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Ihminen on toiminnallaan tuhoamassa elinympäristönsä. Liiketoiminnassa erityisesti pienet ja keskisuuret yritykset (pk-yritykset) ovat tämän ongelman keskiössä. Tämän tutkimuksen tavoite on selvittää millä tavoin ympäristö on läsnä pk-yritysten toiminnassa. Pk-yrityksissä yrityksen johtajalla on merkittävä vaikutus yrityksen toimintaan, myös yrityksen ympäristöasioihin. Tähän laadulliseen tutkimukseen haastateltiin yhdeksää suomalaista pk-yritysjohtajaa eri teollisuudenaloilta. Haastattelutekniikkana käytettiin teemahaastattelua, joka mahdollistaa haastattelutilanteen joustavuuden ja siten johtajien käsityksien ja kokemusten pääsemisen esiin. Tutkimuksessa selvisi, ettei ympäristöllä ole suoraa vaikutusta yritysten päätöksentekoon. Ympäristöllä on epäsuora vaikutus yrityksiin eri sidosryhmien kautta, mutta vaikutus on vähäinen eikä aiheuta merkittäviä konkreettisia muutoksia yritysten toiminnassa. Pk-yritysten ympäristövaikutukset ja -vastuu ovat hajallaan ja ulkoistettuna toimitusketjuissa niin, ettei kukaan ole vastuussa ympäristön tuhoutumisesta. Pk-yrittäjät ovat tietoisia osasta sidosryhmiään, mutta ympäristöllä ei ole sidosryhmän asemaa pk-yritystoiminnassa. Ympäristö voi siihen asemaan kuitenkin päätyä suoraan tai epäsuoraan. Näin voi käydä jos yrityksen vahvimmat sidosryhmät vaativat suoremmin yritystä ottamaan ympäristön huomioon toiminnassaan tai ympäristön kyky tuntemamme elämän ylläpitämiseen alenee merkittävästi.

ABSTRACT

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The voice of nature in Finnish SMEs
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Keywords: CSR, corporate social responsibility, environmental sustainability, SMEs, small and medium enterprises, stakeholders, stakeholder theory

Human is destroying its own living environment. Small and medium enterprises (SMEs) are in the core of the problem. The aim of this study is to find how environment is present in the operation of SMEs. The owner-managers have significant power in the operation of SMEs including the environment related matters. Nine owner-managers of Finnish SMEs operating in differing industries were interviewed for this qualitative study. The interview method was semi-structured interview which makes the interviews flexible and so enable the opinions and experience of the owner-managers to surface. Based on the interviews environment does not have a direct effect on the decision making within the companies. Environment has an indirect effect through different stakeholders of the SMEs but the effect is minor and does not lead to concrete and significant changes in the operation of the companies. The environmental impacts and responsibility of SMEs is scattered, outsourced and externalized within their supply chain so that no one is responsible for the environmental deterioration. Owner-managers are aware of some of their stakeholders but environment does not have a stakeholder status in the operation of SMEs. Environment can end up in a stakeholder-like position if the powerful stakeholders of SMEs demand more directly the SMEs to improve their environmental performance or if the environment's ability to support the life as we know it deteriorates significantly.

ALKUSANAT

Tämä työ on omistettu Lotalle, joka on jatkuvasti tukenut minua ja jonka kanssa olemme paljon pohtineet ympäristöllistä kestävyyttä.

Kiitos muillekin läheisille jotka olette tukeneet minua tämän pitkän opintojen tien varrella.

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LIST OF ABBREVIATIONS

CSR	corporate social responsibility
EMS	environmental management system
ES	environmental sustainability
HR	human resources
LCA	life cycle assessment
NGO	a non-governmental organization
NPO	a not-for-profit organization
PR	public relations
R&D	research and development
SME	a small or medium enterprise
SMM	a small or medium-sized manufacturer
SR	social responsibility

1 INTRODUCTION

1.1 Background of the thesis

In human history natural environment has traditionally been something that humans have tried to overcome, exploit and manage (Wysocki 2012). Nowadays, because of the heavy scaling of exploitation, natural resources are not sufficient for current level of exploitation: there are many human, including corporate, activities that are destroying the only known living environment of human beings, the Earth. According to Waddock (2011) these are "problems of deforestation (e.g., clear cutting or burning), desertification, the impact of mass production-oriented systems of agriculture and animal husbandry, and extractive activities (e.g., oil and mineral uses, the blowing up of mountain tops to reach minerals, not to mention industrial accidents that affect local ecosystems)" (352).

The greatest threat of humans globally is the climate change, global warming (e.g. Revell et al. 2010; Sprengel & Busch 2011). These problems may cause inability of the Earth to continue supporting the life as we know it (Waddock 2011). Wysocki (2012) argues that nature has been freed from its role as the facilitator of human life in the universe because this aspect is not present in the current discussion of sustainability which further makes sustainability related actions temporal and incremental improvements; it denies nature's standing.

Maintaining and supporting life is a value that is universal for all humans. Transforming the value into life supporting action, however, is not possible without redefining and redesigning the relationship and interactions of nature and human beings. Because the actions of companies are human actions and nature is vital for humans, it is companies' responsibility to preserve the nature (Bazin 2009).

According to Seidel et al. (2009) it is widely recognized that firms and also governments and consumers are responsible for implementing sustainable development. Bazin (2009) notes that traditionally the state has been responsible

for nature and companies have not considered environmental sustainability (ES) that much in their operations. Nevertheless, if companies are considered to be responsible for preserving the nature, it raises the question of the limits of corporate responsibility (Bazin 2009).

70% of global pollution is caused by operations of the small and medium enterprises (SMEs). Within EU SMEs employ 75 million people and 99% of companies are SMEs generating more than 50% of the value added, globally the situation is very similar. This means that SMEs are very important factor for environmental deterioration globally (Johnson 2015; Baden et al. 2011; Seidel et al. 2009). It seems that SMEs are in a key position to determine if and how the humans can coexist with their living environment in the future. However, SMEs have many obstacles that prevent them from becoming environmentally sustainable (e.g. Revell & Blackburn 2007; Seidel et al. 2009).

1.2 Central definitions and research questions

The literature on SME's environmental sustainability highlights the importance of stakeholders (e.g. Kerr 2006; Nagypál 2014), therefore "stakeholder" is a central definition in this study. A stakeholder is, according to the widest and also classical definition, an entity that can affect or can be affected by the firm (Freeman 1984, cited by Gibson 2012). In order to address the stakeholders the identification of the stakeholders is important (Mitchell et al. 1997). In this process the voice of stakeholders becomes an important concept. Some stakeholders can make their voice to be heard directly in the firms and some stakeholders need proxies for this (Fassin 2009). The academic literature on environmental sustainability, SMEs and stakeholder theory leads us to the question whether nature has a voice in SMEs and if it has, how and what kind of a voice.

The research questions that this thesis aims to address are:

- 1. Why is it problematic for SMEs to become environmentally sustainable?*
- 2. How is the voice of nature present in the operation of SMEs?*

3. What is the status of environment in the operation of SMEs based on stakeholder theory and empirical evidence?

1.3 The structure of the thesis

This thesis begins by the review of the literature on environmental sustainability. The literature leads to the research questions. The research questions and answers to them can help in understanding the difficulty of environmental sustainability in SMEs and the value-action gap, defined by Revell et al. (2010), between the good intentions of the managers of SMEs and the real activities of SMEs.

The study focuses in exploring how the voice of nature is present in the operations of SMEs. The voice is a concept that, in turn, has been in the focus of the scientific discussion about the application of stakeholder theory in the context of environment and environmental sustainability. This study aims to bring the understanding of the owner-managers to the scientific discussion because their understanding is what ultimately determines how the voice of nature is interpreted and utilized. There is limited amount of empirical studies on the stakeholder theory and environmental sustainability in the context of SMEs.

Qualitative method was the most suitable research method for this study and the research questions were operationalized into a semi-structured interview script. A total of nine owner-managers of Finnish SMEs were interviewed to gain understanding and answers to the research questions.

The presentation of the key findings follows the order of the interview script. Firstly the owner-managers' relationship with nature is presented. Second part of the findings summarize the environment related information flow in the SMEs. Last part of the findings presents the environment's representatives, the proxies, in the operation of SMEs.

The final parts of the thesis are the analysis of the results. The discussion section will answer the research questions derived from the literature and present the implications of this study for the existing theories.

2 LITERATURE REVIEW

This literature review explores the existing literature on environmental sustainability in SMEs. The literature shows the significance of the stakeholder theory which is reviewed hereinafter.

2.1 Definitions from environmental sustainability studies of SMEs

Scholars have studied environmental sustainability in SMEs using various definitions about environmental sustainability (ES) and its aspects in business activities. According to Nagypál (2014) environmental responsibility is part of corporate social responsibility (CSR) and means protection of environment. Halme and Korpela (2014) state that ES means "ways and means by which SMEs integrate environmental -- concerns in their business operations and in their interactions with stakeholders" (548). In fact, ES, as a part of corporate responsibility, can so become strategic responsibility and drive innovation (Halme & Korpela 2014). Parry (2012) studied SMEs' transformation to green and defined "going green" as taking steps to minimize environmentally negative impacts, amplifying impacts that improved environmental conditions, thus becoming environmentally sustainable. Kerr (2006) defined green operation as preservation of natural capital.

