies that there is not any meaningful relationship between companies' level of stakeholder engagement and number of issues that they cover for target setting. This can be evident by the statement from Canon's environment and audit specialist who believes that level of stakeholder engagement is not really influential in regard to deciding how many issues should be subjected to target setting. As her quotes indicates that the main decisions on setting targets comes from the top management (quote 6).

#### **Quote 6: Canon –Level of SE on level of coverage of issues for TS**

*"... It was initially a high level decision and based on that you need to identify what are important topics for my operation on all those environmental aspect to set targets; for example in regard to waste, energy consumption, CO<sub>2</sub>". ( Interviewee C)*

Instead of level of stakeholder engagement, diversity of the stakeholders seems to be more influential on the level of coverage of issues for target setting. In the case of Philips for instance, this can be evidenced by the various documents and also statements made by the company sustainability managers in the quote 7:

#### **Quote 7: Philips - Level of SE on level of coverage of issues for TS**

*"To determine which topics we should chose to set targets we sit and talk with a wide range of our stakeholders... they are people from the governments, NGOs like Green Peace and Friends of the Earth, Good Electronics and etc....each of them have their own concerns and interests and that how we come up with a long list of issues to set targets for them"* (Interviewee A)

However, stakeholders priorities seems to be considered by companies' decisions regarding what issues they should subject to target setting. This can be seen by looking at the materiality analysis of the companies and comparing it to the coverage of issues (figure 9) where issues subjected to targets setting are indicated. As indicated in the table 11 the top three important issues from the stakeholders' perspective (CO<sub>2</sub> reduction, energy efficiency and waste management) have also been covered by the companies in the target setting process. This implies that there is a direct alignment between stakeholders' concerns and companies' decisions regarding coverage of issues for target setting. This is reflected in the quote 8.

#### **Quote 8: Siemens - Level of SE on level of coverage of issues for TS**

*'We identify topics based on their importance for Siemens and our stakeholders and prioritize them by materiality. The prioritization shows the action areas identified. The results were then discussed with our Sustainability Board and ultimately approved by our Managing Board and Supervisory Board'. (Siemens, 2015)*

## 6.2. Level of stakeholder engagement and quality of the CSR targets

A number of patterns can be identified from the set of data presented in regard to level of stakeholder engagement and quality of the CSR targets.

First, according to figure 8, Philips is identified as the company with the highest level of stakeholder engagement comparing to other three companies, while the quality of the targets set by the company is not significantly distinctive than other studied cases. This implies that there is not any significant correlation between the level of stakeholder engagement and the quality of the targets.

Second, the quality of the targets set for climate change and particularly for CO<sub>2</sub> reduction is significantly higher across all four studied companies than other environmental issues. There are several explanations for it: According to materiality studies conducted by all four companies' climate change and specifically CO<sub>2</sub> reduction is ranked the most important issue. As a result, it has become a strategic issue for the companies by which the sustainability performance of the companies is ranked against the competitors. Therefore, it is more likely that companies spend more resources in establishing a stronger information gathering system which is important in order to set targets that are specific in content, realistically timed and financially supported. Second, setting high quality targets for CO<sub>2</sub> reduction is much easier for the companies than other issues, because there are already global targets and thresholds that companies can consider them as the basis for their calculations.

### **Quote 10: Canon – quality of targets**

*"We did a lot of investigations in the process of CO<sub>2</sub> target setting. For this purpose we also asked consultancy companies to help us. For the rest of our targets, we set the figures based on approximate calculations and we still need to carry out further research in order to make them explicit" (Interviewee B)*

Third, within the waste management context, recycling is in the focus of target setting across three companies that is subjected to higher quality of targets. Recycling is a critical issue for electronics and technological sectors mainly due to existing of hazardous substances associated with the products. In the case of Canon, recycling of printer's cartridge and paper is the main area of waste management practices.

## 6.3. Relationship between level of stakeholder engagement and targets ambition

The relationship between the level of stakeholder engagement and target ambition are identified in two ways. First, by considering the overall engagement level (figure 8) in which Philips is identified with the highest level of engagement also set the highest ambitious targets for CO<sub>2</sub> reduction, renewable energy and water use reduction. On the other hands, Canon with lowest engagement level, has least ambitious targets. This can be explained by the fact that companies with high level of stakeholder engagement go under tougher scrutiny and pressure by the stakeholders.