Scholars have explored what ES can achieve in SMEs when it is considered strategically. It can achieve eco-efficiency which combines ecological and economical aspects by increasing output but decreasing required input, thus increases value that the SME creates and decrease waste (Henriques & Catarino 2015; Klewitz et al. 2012). Strategic thinking in the context of ES can yield eco-innovation which turns the sustainability into a core capability of business (Klewitz et al. 2012). Responsible innovation is innovation that drive sustainability and it can be created with abundant, average and scarce resources (Halme & Korpela 2014). Ecological modernization means developing the business environment so that both economic growth and environmental sustainability are possible by, for

example, enabling market-driven business that also improves environmental conditions such as green innovations (Uhlener et al. 2012).

Inefficient consumption of resources causing pollution and waste is in fact a cost for firms and therefore firms should engage environmental sustainability and innovativeness to minimize these costs (Uhlener et al. 2012). So ES can provide competitive advantage. Oxborrow and Brindley (2013) call this eco-advantage. According to Oxborrow and Brindley (2013) eco-advantage links sustainability with competitive advantage which means that the organization is creating environmental and social benefits when trying to achieve economic benefits as well. Eco-advantage means "understanding of sustainability issues, adoption of innovative practices and the environmental and commercial benefits and obstacles to of adopting more sustainable (mainly environmental) product and process design" (Oxborrow & Brindley 2013:355).

ES is a responsibility of companies but with strategic thinking it can even become a competitive advantage for firms. This requires understanding of the issues as Oxborrow and Brindley (2013) state, not just merely awareness. The role of management, especially the role of owner-managers in SMEs is often very significant and dictates how the firm functions (Schaltegger & Wagner 2009). Many studies on ES in SMEs have focused on managing ES. Sustainability management means "internal development of environmental and social measures as well as external contribution to the sustainable development of society and the economy" (Johnson 2015:272) and according to Hoffman et al. (2012) it means managements' approach to decreasing or even eliminating the environmental impact of the firm. Uhlener et al. (2012) define environmental management practices as actions of a firm to decrease its impact on environment including monitoring company's waste, doing environmentally sustainable business, and trying to discover more environmentally sustainable ways to operate. According to Delchet-Cochet et al. (2015) there are two types of motivations to become environmentally sustainable. These are the push-motivation which means reactivity to external pressure and the pull-motivation which means proactivity based on a win-win logic: improving environment and gaining economic benefits

with improved competitiveness (Delchet-Cochet et al. 2015). An owner-manager may have motivation to improve the environmental performance of the firm or may not have anything against becoming environmentally sustainable but the SME may still continue business as usual despite of this. Revell et al. (2010) call this value-action gap.

One peculiar group of SME owner-managers that represent only a small fraction of entrepreneurs are the entrepreneurs who set up the company to improve environmental sustainability and for whom the economical benefit is secondary objective. These kinds of SMEs are called ecopreneurial SMEs. These companies are willing to take greater risks than firms in which economical aspect is priority because the ethical perspective is the driving force of their business. Entrepreneurs in ecopreneurial SMEs educate themselves to become experts on their domain experts and the entrepreneurs were doing a lot of practical work themselves ('hands dirty'). The ecopreneurs faced the problem that they had to educate their customers to realize what they were doing (Rodgers 2010.)

2.2 Environmental sustainability in SMEs

Nowadays sustainable development is more of an opportunity for SMEs rather than a cost or a risk because of improving efficiency and growth (Henriques & Catarino 2015). SMEs' owner-managers are increasingly concerned about ES because of increasing interest of media and environmental regulation (Baden et al. 2011). In fact, SMEs may implement aspects of CSR without referring them as CSR or having any formal CSR policies (Bevan & Yung 2015). SMEs are however less likely to implement environmental aspect of CSR unknowingly (Bevan & Yung 2015). SMEs are source of many innovations (Oxborrow & Brindley 2013). They can contribute significantly to development of sustainability in business (Schaper 2002 cited by Seidel et al. 2009).

SMEs are different from larger companies and therefore they have unique characteristics that affect their ES related issues. SMEs are different from large

companies because SMEs have significantly less resources, they do not have access to knowledge and skills as easily as large companies, SMEs cannot affect the markets as much as large companies, SMEs have less employees, customers and the cash flows are smaller (Jämsä et al. 2011). SMEs are usually affected more by local conditions and features of local markets that may differ from pressures and trends that affect multinational enterprises. SMEs focus in performing well in short term which makes SMEs' strategies complex. This also means that there is no universal path that an SME could take to become environmentally sustainable (Seidel et al. 2009). Lee (2009) argues that there are multiple features in SMEs which can contribute to effective management towards ES: "lines of communication are generally shorter, organizational structures are less complex, people often perform multiple functions, and access to top management is simpler" (1116).

SMEs' managers are aware that climate change will have an effect and forces them to implement new strategies in the future. SME managers are aware that environmental deterioration will cause costs but also provide new opportunities because demand for improved environmental performance is increasing and answering to the demand voluntarily may be economically rewarding for the firm. Majority of SMEs actually gather information about how they use their materials. However, the utilization of the knowledge is not always related to making strategic decisions, it was often related to the policies of the SMEs (Raar 2015).

According to Kerr (2006) few SMEs have environmental policies or are using design or tools, such as LCA, to improve ES. In addition Kerr (2006) discovered that none of the SMEs in the study were using ES in marketing. Also Revell et al. (2010) discovered that it is rare among SMEs to adopt environmental management systems or create environmental policies. Nulkar (2014) discovered that SMEs' managers were aware of environmental problems but 21% of them do not think that they have significant impact on deterioration of environmental conditions. Nagypál (2014) also states that even though SME managers are aware of environmental problems, such as the climate change, they consider the problems non-relevant because their companies contribution to the problems is

minor, and therefore they continue business as usual. On contrary, Cassells and Lewis (2011) discovered that owner-managers are well aware of their environmental impacts and what causes them. The most common sources of SMEs' environmental impacts are waste, transport, and processes (Cassells & Lewis, 2011). SMEs do not often have any specific person responsible for their environmental performance (Nagypál 2014). In fact, Oxborrow and Brindley (2013) argue further that "for the SME it seems that market opportunity, sustainability, innovation and change management are a single integrated process rather than discrete elements undertaken by different individuals or groups within the organization." (371)

Integration of sustainability in business strategy means that sustainability is present in the environmental management, internal organization (including atmosphere, training, job rotation, safe working environment), supply-chain management, client relations, interaction with other actors within the business environment (such as authorities, universities etc.) (Ciasullo & Troisi 2013). However, Revell et al. (2010) argue that SMEs do not think strategically about managing their environmental issues and their ES related actions are made in ad hoc. Revell et al. (2010) argue that if SMEs were able to market their ES related efforts better, they could experience direct link between ES and profitability.

Majority of SMEs' owner-managers think that regulation is not sufficient to guarantee sustainability in economic development and they should proactively improve their ES (Cassells & Lewis 2011; Revell 2010). However, over a third of SMEs comply with law only to avoid being sued. There is a value-action gap which means that managers, who agree that regulation is insufficient and proactivity of firms is needed in order to improve the environmental sustainability, do not actually implement ES aspects in their firms' operations more likely than managers who do not agree (Cassells & Lewis 2011).

Overall, SMEs' owner-managers think that ES should have high priority in business management and they have a positive attitude towards practical actions to improve ES. Owner-managers have a positive attitude towards the costs that ES requires because they think that it can bring benefits such as new customers

and new business opportunities but majority of the owner-managers are not convinced that taking action towards ES can increase profitability of the firm. Owner-managers think that, like in any business, also in ES business there are winners and losers, which makes it risky to improve ES even though it may bring benefits (Revell et al. 2010).

About 50% of manufacturing SMEs use a technology that, at least partly, is designed to reduce environmental damages (Nagypál 2014). Waste management technology is the most used technology (Nagypál 2014). Most of the companies examined by Nagypál (2014) measured and reported their CSR performance but small minority verified the reports and the utilization of the knowledge was not always related to making strategic decisions, it was often related to the policies of the SMEs or just merely making the reports (Nagypál 2014). Gathered knowledge is most often related to energy efficiency, greenhouse gas emissions and waste generation (Nagypál 2014). Most common practical measures to improve ES in SMEs are reducing fuel costs, disposing hazardous waste appropriately, having a recycling program, using reusable packaging, minimizing packaging of products, using safer materials, having environmental policy statement, and appointing environmental management responsibilities to staff (Nagypál 2014; Raar 2015; Cassells & Lewis 2011).

Hoffman et al. (2012) found that the most popular practice to improve ES in SMEs is "receiving information on environmental management from material or equipment supplier" (540) Hoffman et al. (2012) found that cooperation, in addition to information sharing, includes standardization and co-development and SMEs may be in such a position in their supply chain that they have to cooperate more with their suppliers than with their customers. The most popular environmental practices adopted by SMEs are actions that require less investment, such as environmental plan, educating employees in environmental issues and controlling the usage of hazardous materials and least adopted environmental practices are the costly actions, such as establishing environmental management with dedicated employees (Hoffmann et al. 2012). Majority of owner-managers that participated in the study of Revell et al. (2010) had made proactive actions to decrease their

unsustainability. According to Moore and Manring (2009) there are three options for SME to optimize their sustainability: to become lucrative targets for investment because of their ES, becoming part of a network of smaller SMEs that have sustainability as their competitive advantage in markets where larger firms have not been very successful, and becoming superior suppliers in terms of efficiency because of their environmentally sustainable operations.