### **Quote 11: Philips– Level of SE and targets' ambitions**

*"If we only keep our engagement in an information level and change nothing based on the stakeholder's demand, the stakeholders for example Green Peace and others will have no interest to engage with us and the value will be nothing for us neither for them. They are highly demanding and we have to deliver. That's why we keep our targets very ambitious" Philips Sustainability Manager" (Interviewee A)*

This pushes them to raise the bar for their CSR and environmental activities by setting more ambitious targets

Second, by considering the companies' stakeholder engagement specifically in regard to determining the level of ambition. In that sense, three companies namely Philips, Siemens and Samsung that are engaged with the United Nation Global Compact (UNGC) set significantly higher ambitious targets than Canon which is not engaged with UNGC. It can be explained by the fact being engaged with UNGC

particularly for climate change related targets, the companies are stimulated and supported to align their targets with the global demand for emission reduction required to keep the global temperature rise below 2 C. In that case companies that align their targets to global climate change targets, are ended up with more radically ambitious targets. For instance, Philips set a CO<sub>2</sub> zero targets by 2020. Whereas Canon, set its targets looking at its regular progress pace.

**Quote 12: Philips – targets' ambitions**

*"...we sat with a team of people within Philips and we defined a number of targets. Besides that, we have surveyed where we ask our stakeholders they think should be the targets, ambitions and so on. We did the same for the Suppliers Sustainability and Sustainable Solutions programs" (Interviewee A)*

## 7. Discussion

The main aim of this thesis is to explore the influence of stakeholder engagement in target setting practices across the technological companies. As pointed out in the theoretical framework section, although earlier researches confirmed that stakeholder engagement improve the quality of decision makings in the companies (Mitchell et al., 1997; Henriques and Sadosky, 1999; Thornton et al., 2003), it has not been explicitly investigated whether different levels of stakeholder engagement can also improve the quality of targets setting as a form of decision making as well. In this regard, three aspects of target setting practices are concerned: 1) selecting issues to be subjected to target setting, which is termed as coverage of issues, 2) quality of target setting, which are specified based on a range of parameters and 3) ambition of the targets.

### 7.1. Discussing the findings

#### 7.1.1. Determining the level of stakeholder engagement

Although theoretically it sounds comprehensible to categorize a company's stakeholder engagement practices into three informative, consultative and decisional levels (Green et al., 2003); in practice however it is impossible to concretely identify a specific level of stakeholder engagement for a given company. As explored in this study, stakeholder engagement practices within big corporations are very relative and ongoing process. It is relative because all levels of stakeholder engagement can be identified in a company's stakeholder engagement practices with different degrees. In this case, it is not possible to draw a definitive conclusion to determine whether stakeholder engagement of a given company is informative, consultative or decisional. It is ongoing because stakeholders are not engaged specifically for every single decision, but in most cases it is a continuous process. However, there may be some specific issues that need ad hoc resolution and therefore specific stakeholder engagement is required.

In regard to target setting, all three levels of stakeholder engagement can occur. Keeping in mind that the target setting is a procedural practice with different phases, companies' may consider that any level of stakeholder engagement can be equally important in the process of target setting. For example in deciding what issues should be subjected to target setting, the companies may need to conduct materiality study which involves *consultative* level of engagement. Whereas in defining ambition of the targets, companies may need to align their ambition with global trends and global targets (i.e. UN climate change target), which requires joint collaboration with these stakeholders that is a *decisional* level of stakeholder engagement.

#### 7.1.2. Target setting practices: purpose and approach

The companies set targets for multiple purposes. It is widely believed that having clear targets can drive the business towards CSR. This implies that they associate leadership and psychological purposes to having targets. In that sense, targets are meant to keep the organizations and the employees more focused and stimulated to realize the targets. It also provides greater rationale for the decisions. This will eliminate a lot of the uncertainty that goes with not understanding the direction of the company.

In addition, targets serve a tool to communicate the companies' commitment to its stakeholders. It means that having clear targets can assure the stakeholders about seriousness of the corporation in regard to CSR issues, and this can win their trust to them. Moreover, targets can have managerial use as well. In that regard, they make it possible for the company to measure their progress, and identify the obstacles.

The approaches of the companies can be discussed in two aspects of targets setting, namely *quality* of the targets, and *ambition* of the targets.

The quality the targets is measured across these parameters: *specificity* (in terms of content, time, quantity, geography, approach), *achievability* (realistic). In this regard, the widely favorable approach is to keep the targets as much specific as possible (in term of all parameters). However, it can be argued that there are some negative side-effects associated with too much specificity as well, as it can outweigh the benefits. When targets are too specific, there is a risk that the involved employees narrow down their focus on that specific targets and become blind to other factors influencing factors. This phenomenon is known as *inattentional blindness* (Most et al., 2001). For example in the 1960s, Ford had set specific fuel-efficiency targets and an aggressive timeline for the design of a new car. The company successfully met its targets. In the process, however, the company ignored safety risks, which eventually resulted in a number of deaths result in company's reputation damage. The company's targets were so specific that it didn't leave room for employees to focus on anything else (Venkatraman, 2016).

In regard to the ambition of the targets, two approaches are recognizable: 1) setting target's ambition based on the company's progress pace, 2) setting targets ambition based on global trends and global targets. In the former case, companies end up with less ambitious targets, but more achievable. In the later case, companies set more ambitious targets in order to be aligned with the global requirements. However, in that case the achievability of the targets remain questionable.

#### 7.1.3. Influence of stakeholder engagement and target setting practices

Influence of stakeholder engagement is assessed in regard to three aspects of targets setting practices, namely level of issue coverage, quality of targets and target's ambition. The findings indicate that the target ambition is the only aspect of target setting practice that could directly be affected by the level of stakeholder engagement.

The level of issues covered for target setting is determined mainly by diversity of the stakeholders, rather than their level of engagement. However, if companies' decision for selecting issues to be covered for target setting is made based on stakeholders' concerns, then practicing a consultative level engagement in the form of surveys to identify stakeholder materiality is inevitable. For this purpose, practicing informative and decisional levels of stakeholder engagement is irrelevant.

The result indicate that the quality of the targets is not significantly higher within the companies with higher level of stakeholder engagement, than those with lower level. This, however, does not provide a convincing conclusion that there is not any link between the level of stakeholder engagement and quality of the targets, given that only four companies were studied, which is not sufficient to draw statistically sound conclusion. Considering the fact that setting high quality targets according to the concerned indicators table 7 require extensive assessments of the needs and resources; companies have to rely on their stakeholders to collect information for such assessments. In that case, engaging with the stakeholders at least at the consultative level become inevitable.

#### 7.2. Theoretical implication

The outcome of this research provides a number of implications for the theories concerned with stakeholder engagement and its relationship with business decision makings including targets setting as concerned by this study:

First, despite Green's model is applicable on a wide range of stakeholder engagement practices, there are still a number of engagement practices that are left out of Green's three levels of engagement. Such practices are neither consultative, nor decisional; but they serve to empower the stakeholders. In that sense, applying Green's model within this research to identify and label stakeholder engagement practices, it was noticed that the definition given to consultative and decisional engagements by Green et al. (2003), don't encompass those engagement practices that have empowering notion. For instance sponsoring and donations to stakeholders could be categorized more in the empowering level rather than consultative or decisional. However, in Arnstein's ladder of participation, which is the foundation of Green's model, categorization of levels of engagement is structured with more details that encompasses almost all types of engagement practices including those that have empowering purpose. Therefore, the Model of Green et al. (2003) can be more inclusive if in addition to three levels of informative, consultative, and decisional one more level namely *empowering* is added between *consultative* and *decisional* levels.

Second, the model that is proposed by Green et al. (2003) depict two aspects of stakeholder engagement, namely *level of engagement* and *frequency of engagement*. However, when it comes to exploring the influence of stakeholder engagement in business decision making, *diversity of the stakeholders* is another influential factor as well in determining and influencing the quality of the decisions. Within this research, the significant influence of diversity of the stakeholders is identified in relation to decision of the companies regarding coverage of issues for target setting. Companies that engage a wider diversity of the stakeholders tend to cover wider range of issues under target setting scheme. This is explainable with the fact that wider range of diverse stakeholders represent a wider range of interests and issues, which ultimately force the companies to cover as much wider issues as possible.