Improving company's environmental performance can bring many benefits, such as improved competitive performance (Larrán Jorge et al. 2015), new business opportunities, having better customer relationships (Nulkar 2014), thus gaining financial benefits by increasing sales and profit margins (Klewitz et al. 2012). Decreasing waste of resources and becoming more efficient generates savings and improves company image and brand value which are very beneficial for the company (Klewitz et al. 2012), especially SMEs need to have a good reputation in their local communities (Sen & Cowley 2013). Decreasing risks for environmental damages and increasing safety also benefit firm and help the firm to comply with the law better (Klewitz et al. 2012). Improving ES may even improve the organization by making the company more attractive for new employees which can improve the capabilities of the firm (Klewitz et al. 2012). These benefits will, however, come in the long term and after committing to the reform (Larrán Jorge et al. 2015).

These work vice versa as well. When ES becomes more popular, firms with low standards start to lose customers and employees (Baden et al. 2011). Hoffmann et al. (2012) argue that neglecting cooperation with stakeholders in environmental issues will decrease competitiveness of SMEs because it makes them to adopt new technologies slower. Also Revell et al. (2010) argue that SMEs are losing opportunities because of poor cooperation and communication about ES with their stakeholders. Balancing the environmental performance with economic performance will enable the company to sustain in the competition in the long term (Tomšič et al. 2015). As mentioned before, improving ES in SMEs may yield responsible innovations. Scarcely resourced innovations do not require a lot of resources and can therefore be created even by the smallest companies. Scarcely

resourced innovations are usually business model innovations utilizing existing ICT and resources are independent, affecting directly the creation of the responsible innovation (Halme & Korpela 2014).

The results of previous studies are controversial. Some scholars have found that SMEs are proactive with ES because it is beneficial (Raar 2015) and others have found that they are not proactive because their significance is low (Nulkar 2014). Based on these studies, it can be concluded that improving environmental performance in SMEs with strategic thinking may increase their economic performance. However, in SME studies environmental sustainability, "going green" has not usually been defined as environmentally friendly operation, operation with no environmental damages or operation that improves environmental conditions. It has been about minimizing damages and contributing to society (e.g. Parry 2012; Johnson 2015). This means that there is a mismatch between real environmental sustainability and environmental sustainability in the studies on SMEs' ES. The focus has usually been in how SMEs can improve their competitiveness by demonstrating to their communities that they can cause less damage by implementing incremental improvements in their environmental performance. Whereas damaging environment less is better than damaging it more, being environmentally less unsustainable does not mean that firm's operations are environmentally sustainable or 'more environmentally sustainable' as Uhlener et al. (2012) define decreased unsustainability.

2.3 Differences of SMEs

This section reviews the literature on the differences of SMEs. SMEs are very special compared to large companies and common features of SMEs are reviewed first. Next paragraphs review literature that demonstrate that SMEs are unique and there is no one strategy for SMEs to become environmentally sustainable in their operations.

2.3.1 Special features of SMEs

SMEs are very diverse based on their size, strategies, attitudes, wealth, industry etc. and therefore there is no one right way for them to become environmentally sustainable (Parry 2012). SMEs are medium, small end micro enterprises and therefore their CSR issues, approaches, drivers etc. differ (Parry 2012). A self-identified business considers sustainability from different perspectives than experts or large companies that develop sustainability systems (Clarke-Sather et al. 2011). Even the smallest firms can have positive attitudes toward ES and act to improve their environmental performance if they are managing well financially (Revell et al. 2010). However, managers of smaller firms are more likely to ignore ES because they consider their companies' environmental impact negligible (Cassells & Lewis 2011). Industry affects how SMEs create ES policies and integrate them in their strategies (Raar 2015).

2.3.2 Varying paths to environmental sustainability

Environmental strategic behavior can be negative, neutral or positive. Environmental strategies can be resistant strategies, reactive strategies, proactive strategies or sustainable/ ecological strategies (Klewitz & Hansen 2014).

Parry (2012) discovered three varying paths for micro businesses to become 'green' and the path depends on the initial motivation for becoming green. The motives are economic and value-driven motivations. Greening will require personal ethical values from owner-managers regardless of the initial motivation to start greening the business. Micro-businesses with economic motives start with cost reduction, increasing efficiency and using more sustainable materials. They may use external help in the process. Eventually they will green their energy sources, acquire social capital by networking and developing the image of the firm, develop brands and integrate ES in their business strategy and start investing in it significantly because at this point ES starts to provide the firm with competitive advantage (Parry 2012).

Micro-businesses with value-driven focus start by increasing the firm's legitimacy, creating formal ES policies and gaining external assistance. After this the path is similar with firms that had economic motives. Process is incremental because reaching the point in which ES starts to be competitive advantage costs money and micro-businesses need success in smaller projects to gain confidence to advance with ES. ES activities that micro-businesses do in branding, and after that ES is integrated in the core business, are very costly and complex in which the micro-businesses really need external support in finance and expertise. And at this point there is usually not enough support available for micro-businesses. In fact, there is enough support available for SMEs to start the path of 'greening' but after the path becomes more complex and costly, micro-businesses are often left alone and therefore true sustainability will not be achieved frequently (Parry 2012).

2.3.3 Classifications for SMEs' engagement to environmental sustainability

Ecologic SMEs' worldviews and values are the base of their business. In ecologic SMEs the entrepreneur has founded the company in order to improve ecology and sustainability has top priority in the operation (Jämsä et al. 2011). Nagypál (2014) was able to divide companies in four clusters based on their size, scepticism, attitude towards ES as a responsibility of only the larger companies and activity level. The clusters are "small skeptics", "skeptics tending to shift responsibility", "SMEs doing what they can" and "enthusiastic professionals" (Nagypál 2014). "Small sceptics" think that ES is a threat. "Sceptics tending to shift responsibility" think that ES is for larger companies to implement. "SMEs doing what they can" consider ES as responsibility of financially thriving firms, these firms are motivated to improve their ES by their stakeholders. "Enthusiastic professionals" are proactive in ES which itself motivates them to improve their environmental performance (Nagypál 2014).

Battisti and Perry (2011) divide SMEs' owner managers in four categories based on their attitudes toward environmental sustainability that are "cost burden owner-managers", "business opportunity owner-managers", "bottom line owner-

managers" and "responsibility owner-managers". "Cost burden owner-managers" will address environmental issues only if it provides immediate cost savings with little effort and compliance with regulation. "Business opportunity owner-managers" address environmental issues only in order to minimize their costs, maximize their profits and gain competitive advantage with 'triple bottom line' thinking. "Bottom line owner managers" have strong personal environmental sustainability related values and therefore they concentrate in environmental performance over economic performance with active anticipation of environmental issues and improvement of environmental business practices. "Responsibility owner-managers" consider all ES related issues as duties and are willing to make tradeoffs between high profitability and environmental sustainability to improve ES (Battisti & Perry 2011).

Hoffmann et al. (2012) divide SMEs in four categories based on their collaboration with stakeholders and adoption of advanced technology. The categories are "commodity suppliers" that have low adoption of advanced technology and collaboration with stakeholders that are usually smallest firms with little diversity in their products and that have automated their processes. "Collaboration specialists" collaborate with stakeholders but do not adopt advanced technologies and have usually high amount of employees. "Technology specialists" have high adoption of advanced technologies but low amount of collaboration with stakeholders, average amount of employees and do not otherwise distinguish themselves. "Problem solvers" have high adoption of advanced technologies and high collaboration with stakeholders and they are better innovators than other SMEs, they are usually the largest firms among SMMs, they are agile in resource allocation to utilize new business opportunities and they can be found in any sector of any industry (Hoffmann et al. 2012).

SMEs vary but the significance of owner-manager is definitely great because the attitudes and values of owner-managers affect if the SME is able to become environmentally sustainable and if it is, the attitude affects on the correct path because there is no universal path or strategy for SMEs to become environmentally sustainable. There are, however, cases in the literature of

becoming green or at least environmentally sustainable and it is achievable for SMEs.

SMEs are unique but the drivers and inhibitors for their environmental sustainability are relatively general and many scholars have concentrated in exploring and generating understanding on them. Next section will explore the literature on the drivers and inhibitors of SME's ES in more detail.

2.4 Drivers and inhibitors of environmental sustainability in SMEs

This section presents the drivers and inhibitors of environmental sustainability that current academic study has recognized. They are presented in tables 1 and 2. Tables 1 and 2 summarize the drivers and inhibitors of environmental sustainability in SMEs. According to the literature, barriers for SMEs' ES are mostly the lack of drivers or they are the opposites of the drivers.

Based on earlier studies, SME's management is in key position to determine the orientation of the company in ES related issues. SMEs are small and therefore they lack resources and skills that may be needed to improve ES. Also SMEs may not have employed lawyers or professionals of environmental management which leads to a situation in which the SMEs do not necessary even know that they are breaching the law and they do not know that ES could provide them competitive advantage and other benefits as well.