### 7.3. Limitations and further research

Concerning generalizability and interpretability of the findings, it is important to discuss a number of limitations that could influence the validity and reliability of the research, as well as the measures taken to reduce the influence of these limitations to a possible extent.

Limitations that could influence the validity of the research are discussed across two aspects of validity: 1) external validity, and 2) internal validity. According to Campbell et al. (1966) internal and external validity is important elements in a research without which interpretability and generalizability of a research is impossible. In regard to the external validity, the main limitation identified is related to research population. Although the study is based on exploratory case-study, yet it is difficult to justify that the result drawn from one company can be generalized to the entire industry. Therefore, to improve generalizability, three more companies were added to be studied alongside the main case company. Consequently, having more companies can yield a higher number of targets and stakeholder engagement practices to be studied, which are the measurement units of this study. Besides, selecting all the case companies from a specific sector (electronics) improves generalizability of the research in term of proximal similarity. This means that the result of the study could have higher generalizability within the studied sector, if not within the entire business world.

Considering the internal validity, the main limitation is related to other factors that could have influenced the relationship between the dependent variable (level of stakeholder engagement) and the independent variable (target setting practicing). In regard to this research, other variables that could influence the coverage, quality and ambition of target setting practices are namely diversity of the stakeholder engagement, size of the selected companies, magnitude of the CSR budget and resources of the selected companies and also the geographical context that the main operations of the companies are concentrated. Among all these variables, diversity of the stakeholders to be

engaged and geographical context of the companies identified to have influence on the independent variables.

Regarding the *reliability* of the research, observer bias is the main limitation that could have influenced the result of the study. During the research interviews, the researcher have developed an own prior perception regarding the stakeholder engagement and its relationship with target-setting practices. This could have influenced the questions and also increased subjectivity of the analysis.

Another occasion that observer bias might have influenced the result is during identifying and categorizing the stakeholder engagement practices. Although clear rules were defined in order to put stakeholder engagement practices within the exact category, yet the difficulty of differentiating between *consultative* and *decisional* levels of stakeholder engagement could result in misplacing the SE practices.

The interviewee bias is also mentionable as another limitation that could have affect the result. Although, the companies' documents were the primary sources of data collection, for two companies Canon Inc. and Philips interviews were also conducted. Despite clarifying to the interviewees that their views should reflect and represent their companies, yet it is possible that their subjective perception have influenced the objective truth.

Another limitation is related to the language of the interviews. English is not first language of the interviewees nor the interviewer. This could in some occasions have led to misinterpretations or misunderstandings that add a limitation to the study.

To this end, considering the above mentioned limitations and gaps that identified during the course of this research, a number of further research opportunities are proposed:

First, in order to identify the level of stakeholder engagement and its relationship with CSR target-setting, this research explored the overall stakeholder engagement related to the concerned environmental issues. Due to limitation of time and access to information, the researcher could not investigate engagement practices that occur particularly for every aspects of targets setting. Was the researcher able to track all the target setting practices and role of stakeholders in it, the result of this study could have been different. Therefore, a similar research that investigate engagement practices specifically for every target setting decision is suggested.

Second, in addition to the level of engagement, other aspects of stakeholder engagement such as diversity of stakeholders and frequency of engagement in relation to targets setting practices needs to be further researched as complementary to this study.

Third, this research is performed in the context of technological industry. In order to provide implications for a wider context, a similar research should be performed with more and diverse range of companies from different sectors.

Fourth, in regard to defining ambition for the CSR targets, it is important to underpin the ambitions of the targets based on wider ambitions that are set globally and/or regionally. Such an approach for CO<sub>2</sub> reduction known as *science-based targets* setting among the scholars (Plotnek, 2016). A number of corporations align their CO<sub>2</sub> reduction targets with global demand for de-carbonization to keep global temperature rise below 2 degree (Plotnek, 2016). In that respect it is a relevant research opportunity to investigate how science-based targets are relevant to other issues such as water use efficiency, biodiversity and waste management.



## 8. Conclusion

In this thesis the relationship between level of stakeholder engagement and target setting practices was explored. In that respect, the main question concerned by this thesis is as below:

### **How different levels of stakeholder engagement influence corporate decisions in regard to CSR target setting?**

The theoretical base of this study was the stakeholder engagement model proposed by Green et al (2003) that was basically built upon Arnstein's ladder participation.

Applying Green's model, at first, stakeholder engagement within the case companies was explored. To do so, various information sources were reviewed in order to identify all stakeholder engagement activities within the environmental issues concerned by this study, and then categorize these SE activities within the three levels proposed by Green et al. (2003).

In regard to identifying level of SE across the case companies, the main implication drawn from applying Green's model was that SE in the companies occurs relatively and continuously at all three levels, and thus it is practically impossible to draw an absolute conclusion to identify a given company with a certain level SE. In regard to target setting practices in particular, all three levels of SE occur within one company. This is because TS is a procedural practice with different phases, companies' may consider that any level of SE can be equally important in the process of TS.

After exploring SE level across the case companies and identifying their relative level of SE level, the next step was to explore the relationship between level of SE and TS practices across the selected companies.

First, concerning the coverage of issues for target setting, the findings indicate that there is not any meaningful relationship between companies' level of stakeholder engagement and the number and type of issues that they cover for target setting. Instead of level of stakeholder engagement, diversity of the stakeholders seems to be more influential on the level of coverage of issues for target setting.

How do different levels of stakeholder engagement influence CSR target setting practices of corporations?

The findings also indicate that the quality of the targets set for climate change and particularly for CO<sub>2</sub> reduction is significantly higher across all studied companies than other environmental issues. According to materiality studies conducted by all four companies' climate change and specifically CO<sub>2</sub> reduction is ranked the most important issue. As a result, it has become a strategic issue for the companies by which the sustainability performance of the companies is ranked against the competitors. Therefore, it is more likely that companies spend more resources in establishing a stronger information gathering system which is important in order to set targets that are specific in content, realistically timed and financially supported. In addition, setting high quality targets for CO<sub>2</sub> reduction is much easier for the companies than other issues, because there are already global targets and thresholds that companies can consider them as the basis for their calculations.

Concerning the ambition of the targets, the findings indicate that companies with decisional level of engagement tend to set more ambitious targets, particularly for CO<sub>2</sub> reduction, energy efficiency and water use efficiency. This can be explained by the fact that companies with decisional level of stakeholder engagement align their targets with the demand of the stakeholders. For example, in term of climate change and CO<sub>2</sub> reduction the companies that aligned their targets with UNGC targets set significantly more ambitious targets compared to the companies who didn't.

## 9. Recommendations for host company

The conclusion drawn from this thesis led to the following recommendations to the case company:

1. It is recommended for the case company to develop a clear and comprehensive stakeholder engagement policy. Such a policy should serve as a guideline for the company in many ways: it should guide the company to identify the most relevant stakeholders for every decision regarding environmental issues. Determining the method, and approaches of stakeholder engagement should also be a part of this policy.
2. The findings show that the targets set by Canon Europe in regard to recycling and biodiversity issues are of lowest quality. The targets set for these issues lack specificity in many terms. These targets sound like general commitments. They are not specific on what is going achieved exactly, on quantity, on the means of making them achievable and also not specific in regard to their geographical context. The main reason for failing to set high quality targets is link to lack of systematic information gathering regarding the companies' environmental impacts, particularly on biodiversity. Creating a systematic method of information gathering can contribute to develop more specific targets.
3. Currently Canon is setting targets based on its usual progress pace. This means that their target ambition is determined based on the progress of the previous year. Although this approach results in relatively modest but achievable targets, there is no evidence whether the targets can have a considerable contribution to solving the global environmental issues, specially CO<sub>2</sub> emissions. This thesis recommends to Canon Europe to use the science-based approach in setting its emission reduction targets. Science-based targets means in-lining the scale of reduction required to keep global temperature increase below 2°C compared to pre-industrial temperatures. it involves allocating a proportion of the required global emissions-reduction targets to an individual company in a fair and transparent way. By taking this approach, the targets that Canon set for CO<sub>2</sub> reduction can make sense for the stakeholders. This in fact assures the stakeholders that the set targets are designed and projected in a way to be linked to the current global requirements of emissions reductions.