Table 1. The drivers of environmental sustainability in SMEs

Driver	Authors
Reduced costs and increased benefits	Kerr 2006; Cassells & Lewis 2011, Bevan & Yung 2015; Oxborrow & Brindley 2013; Revell et al. 2010
Proper resources	Halme & Korpela 2014
Forcing regulation	Nulkar 2014; Revell et al. 2010; Hoffman et al. 2012
Public and fiscal policies	Kerr 2006; Johnson 2015; Baden et al. 2011; Halme & Korpela 2014; Revell et al. 2010
Proper management tools and systems	Johnson 2015; Henriques & Catarino 2015; Seidel et al. 2009; Kerr 2006
Organizational values and culture	Nagypál 2014; Jämsä et al. 2011
Simple organizational structure	Baden et al. 2011
Size	Uhlener et al. 2015; Larrán Jorge et al. 2015; Cassells and Lewis 2011
Perceived competitive advantage	Revell et al. 2010; Delchet-Cochet et al. 2015; Oxborrow & Brindley 2013
New capabilities, technologies and innovation	Moore & Manring 2009; Delchet-Cochet et al. 2015; Uhlener et al. 2012; Hoffman et al. 2012
Cooperation with stakeholders	Kerr 2006; Jämsä et al. 2014; Johnson 2015; Moore & Manring 2009; Halme & Korpela 2014; Baden et al. 2011; Hoffman et al. 2012; Revell et al. 2010; Raar 2015; Lee 2009; Larrán Jorge et al. 2015; Nagypál 2014; Seidel et al. 2009; Oxborrow & Brindley 2013; Delchet-Cochet et al. 2015; Nulkar 2014; Klewitz et al. 2012; Uhlener et al. 2012; Baden et al. 2011

Table 2. The inhibitors of environmental sustainability in SMEs

Inhibitor	Authors
Perceived costs	Revell et al. 2010; Seidel et al. 2009; Nulkar 2014; Nagypál 2014; Heidrich & Tiwary 2013; Oxborrow & Brindley 2013; Baden et al. 2011; Revell & Blackburn 2007
ES has no perceived benefits	Revell & Blackburn 2007; Seidel et al. 2009; Nulkar 2014
ES has low priority in business	Revell & Blackburn 2007; Nagypál 2014
Unfavorable organizational culture	Seidel et al. 2009
Lack of capabilities to implement ES	Heidrich & Tiwary 2013; Nagypál 2014; Bevan & Yung 2015; Seidel et al. 2009; Nulkar 2014; Oxborrow & Brindley 2013
Ignorance	Seidel et al. 2009; Oxborrow & Brindley 2013; Wilson et al. 2012; Nagypál 2014; Johnson 2015
Irrational behavior	Revell & Blackburn 2007
Low quality regulation	Wilson et al. 2012; Baden et al. 2011
Stakeholders are not interested in ES	Seidel et al. 2009; Nulkar 2014; Jämsä et al. 2011; Revell & Blackburn 2007; Nagypál 2014; Oxborrow & Brindley 2013

Stakeholders have received a lot of attention in the literature. Many scholars argue that cooperation with stakeholders is the key for SMEs to a greener future and neglecting the cooperation will make the SMEs stagnant. The literature about SMEs' ES related cooperation with their stakeholders will be reviewed in detail next.

2.5 Cooperation with stakeholders as a driver for environmental sustainability in SMEs

Networking and cooperating with stakeholders was found very important for SMEs' ES by many authors because it allows SMEs to utilize their agility and also supplement their internal deficiencies such as lack of skills and resources.

2.5.1 Networking

SMEs are not operating in a vacuum; their business happen within a network and the network creates, absorbs, stores and diffuses large amounts of vital knowledge and other resources for SMEs when SMEs interact within the network. Useful ideas, knowledge and resources can come from anywhere within the network. SMEs networks are developed by members teaching each other and learning from each other which is mutually beneficial opportunity for entrepreneurs to discover new opportunities. Networking is used to make better marketing decisions, product development and information acquisition from the target market. SMEs' networks that are meant to improve environmental sustainability are increasingly important in implementing sustainable development. These kinds of networks can also trigger a societal change as well. To improve the effectiveness of the network it should be orchestrated to create a common culture. In order to maintain the competitive advantage of environmentally sustainability gained in the network, partners with unsustainable practices may need to be excluded from the network. (Jämsä et al. 2011). Jämsä et al. (2011) argue that ES reform requires this kind of network and social capital.

Networks and also consultants and governmental agencies can provide expertise that helps SMEs to implement ES tools (Johnson 2015). Networks may be increasingly significant in improving SMEs' ES because SMEs are the majority of the enterprises, pollute the most and developing ICT is making the operation of networks smoother (Moore & Manring 2009). When creating responsible innovation, the most important external resources for SMEs are their networks and R&D cooperation and, in fact, many SMEs that create responsible innovations

have a parent organization (Halme & Korpela 2014). Venture capital and government's subsidies are solely insufficient source of resources and loan is rare mean to finance responsible innovation in SMEs (Halme & Korpela 2014)

Moore and Manring (2009) argue that SMEs can use ES as a competitive advantage if they create a network of sustainable SMEs in niche markets. Kerr (2006) argues the same and notes that this kind of partnership can be established among responsible SMEs just to promote ES. This cooperation can be used in optimizing distribution networks, adopting advanced technologies, marketing, R&D, training employees, creating favorable organizational cultures and creating regional alliances to improve the environmental conditions of the area (Kerr 2006). Business network can pressure SMEs to improve their environmental sustainability and the most frequently pressured aspects are waste management, standards, such as ISO14001, efficiency and pollution prevention (Baden et al. 2011). In specific position of a supply chain, an SME may have weaker relationships with its customers than with its suppliers (Hoffmann et al. 2012) and can therefore pressure its suppliers in ES related issues more effectively. Delchet-Cochet et al. (2015) argue that ES can diffuse when responsible SMEs require ES from their suppliers and also consumers can pressure SMEs to improve their environmental performance.

According to Revell et al. (2010) SMEs network within their specific business sector rather than with organizations that have specific ES related agenda. SMEs that create policies and procedures to keep their external customers satisfied are less affected by global warming in terms of customer relationships (Raar 2015). Hoffmann et al. (2012) found that minority of SMEs adopt more advanced technologies and collaborate with partners or stakeholders. Developing operation in networks help SMEs to actually gain competitive advantage from being environmentally sustainable instead of just individually decreasing their unsustainability (Moore & Manring 2009).

The literature demonstrates that networks should be broad and companies within them flexible and willing to transfer information. Flexibility is needed because the

networks provide resources and knowledge and their utilization requires flexibility. Also network's pressure may require urgent changes in operation which also demands agility from the company.

2.5.2 Information and knowledge

As mentioned, business network is an important source of knowledge (Jämsä et al. 2011) and receiving ES related information from suppliers is relatively the most popular sustainability management practice adopted by SMEs but collaboration within the network occurs also regarding standards and development (Hoffmann et al. 2012). Also majority of SMEs consider that they need more information about how to improve their environmental performance and they can contribute to sustainable development effectively only in networks (Revell et al. 2010). Low awareness can cause resistance towards ES activities and therefore gaining information and know-how from the network and training the employees decreases the unawareness and resistance and therefore can drive the ES in SMEs (Lee 2009).

2.5.3 Stakeholders

Hoffmann et al. (2012) found that SMEs that collaborated with their stakeholders gained ES related capabilities that made them perform better in competition and it was disadvantageous for SMEs to not collaborate with their stakeholders in ES related issues. Revell et al. (2010) discovered that communication with stakeholders with ES related issues can gain benefits for the firm and firms that do not communicate with the stakeholders pay opportunity costs by losing opportunity to create green image and capitalize it. Also Larrán Jorge et al. (2015) argue that communication with stakeholders can increase the economical benefits yielded by ES related activities and therefore it can drive ES in SMEs even further. By collaborating with suppliers and customers SMEs can gain strategic advantage but also develop new capabilities within the company which can further help to improve the environmental performance and the collaboration does not need to be

sustainability related, any cooperation within the business network is likely to eventually lead in contribution to sustainable development because ES activities are likely to yield competitive advantage (Hoffmann et al. 2012).

Hoffmann et al. (2012) argue that it is strategically rational to cooperate with customers and suppliers to improve environmental performance of an SME. Nagypál (2014) found that 85,5% of SMEs were supported by their stakeholders when they implemented CSR related activities. Practically this means that large companies that monitor their supply chain and suppliers' suppliers are important motivating factors for SMEs' CSR (Nagypál 2014). Seidel et al. (2009) argue that identifying the stakeholders and networking with them help overcoming the problems that SMEs may experience when implementing ES related activities.

Knowledge from network helps cooperation with stakeholders even further and enables even smallest companies to affect their products' whole life cycle (Seidel et al. 2009). Collaborating with external stakeholders such as customers and suppliers enable SMEs to monitor and even control their whole business cycle and make agile adjustments in it if needed (Svensson & Wagner 2012). Also operating locally makes cooperation with stakeholders itself a driving factor for ES in SMEs (Nagypál 2014). Customers and other stakeholders can also successfully pressure SMEs to improve their environmental performance because otherwise the SMEs face a threat to lose their market opportunities (Raar 2015; Oxborrow & Brindley 2013).