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## 11. Appendices

### Appendix A: Interview questions

Some of the interview questions could be changed considering the different stakeholders and their interested CSR issue to be subjected to target-setting.

Name of the interviewee:

Interviewer: Shoaib Amin – MSc. candidate at Utrecht University

Interviewee: Simon Braaksma, Senior Director – Sustainability Group – PHILIPS

How do you define sustainability within Philips?

According a document in Philips' website, Philips builds its sustainability approach on two dimensions: social and environmental. What are the critical environmental issues that Philips deal with?

Are there any specific environmental targets that Philips plan to achieve in a certain time-frame?

If yes, to what environmental issues the targets are related?

How have the first idea been initiated that there should be specific targets on these particular issues?

From which level of hierarchy the idea of developing targets have been initially emerged?

What is the main motivation behind it? Why setting targets on this particular issue(s)?

Have you interacted with you stakeholders during development of your environmental policies and setting targets?

If yes, which stakeholder groups? At which stage of policy development?

What could be the main reasons for engaging/not engaging your stakeholders in the process of policy development?

Do you think engaging your stakeholders in the process of environmental policy improve the quality of your policies and the targets within the policies?

How have you decided to select the type of stakeholders to be engaged in the process?

Was there any case that the people or organizations opinion cause significant change in the way you develop your environmental policy and targets?

If yes, what were those objections/opinions?

How do you usually deal with the conflicting ideas of your stakeholders? Can you recall any case in relation to that?



## Appendix B: Stakeholder engagement practices

### Appendix B1. Canon

Stakeholder engagement activities/initiatives	Informative			Consultative			Decisional		
	1	2	3	4	5	6	7	8	9
Informing stakeholders early in the start of decision making process									
We explain risks and their management to stakeholders, particularly neighborhood residents near operational sites.									
Publishing sustainability reports annually									
Regular publishing of magazine and other informative material regarding environmental activities									
Environmentally-focused advertisements									
Announcements, press releases, newsrooms, position statements, and prepared statements for the purpose of informing.									
Regular contact with the universities and research centers to present the projects and sust. strategies									
We communicate company news through regular newsletters, intranet updates									
In 2015, Canon conducted a questionnaire survey to ascertain stakeholder expectations.									
Canon conducted survey among its employees about important sustainability issues for planning									
Identifying and prioritizing SHs concerns and interests (materiality)									
Carry out surveys and inquiries among the stakeholders to their opinions and use the outcome as a source of decision making									
Establish specific accessible and responsive means for stakeholder to raise concerns and opinions about the performance									
At Canon, we monitor the appropriateness of our supply chain's response in China based on discussions with the Institute of Public & Environmental Affairs (IPE), an environmental NGO based in China.									
Canon takes every opportunity and uses a variety of media to present environmental information and other non-financial information to stakeholders.									
Canon asked for ideas through social media about how to solve environmental issues, targeting schools across the UAE through a collaborative project with a local environmental organization and a media									
According to the World Resources Institute (WRI)*'s water risk map "AQUEDUCT," none of Canon's production sites are located in a region considered to be extremely high risk.									
We have a Canon European Consultative Committee, formed of Canon employees and Canon management representatives, to exchange information and views.									
Our Whistleblower system allows employees to raise concerns anonymously about suspected wrongdoing									
We conduct supplier audits									
In the environmental field, Canon also identifies materiality at the Aspect level as stipulated in the GRI Sustainability Reporting Guidelines (G4) (see page 36).									
Canon has hotlines in place to discuss environmental and safety management issues with local governments and authorities.									
Complaints made to these hotlines are addressed appropriately and major problems are reported to Canon's top management through the Global Environment Center.									
Supporting SHs by donations, sponsorship, volunteering, awareness raising progz									
Stakeholder's opinions are clearly reflected and incorporated in the decisions									
We support suppliers to improve their own environmental impact									
Taking part in industry groups to help develop appropriate new regulation or offer advice									
Local communities have a variety of needs: we engage with local communities wherever we operate, offering support in a number of ways in-kind support, sponsorship, cause-related marketing, volunteering									
We fund projects and raise awareness of our partner NGOs' activities									
We encourage our national sales offices to engage with WWF and the Red Cross locally to add value to our partnerships - We use the power of imagery to raise awareness of climate chang									
Canon has promoted environmental education aimed at gaining the understanding and recognition of all Group employees on the importance o environmental assurance and encouraging voluntary action in their daily work									
Canon takes a two-pronged approach to environmental education, providing awareness training and specialized training. Awareness training aims to impart basic environmental knowledge to all employees.									
In 2015, we supported environmental education through outreach programs in local communities, hosted booths at various exhibitions inside and outside the company, and worked on activities alongside NGOs.									
Additionally, wildfowl-related events were held for employees and their families									
In Vietnam, Canon implemented "For a Green Vietnam Project" in 2015 with the assistance of local governments and regional people's committees									
Contributing to joint programmes									