Suppliers' adoption of environmentally sustainable business practices and also pressure from supply chain can drive SMEs to improve their environmental performance (Delchet-Cochet et al. 2015). Especially large companies can demand environmentally sustainable business practices from their small suppliers instead of accepting the lowest cost supplier (Nulkar 2014). This can push SMEs to improve their environmental performance (Nulkar 2014). Largest multinational companies can even encourage smaller suppliers' ES efforts by providing technology and know-how (Nagypál 2014). Also regional environmental management systems can provide SMEs with help to decrease their

environmental impact (Kerr 2006). Actors outside the private sector can also help SMEs with ES related issues: public financing can drive SMEs' ES related investments and NGOs can develop ES tools for SMEs (Nagypál 2014). Public and private intermediaries can assist SMEs that have low absorptive capacity to create eco-innovation (Klewitz et al. 2012). There is also a link between industry's tangibility and probability for an SME to start adopting green management practices (Uhlaner et al. 2012)

Uhlaner et al. (2012) argue that local communities can design tools to reward SMEs that perform well in ES and public shame lists for SMEs that are damaging the living environment and this external pressure could drive SMEs' ES locally. Responsibility should be also pushed by the society which is a problem in developing economies that want to grow rather than be environmentally sustainable (Seidel et al. 2009). Customer pressure is very important driver for SMEs' environmental sustainability (Nulkar 2014).

To keep employees within the firm can be a driving factor for SMEs to improve their environmental performance (Revell et al. 2010). If employees are empowered to take environmental concern into account in their daily work, it is likely that SMEs' environmental impact decreases (Baden et al. 2011).

SMEs are informal and resource bound but they can address their deficiencies by collaboration with external entities; by networking, gaining information and knowledge and cooperating with their stakeholders. In the context of environmental sustainability this kind of orientation may enable SMEs to become literally environmentally sustainable. The literature on SMEs' ES highlights the importance of SMEs' networks, stakeholders, and flow of relevant information to increase owner-managers' and employees' awareness but there are few existing studies that have investigated SMEs and their stakeholders in the context of ES. Next section of the literature review will explore the literature on stakeholder theory to provide understanding in the discussion about ES, SMEs and stakeholders

2.6 Stakeholder theory

This section reviews the stakeholder theory and the literature on stakeholder theory that has addressed environment, environmental sustainability and SMEs. Stakeholder theory and its applicability have many contradicting views among the scholars.

Before stakeholder theory became popular, scholars tended to argue that the best way to improve firm's performance is to adopt market orientation in which the customers and competitors are in the focus of the management and other stakeholders are not addressed directly. However, that view has been challenged by the stakeholder orientation which is more flexible and situational and enables managers to consider the contextual factor of the company as well. Market orientation and stakeholder orientation are complementary orientations (Ferrel 2010).

Also the traditional comprehension of firm's mission is that a firm should maximize the value of its shareholders. For example according to the Finnish law, the mission of a company is to generate profit for its shareholders (Osakeyhtiölaki 5§). Laplume et al. (2008) argue that the fundamental idea behind stakeholder theory is that the firms should be managed so that all who have their stakes in the company can gain benefits from its actions and stakeholder theory is increasingly important because of the current trend of increasing interest toward ethical behavior of companies. Philips and Reichart (2000) state that stakeholder theory refers to managing conflicts that arise when scarce resources are allocated at different targets. These conflicts are managed by cooperating voluntarily to find satisfying trade-offs between stakeholders that have legit claims in order to create benefits (Philips & Reichart 2000).

2.6.1 Definitions of stakeholder

"Stake" and "stakeholder" have been difficult theoretical concepts to define and there have been various interpretations of them and also of theories created

around them. However, according to Mitchell et al. (1997) there is a relatively high consensus about the entities that can be stakeholders: "persons, groups, neighborhoods, organizations, institutions, societies and even the natural environment" (855). Perhaps the most popular definition for "stakeholder" cited by many authors is, according to Freeman (1984, cited by Gibson 2012), that a stakeholder significantly affects or can be affected by the activities of an organization. It can be called a principle of "can or can be affected" because many scholars use the words when referring to Freeman (1984) (e.g. Mitchell et al. 1997). Since 1984 the theory has evolved because this original definition is problematic when applied to reality (e.g. Fassin 2009 and Philips & Reichart 2000). The problem in definitions is in how to define the "stake" (Mitchell et al. 1997).

Based on the definition of Freeman Freeman (1984, cited by Gibson 2012) for a stakeholder, anyone or anything can be a stakeholder of a firm. According to Philips and Reichart (2000) stakeholder theory cannot make difference between stakeholders and those who actually are not stakeholders. Fassin (2009) notes that "those who can affect a firm are not always the same as those who can be affected by it" (117) and according to Fassin (2009) stakeholder means "any individual or group that maintains a stake in an organization in the way that a shareholder possesses share" (116). Also stakeholders usually have some kinds of requirements for the firm and those that can affect or be affected by the firm may not have requirements for the firm (Fassin 2009). Therefore the managers should be able to define the legitimate stakeholders and find the best way to consider their, perhaps contradicting, interest in the firm's action by distributing the resources accordingly in various situations (Philips & Reichart 2000). Stakeholders' interests are intertwined with each other but they also include the core elements that are vital for the sustainability of the firm's operations (Haigh & Griffiths 2009). Onkila (2011) argues that "stakeholders" cannot be seen in objective reality but instead stakeholders and relationships with stakeholders are created by arguments and communication. Mitchell et al. (1997) on the other hand suggest that management may or may not identify the stakeholders correctly; it is the management who decides which stakeholders are salient. In other words

stakeholder exist and it is about the management to identify them (Mitchell et al. 1997).

Mitchell et al. (1997) reviewed existing stakeholder literature and addressed the problem of stakeholder identification and prioritization. They created a model which suggests that there are three attributes that stakeholders can have: power, legitimacy and urgency. And the more a stakeholder has these attributes, the more salient the management will probably consider it (Mitchell et al. 1997). The model is represented in Figure 1. Mitchell et al. (1997) uses Etzioni's (1964) definition for the power according to which power can be coercive (physical), utilitarian (material resource-based), or normative (abstract resource-based). Legitimacy is a difficult concept to define but it refers to socially desirable attributes. Urgency refers to time: how much a delay in action harms the stakeholder, as well as criticality: how immediately the management must react to the claim of a stakeholder (Mitchell et al. 1997).

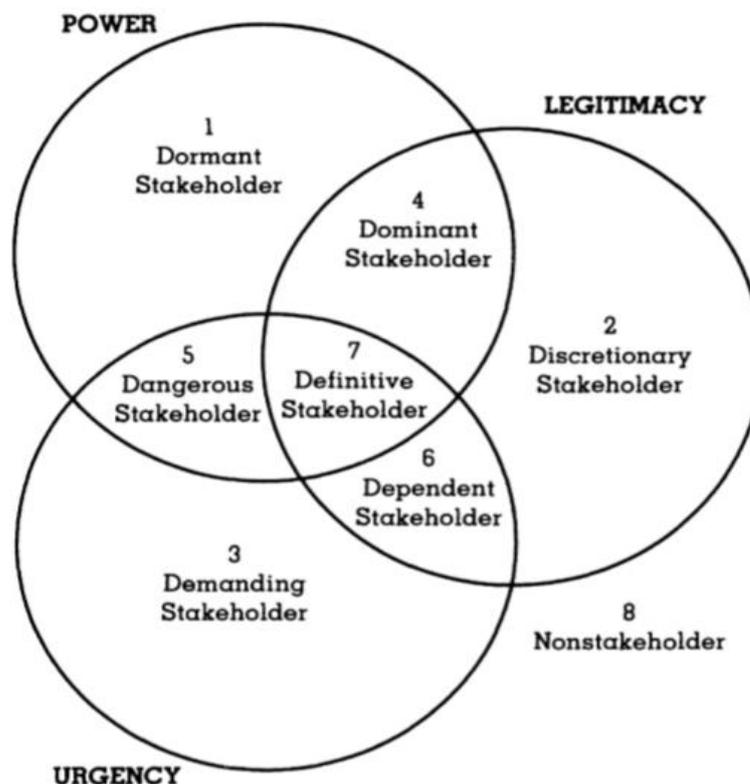


Figure 1. "Stakeholder Typology: One, Two, or Three Attributes Present" (Mitchell et al. 1997:874).

Entities that do not have any of the three attributes are nonstakeholders. Latent stakeholders have only one attribute and they can be dormant stakeholders, discretionary stakeholders or demanding stakeholders. Dormant stakeholders have power, which can be coercive, utilitarian, or symbolic, but they do not use it unless they gain more attributes. Discretionary stakeholders are legitimate stakeholders but managers do not have any reason to address them actively. Demanding stakeholders are urgent, such as a single protestor on factory site, but will most probably not be addressed by the management. Expectant stakeholders have a combination of two attributes and based on the attributes they can be dominant, dependent, or dangerous stakeholders. Dominant stakeholders have both power and legitimacy. Dominant stakeholders have probably relationship and communication channels with the firm and the firm has probably anticipated situations in which these stakeholders become urgent by assigning staff, such as PR and HR officers, and preparing procedures. Dependent stakeholders have legitimacy and urgency but no power to influence the firm. Dangerous stakeholders have power and are urgent but have no legitimate claim on the firm. Dangerous stakeholders can be, for example, terrorists and saboteurs. Definitive stakeholders have all three attributes and management of the firm should and probably will definitely address their claims. Attributes are not stagnant and they can be gained or lost so the status of the same stakeholder can vary within the model (Mitchell et al. 1997).