Stakeholders are engaged in joint problem-solving, compromising to reach mutually acceptable solutions (i.e. policy and legislation development)									
Engagement and partnering are adequately integrated into project planning and target setting									
We work on joint projects (e.g. on transport efficiency)									
We work with a number of organisations that complement and enhance our products and solutions									
Subscribing to international organizations such as UNDGs,									
Along with governmental authorities, corporations are being urged to carry out initiatives for biodiversity in order to help achieve the Aichi targets adopted by the tenth meeting of the Conference of the Parties (COP10) to the Convention on Biological Diversity.									
Canon Zhongshan worked with the local fisheries bureau to release a total of 300,000 juvenile fish, including mud carp, grass carp, bighead carp, and crucian carp									
Canon Italy and Canon Spain worked with wildfowl protection groups to hold birding workshops and host events that connect birds and photography.									
Canon have worked with two nonprofits dedicated to trees and the “greening” of spaces, the Arbor Day Foundation (in the U.S.) and Evergreen (in Canada).									

## Appendix B2- Philips

Stakeholder engagement activities/initiatives	Informative			Consultative			Decisional		
	1	2	3	4	5	6	7	8	9
Informing stakeholders early in the start of decision making process									
Publishing sustainability reports annually									
Announcements, press releases, newsrooms, position statements, and prepared statements for the purpose of informing.									
Continually informing SHs until the end of the strategy and target setting process through reporting									
Regular contact with the universities and research centers to present the projects and sus. strategies									
We communicate company news through regular newsletters, intranet updates and in-house magazine									
Proposals and options are presented to stakeholders, who provide feedback that is incorporated in planning.									
Identifying and prioritizing SHs concerns and interests (materiality)									
Involve directly affected stakeholders in the monitoring progress, impacts, and achievements									
Communicating with the stakeholders through social media to understand their opinions									
Meetings are conducted in a manner and format conducive to open dialogue and free exchange of ideas and viewpoints									
Taking part in the events, gathering , conference held by the stakeholder groups to develop regulations or strategies The events and conferences included Climate Week NYC in New York, and COP21, the United Nations Climate Change Conference in Paris .Philips participated in 2015 in the development of the Natural Capital Protocol and volunteer a pilot company									
Supplier regular audit									
Conduct trainings and workshops regarding the topics covered in the decisions									
Conducting events where stakeholders are invited to take part with new initiatives									
Supporting SHs by donations, sponsorship, volunteering, awareness raising progz									
Stakeholder's opinions are clearly reflected and incorporated in the decisions									
Sponsor of The Guardian's circular economy hub, a leading newspaper and online platform for sustainable business leaders									
Member of The Circular Economy 100, the alliance of 100 global corporations, emerging innovators and regions committed to working together to build circular economy capability									
Member of the Circle Economy Netherlands, a non-profit open platform designed to accelerate the transition to a circular economy									
Hosting a business delegation tour in Philips refurbishment facilities									
Lunching internal events to inspire employees on CE									
Inform, engage with and enable Philips employees to implement circular economy principles in the organization.									
Philips values working through partnerships with stakeholders like NGOs, local communities and/or officials									
Stakeholders are engaged in joint problem-solving, compromising to reach mutually acceptable solutions (i.e. policy and legislation development)									
Partnership with International Union for Conservation of Nature									