Bazin (2009) argues that the term stakeholder should be divided in interest parties and concerned parties because not all of those who are stakeholders based on the classical definition have a stake in firm's operations but instead they are concerned on it. Based on the classical definition for "stakeholder", Fassin (2009) identifies three groups that belong to it, the real "stakeholders", "stakewatchers", and "stakekeepers" derived from innovation literature. Stakeholders have a real stake, which means positive and loyal interest, in firm's actions. Stakewatchers are groups that do not have a stake in firms actions but who can pressure the firm to address the stakes of real stakeholders i.e. they act as proxies. These can be, for example, labor unions. Stakekeepers do not have a stake in the firm's operation but can influence and directly affect it but firm has little influence on them. These

are, for example, regulators. Same group can be a stakeholder, stakewatcher or a stakekeeper in different situations. In addition to these three groups, there are groups that can have influence, most probably negative, on the firm and who cannot be controlled or whose actions cannot be predicted, the "false" influencers such as activists and terrorists with unjustified motives (Fassin 2009).

Figure 2 represents the stake model of the firm that Fassin (2009) created based on existing stakeholder theory. Fassin (2009) argues that the model helps identification of real and legitimate stakeholders and also identification of which role a stakeholder has. Ellipses with text represent firm's stakeholders and stakeholders within the great ellipse are internal to the firm. Ellipses external to the greater ellipse represent the business environment with social and political actors such as the stakekeepers.

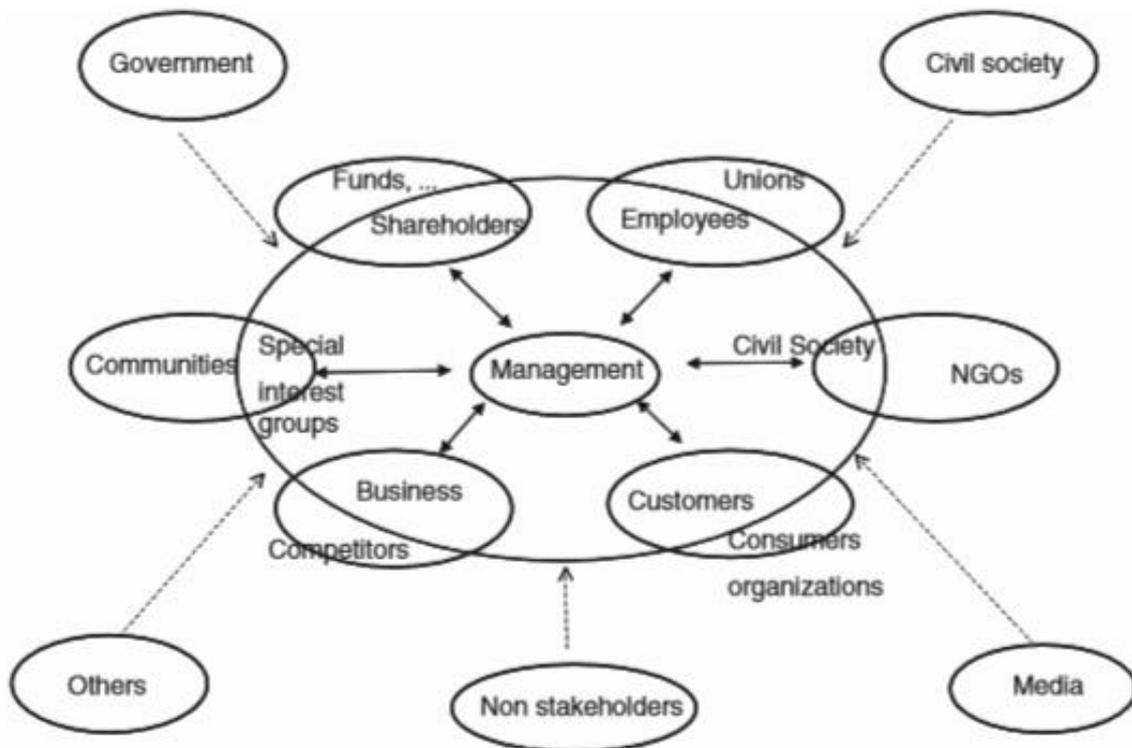


Figure 2. "The stake model of the firm" (Fassin 2009:124).

In the stake model stakeholders are the entities that can significantly be affected by the firm but have relatively little power over the firm and stakewatchers and stakekeepers are entities that can significantly influence the firm. The latter two

have their power based on their legitimacy and are able to force the firm to bear responsibility for its actions or lack of actions. Stake model is, however, very simplistic representation and real life is more complex than the model (Fassin 2009). Nevertheless, regardless of all the definitions, it is on management's responsibility to explore and gain knowledge of their business environment and identify the stakeholders (Mitchell et al. 1997).

So idea behind the stakeholder theory is the new comprehension that firms should not only maximize the profit of their shareholders but to also maximize the benefits of their stakeholders, including the shareholders. Firms' stakeholders vary, the same stakeholders can have different claims in different situations and it is crucial for the firms to identify their stakeholders, so that they can be addressed accordingly. Firms have stakeholders but firms can also be stakeholders of their stakeholders, the direction of impacts in stakeholder relationships is not always a one-way road.

2.6.2 Environmental stakeholders

Environmental stakeholders of large companies and companies in general

Environmental stakeholder is a stakeholder whose stake has environmental nature. Companies can have varying relationships with their stakeholders when they are addressing environmental issues. In power-based relationships either corporate pressures its stakeholders to become environmentally sustainable or vice versa when the stakeholder uses its power. In collaborative relationships the company is among many actors with equal responsibility among whom the responsibility is shared, power relations are different and their environmental interests are unknown to each other. Conflicting relationships mean that company questions its stakeholders' demands, usually because the demands can be seen as harmful for the environment. One-sided contribution relationships mean that company makes one-sided contributions to the stakeholders to justify their environmental impacts (Onkila 2011).

Firms also promote their environmental action in their ES related communication (Onkila et al. 2014). Companies show commitment to sustainable development in which case stakeholders are used to increase company's legitimacy (Onkila et al. 2014). Stakeholders can demand environmental sustainability but also companies, in their communication, may demand environmental responsibility from their stakeholders (Onkila et al. 2014). Sometimes companies communicate that stakeholders prevent them from implementing environmental sustainability related actions (Onkila et al. 2014). Onkila (2011) argues that companies lack expertise in how to properly cooperate with their stakeholders to address environmental issues and stakeholders' environmental claims. Environmental stakeholders vary based on the situation and their claims can vary significantly which means that there is no universal way or tool that can be used to manage every relationship with an environmental stakeholder (Onkila 2011). Onkila (2011) argues that managers should be able to recognize where the stakeholders derive their power in order to be able to act in accordance. Also companies' attitudes towards stakeholders vary. The way managers frame the stakeholders derives from company's environmental intentions: they may want to continue business as usual even though they make environmental reports (Onkila et al. 2014). Onkila et al. (2014) argue that differences between companies' environmental sustainability policy reporting and their real actions decrease companies' credibility. Companies tend to not report if they have conflicts in relationships with environmental stakeholders which "leads to a promotion of corporate power, not stakeholder influence" (Onkila et al. 2014:152).

Hörisch et al. (2014) created a conceptual framework for relationships of environmental stakeholders based on the idea that sustainability is a mutual benefit and therefore it is in everyone's interest. In the framework financiers, community, suppliers, employees, customers and other stakeholders have their own particular sustainability interests and they interact aiming to increase the collective value of sustainability which is implemented through sustainability based value creation, education and regulation (Hörisch et al. 2014). Education both

increases the positive attitude toward environmental sustainability and enables stakeholders to become better proxies for environment (Hörisch et al. 2014).

Environment as a stakeholder

There is theoretical discussion and essays mainly without empirical studies about the nature's status as a stakeholder with very contradictory conclusions. Bazin (2009) argues that stakeholders can only be human beings because stakeholders must have interests and even if a stakeholder cannot express them, someone should be able to define them and existing theory fails to convince that environment should be taken seriously as a stakeholder. Bazin (2009) argues that humans can preserve nature if they are ethically interested in preserving it. However, there are many aspects to the problem and results depend on approach. Biocentric approach assumes that nature has its own interests (Bazin 2009). Anthropocentric approach assumes that humans are proxies for nature because they have interests for nature (Bazin 2009). It seems so that anthropocentric approach assumes that humans are not part of nature because if humans were part of nature and had interest in preserving nature, it would mean that nature has its own interests to preserve itself. Bazin (2009) argues that because humans are created by nature, humans therefore have obligations towards nature. Bio-ontological approach means that humans should act so that the actions do not compromise future human's ability to live (Bazin 2009).

Also Gibson (2012) argue that sustainability should be the principle that affects business but considering nature as a stakeholder is a category mistake and nature's stakeholder status in literature is based on too liberal interpretation of definitions for "stakeholder". Philips and Reichart (2000) argue that natural environment can and should be addressed by legitimate stakeholders and it should be a moral obligation for firms to contribute to environmental sustainability but natural environment itself lacks the legitimacy and power, the 'voice', to be accounted as a stakeholder.

Some scholars have addressed whether nature has something that can be interpreted as a voice which could make nature a stakeholder. Haigh and Griffiths (2009) argued that because nature has physical power that affect us, it has therefore a voice and can be a stakeholder. However, majority of scholars argue that only humans can be environmental stakeholders and act as proxies, intermediaries, between natural environment and corporations (Hörisch et al. 2014; Wysocki 2012; Philips & Reichart 2000).

Onkila (2011) found that businesses do not consider nature being influential stakeholder. Nature is considered having legitimacy and it was justified as a stakeholder based on its position as the reason for responsibility and sustainability efforts but on the other hand nature's lack of power does not justify it being a stakeholder (Onkila 2011). Based on this and the model of Mitchell et al. (1997) nature is therefore a dependent stakeholder. Tryggestad et al. (2013) found that environment can affect firm and non-human entities can be addressed strategically as stakeholders by firms but in their case the non-human stakeholders, moor frogs, were not identified as stakeholders in the firm before their claim was represented by human proxies. According to Philips and Reichart (2000) it is also on regulator's responsibility to create laws that enhance environmental sustainability in business. Even if some entity, such as nature, can affect the firm, it does not create moral obligation for the firm to address the affecter (Philips & Reichart 2000). Philips and Reichart (2000) use an example to prove their point:

"Simply because two things exhibit similar characteristics does not necessarily mean that the two are identical. A manager's relationship with her spouse has moral implications, as does her relationships with her subordinates. Both types of relationships have ethical, socio-emotional, and legal aspects, but it is absurd to suggest that, therefore, her spouse is her subordinate or vice-versa" (190)

This demonstrates how abstract the stakeholder theory discussion in the context of natural environment has been. The examples proving the scholars' points are sometimes somewhat questionable.

Whereas some scholars argue that nature cannot be a stakeholder because it lacks attributes such as legitimacy or power (Philips & Reichart 2000), Haigh and Griffiths (2009) argue that nature should be the primary stakeholder for firms because in addition to power, legitimacy, and urgency, nature also has proximity as a stakeholder. Proximity is an extension to the model of Mitchell et al. (1997) represented in Figure 1 and it means that nature has proximity because firms are operating in it (Haigh & Griffiths 2009).

Haigh and Griffiths (2009) argue that many problems that companies have in their environmental sustainability could be addressed if the companies would gain their environmental information directly from the environment instead of from proxies i.e. addressing environment as their primary stakeholder. Proxies add complexity and causes information to be filtered and interpreted multiple times which may distort the original message (Haigh & Griffiths 2009). If companies gain understanding directly about their physical business environment, they can gain strategic advantages (Haigh & Griffiths 2009).

The advantages of addressing natural environment as a primary stakeholder include understanding the ecosystem's own services that can be utilized and understanding the impact of the nature on suppliers, customers and competitors (Haigh & Griffiths 2009). It is often forgotten in the stakeholder literature that effects in nature-company interaction occur on both sides (Haigh & Griffiths 2009). Considering environment as a stakeholder is a managerial and strategic action and implementing it may require investment and is a long term action (Haigh & Griffiths 2009).

Haigh and Griffiths (2009) argue that "natural environment has an economic stake in organizations" (356) and therefore it is a strategic instead of a moral action to consider nature as a stakeholder, lack of nature's will and lack of other features that humans have is irrelevant for stakeholder status. Waddock (2011) argues that instead of environment, Gaia, the entity to which everything on Earth belongs, should be the ultimate stakeholder. It is the question of the long term survival and well-being of our species because Gaia does not care whether we survive or

extinct (Waddock 2011). Gaia and humans affect and are affected by each other and therefore 'voice' or other human attributes are not needed for stakeholder status and also humans are stakeholders of Gaia (Waddock 2011).

Gaia's ability to facilitate the life as we know it is deteriorating and in the future humans' ecosystems start to suffer more from that (Waddock 2011). Therefore Waddock (2011) argues that we, as stakeholders of Gaia, are dependent on its ability to support our lives and therefore Gaia, instead of a corporation, should be in the core of stakeholder thinking. This is a very philosophical view but basically it means that if the environment turns too toxic for humans or plants and animals needed by humans, our species will probably perish because we do not have other environments where we could move to.

Natural environment becomes a stakeholder of an organization if the organization consider it as a stakeholder (e.g. Mitchell et al. 1997). Problem may arise from what is defined as natural environment. Waddock (2011) defines it as ecosystems, including societies, and therefore actions that affect the ecosystems directly or indirectly, such as climate change caused by consumption of fossil fuels, are actions that should be considered based on assumption that natural environment is a stakeholder. So natural environment includes living and non-living aspects, the aspects as a whole form the "Gaia's life supporting capacity" (Waddock 2011: 193).

Based on the environment and stakeholder related literature the relationships with environmental stakeholders should be addressed so that mutual benefits can be gained, the benefits are not always economic but if the efforts are successful, the long term sustainability of firms improve. This is because the legitimacy of the firm improves and, as mentioned earlier, the benefits can indirectly bring success for the firms with increased innovativeness and competitive advantage. Natural environment as a stakeholder is a difficult theoretical concept but practically it is clear that natural environment is vital for every living entity on Earth, and therefore extremely valuable for humans and most probably easiest way to preserve human life is to preserve the natural living environment of humans.

2.6.3 SMEs and stakeholders

There has not been excessive amount of academic study on SMEs and stakeholders. Existing studies have usually chosen CSR aspect for the study. The studies have had mixed results. It may be so because Sen and Cowley (2013) found that minority of the SMEs' owner-managers know what CSR means and Schlierer et al. (2012) found that minority of SMEs' owner-managers know what the term "stakeholder" means. This was also found by Sen and Cowley (2013) and when the term was explained, SMEs' owner-managers in the study stated that stakeholders do not have an impact on them. However, SMEs want to be respected members of their local communities which make CSR and stakeholder thinking relevant for them (Sen & Cowley 2013; Looser & Wehrmeyer 2015).

Raar (2015) argues that the most crucial stakeholders of SMEs are the employees and customers. Schlierer et al. (2012) argue the same but add suppliers in the list. Sen and Cowley (2013) found that SMEs implemented and are likely to implement CSR related activities only with their customers or suppliers. However, Parker et al. (2015) found that SMEs do not communicate their policies, actions, or commitment to create favorable conditions for the employees. Looser and Wehrmeyer (2015) had a very original perspective and they studied stakeholders of Swiss CSR and found that they are MNEs, SMEs and NPOs. As stakeholders in Swiss CSR SMEs have high societal legitimacy because of their strong commitment to local communities. MNEs have high urgency, power and legitimacy, consumers have high urgency and legitimacy, trade unions have power and legitimacy, non cooperating NPOs may have some power, cooperating NPOs have urgency and legitimacy, support providers, such as certifiers and external consultants have legitimacy, financiers have power, media has power and in some situations urgency and government has legitimacy and power (Looser & Wehrmeyer 2015).

According to Parker et al. (2015) SMEs stated that their stakeholders in CSR issues are society or community, customers, suppliers, employees, and environment. Parker et al. (2015) argue that environment is a stakeholder of SMEs because SMEs address environmental issues in their websites. However, SMEs do not communicate their commitment to the nature or their sustainability related values (Parker et al. 2015). Instead they usually state what kind of practical actions they are implementing to decrease their environmental impact (Parker et al. 2015). In addition SMEs do not mention suppliers in their CSR communications and they neglect communication of their commitment to the society (Parker et al. 2015). This is in contradiction with many studies but may be caused by negligent online communication and lack of skills in marketing instead of lack of commitment to the society, environment, or employees.

SMEs have very informal approach to their stakeholders and prefer a hand shake rather than formal contracts. Also non-coercive regulation is preferred by SMEs (Looser & Wehrmeyer 2015; Schlierer et al. 2012). SMEs usually act locally and are therefore committed to build trust-based networks within their local communities and therefore they invest in CSR because they want to contribute to the community from which they gain their revenues (Looser & Wehrmeyer 2015; Sen & Cowley 2013). Also Parker et al. (2015) discovered that SMEs are willing to contribute to the community and they usually do it by providing their normal products and services but for free of charge or for lower price in some occasions. However, SMEs do not call CSR activities as CSR activities, but they are implementing CSR actions, sometimes unknowingly, because they consider it the right thing to do (Looser & Wehrmeyer 2015). In their network analysis Looser and Wehrmeyer (2015) discovered that SMEs are in central position to improve CSR with their stakeholders. According to Looser and Wehrmeyer (2015) SMEs are urgent and legitimate stakeholders in CSR so based on the model of Mitchell et al. (1997) SMEs are dependent stakeholders in CSR; they lack power. By gaining power by, for example, collaborating with entities such as media, SMEs may be able to diffuse their CSR to their society, rivals, customers, suppliers etc. (Looser & Wehrmeyer 2015).

According to Kusyk and Lozano (2007) internal and external stakeholders of SMEs create the drivers and barriers for their social responsibility (SR). Internal stakeholders create less drivers and more barriers compared to external stakeholders (Kusyk & Lozano 2007). However, most important internal driver are the owner-manager's values but they can also be a significant barrier for social responsibility. Most significant internal inhibitor is lack of resources. Most important external driver are the customers and most significant external inhibitor is supply chain unfavorable for investment in CSR pressuring to savings and cheap work (Kusyk & Lozano 2007).

The internal and external stakeholder related drivers and inhibitors of SR can modify SME's competitive advantage created with SR and also the autonomy of owner-manager in decision-making. These divide firms in four clusters. High competitive advantage based on SR and high decision-making autonomy means that the company is a "moral leader" and innovator in SR management. High autonomy in decision making but low advantage in SR issues make the company "observer" who tries to adapt based on the social issues and management is passive in SR issues. Low advantage and low decision making autonomy means that the company is "non-participant" actively supplying for the demand in the supply chain. High advantage based on SR but low decision making autonomy makes the company "customer dependent" trying to comply and serve the supply chain actively. SMEs analyze their situation and make the decision between each cluster based on their analysis and their stakeholders have great impact in the decision making so in some situations the stakeholders can have significant power over the company, more significant than a company have in the stakeholders (Kusyk & Lozano 2007).