Together with WBCSD we are further developing the EP&L and methodology, incl. environmental benefits									
Working together with our stakeholders on joint projects									
Partnership with Circular Economy, TurnTour, WEF on environmental issues									
Engagement and partnering are adequately integrated into project planning and target setting									
Launching face-to-face negotiations with the stakeholder to solve the conflicting issues between them									
Philips aspires to be a major private sector contributor to the Sustainable Development Goals (SDGs)									
Philips is committed to working closely with all relevant stakeholders to provide energy-efficient solutions									
Maersk Line, is our partner in ensuring that we are able to cut 20% of CO2 emissions for every Philips container moved <sup>11</sup>									
Philips is a strategic partner of the European Partnership for Responsible Minerals, a multi-stakeholder initiative designed to stimulate responsible mineral trade <sup>12</sup>									
Philips, together with its partners, are delivering on our commitments to the United Nation's Sustainable Development Goals									
Exploring possibilities from a second hand market enables Philips to capture new value from used parts and luminaires and co-creation with like-minded companies creates a platform for innovation.									
Collaboration across the value chain enables reverse logistics and possible trade-in campaigns.									
Philips pursues balanced communications that illustrate the company's contribution to particular initiatives and their social impact, without being exploitative.									
Carry out surveys and inquiries among the stakeholders to their opinions and use the outcome as a source of decision making									
Stakeholder's idea/innovation is directly used by the company									
In a collaboration with E. M. F, the WEF and McKinsey A Research team has developed a white paper to describe innovation opportunities to address CE challenges. The paper has been widely distributed internally to all Philips businesses to stimulate innovation activities across the company.									
Philips and the Ellen MacArthur Foundation shared their common vision for a resource efficient and, ultimately, a regenerative circular economy									
Using IUCN tools and inputs for defining our key biodiversity area									

## Appendix B3 - Siemens

Stakeholder engagement activities/initiatives	Informative			Consultative			Decisional		
	1	2	3	4	5	6	7	8	9
Publishing sustainability reports annually									
Additionally, Siemens has built a sustainability board of executives to convey messages to publics and manage sustainability efforts throughout the organization									
Announcements, press releases, newsrooms, position statements, and prepared statements for the purpose of informing.									
Continually informing SHs until the end of the strategy and target setting process through reporting									
We also actively engage with our stakeholders on Social Media platforms such as YouTube, Twitter, Facebook, Google Plus, and LinkedIn.									
We conducted a comprehensive process to detail the priorities of "Sustainability and Citizenship" within our "One Siemens Management model."									
Our key stakeholders include, but are not limited to: customers, investors, suppliers, employees, communities, policymakers, media, nongovernmental organizations, business organizations and academia.									
Identifying and prioritizing SHs concerns and interests (materiality)									
Inquiries of employees concerning the sustainability strategy, sustainability principles and sustainability management including the stakeholder dialog of Siemens AG.									
Establish specific accessible and responsive means for stakeholder to raise concerns and opinions about the performance									
Involve directly affected stakeholders in the monitoring progress, impacts, and achievements									
Meetings are conducted in a manner and format conducive to open dialogue and free exchange of ideas and viewpoints									
Establish specific accessible and responsive means for stakeholder to raise concerns and opinions about the performance									
Our stakeholder relations are managed by the dedicated departments at the corporate level.									
We actively engage with leading sustainability organizations such as the World Business Council for Sustainable Development (WBCSD) and the United Nations Global Compact.									
As a member of various international organizations, we're involved in numerous initiatives and programs, including the Action 2020 Water Project of the World Business Council for Sustainable Development.									
We are committed to international standards and guidelines for sustainability. We signed the UN Global Compact and committed to its 10 principles as well as signed the Global Compact's CEO Water Mandate.									
Another part of Siemens' plan to combat climate change is membership in non-governmental organizations									





Development (WBCSD).									
there has been an increased expectation from stakeholders for businesses to actively participate in the conservation and sustainable use of biodiversity. Accordingly, Samsung established the basic idea and action plans to conserve biodiversity by promoting the importance of biodiversity conservation with its employees and by reflecting them in business plans.									