Kusyl and Lozano (2007) argue that the most salient stakeholders of SMEs are the owner-managers and actors in their supply chains. Sen and Cowley (2013) found that whereas owner-managers are usually the dominant CSR related decision-makers in SMEs, sometimes the employees can also improve the CSR if they are empowered to do so. Sen and Cowley (2013) also argue that SMEs do not

address the stakeholders rationally but less salient stakeholders may receive greater attention than more salient stakeholders.

Schlierer et al. (2012) studied how SMEs' owner-managers comprehend and make sense of their stakeholders and stakeholder management. They found that stakeholder management is relevant, strategic, and ethical. In some countries, such as in Norway, for example, stakeholder relationships are partly defined by regulation and policies. SME owner-managers usually recognize their primary stakeholders as stakeholders but recognize other relevant stakeholders more rarely which indicates that SMEs do not realize the scale of which the business affects different stakeholders (Schlierer et al. 2012).

As mentioned before, SMEs seem to address their stakeholders in irrational way (Sen & Cowley 2013) and therefore Sen and Cowley (2013) argue that local communities are the most salient stakeholders of SMEs and SMEs are, in CSR issues, dependent on networking within them to gain as diverse network as possible. This is why Sen and Cowley (2013) argue that stakeholder theory cannot be applied to SMEs and it is the social capital theory that can be applied to the networking: SMEs are not networking based on "stakes" but instead based on the social capital that networking provides. Also Schlierer et al. (2012) argue that stakeholder theory is difficult to be scaled down to fit SMEs.

2.6.4 Environmental stakeholders of SMEs

SMEs have very informal approach to their environmental stakeholders (Kerr 2006). Stakeholder analysis conducted by SMEs enable them to affect the whole life cycle of their products, thus improve their impact on environment, on societal stakeholders, and improve their efficiency (Seidel et al. 2009). Raar (2015) found that SMEs' stakeholders, mainly employees and customers, were concerned on the environment and SMEs were aware of their concern. Especially SMEs on service sector are highly interested in the natural environmental claims of their employees (Raar 2015). Tang and Tang (2012) found that the greater the power

difference is between SME and its government and competitors, the better is SME's environmental performance. SMEs have power to counter their stakeholder's claims (Tang & Tang 2012). Tang and Tang (2012) found that stakeholder's attitude towards environmental sustainability affects SME's environmental performance. Tang and Tang (2012) argue that since customers are the entity that determines if the firm gains revenue, they are in key position to affect SMEs' attitudes toward environmental sustainability. The literature on SMEs' ES highlights the importance of stakeholders. If stakeholder cooperation helps SMEs to become environmentally sustainable, what does the ES mean, who defines it and how is the voice of nature present in that cooperation?

2.7 Conclusion of the literature review

The living environment is generally deteriorating, this includes the living environment of human beings. Firms can be seen responsible for the situation and especially the SMEs are in key position to determine how much the corporate activities contribute to the trend globally. Studies on SMEs' ES define ES in ways that actually mean that environment is still deteriorating because of the firm's actions, such as Parry's (2012) definition: minimizing the environmental impacts. There is a mismatch between what natural environment can sustain and still support the life as we know it and what is defined as ES in business studies. Why is ES so problematic issue in SMEs?

The mismatch can be removed when the environmental impacts and information are addressed and gathered directly without proxies and setting natural environment in a stakeholder-like position: considering natural environment as company's primary stakeholder (Haigh and Griffiths 2009). However, scholars have differing views on the stakeholder status of the environment in business. Some scholars state that environment is not a stakeholder in business (Bazin 2009; Gibson 2012; Philips & Reichart 2000) and environment should be represented by human proxies. Some scholars state that stakeholders of companies are proxies for environment in business (Hörisch et al. 2014; Wysocki

2012; Philips & Reichart 2000). Fassin (2009) states that proxies are intermediaries between stakeholders and companies, the "stakewatchers" which means that the environment is a stakeholder regardless of the proxies who represent the environment in business and their stakeholdership. Existing theory does not provide unambiguous explanation what the terms "stakeholder" and "proxy" mean and different studies use the terms in different meanings. The question behind the stakeholdership of environment in business operation is whether the environment has a voice in business. Voice can mean legitimacy, (Philips & Reichart 2000), power (Philips & Reichart 2000; Onkila 2011; Haigh & Griffiths 2009) and information (Haigh & Griffiths 2009). The voice can be derived directly from the environment or it can be transmitted by the proxies, the environmental stakeholders, of the company. Environmental stakeholders are stakeholders with environmental case within the company (Onkila 2011).

There is a limited but increasing amount of literature on SMEs and ES and very limited amount of literature on SMEs and stakeholders. Literature on SMEs and ES highlights the significance of stakeholders but literature on SMEs and stakeholders is contradicting and questions whether stakeholder theory can be applied on SMEs or not. Stakeholder theory is very strategic and SMEs are not thinking very strategically. However, even if SMEs' managers do not use the term "stakeholder", it is possible to define their relationships with external entities as stakeholder relationships and describe them.

Figure 3 is derived from Fassin's (2009) stake model of a firm. It demonstrates that SMEs' are operating in natural environment and that natural environment can potentially have a stakeholder status.

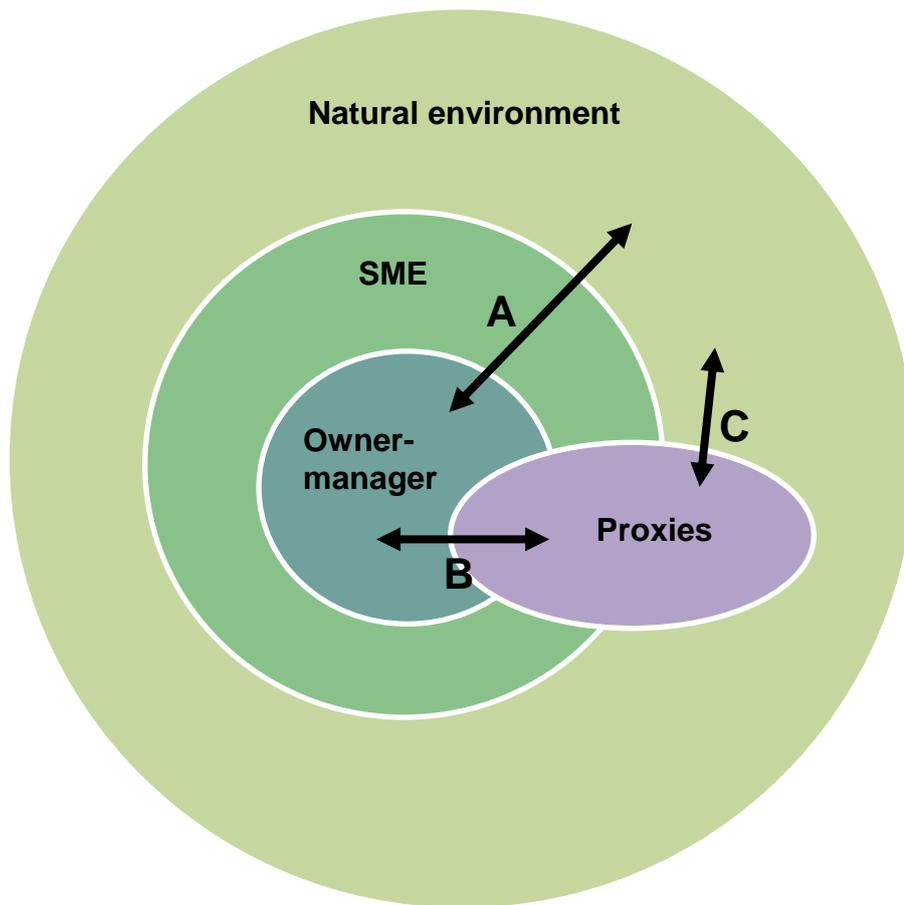


Figure 3. SME's environmental stakeholders.

Proxies are the environmental stakeholders that are human, they can be "persons, groups, neighborhoods, organizations, institutions, societies and even the natural environment" (Mitchell et al. 1997:855). They can be internal and external to the firm. Owner-manager has very significant role in SME but in certain situations owner-manager can be a proxy for environment as well, for example, if employees and management within an SME are very equal. The arrows represent two-way relationships between the stakeholders that can be assessed based on existing theory on stakeholder relationships.

The reviewed literature and its gaps provide research questions for this study:

1. *Why is it problematic for SMEs to become environmentally sustainable?*
2. *How is the voice of nature present in the operation of SMEs?*

3. What is the status of environment in the operation of SMEs based on stakeholder theory and empirical evidence?

The framework is in Figure 3. The questions 2 and 3 can be solved by exploring arrows A and B, arrow C is excluded from the study and left for future studies to be explored.

3 METHODOLOGY

This section describes the qualitative research method and reasons why it was chosen to collect empirical data for addressing the research questions in this study. The implementation of the qualitative method is described and the final part of this section assesses the validity and reliability of the study.

3.1 Qualitative method

Qualitative method is needed in order to investigate humans and their actions. The aim is to increase understanding on the phenomenon and the study basically consists of single cases that are used to understand participants' perspective utilizing their understanding. This should provide rich material. Qualitative method is also suitable method when the organization is a reality that consists of groups of people who are interacting with each other (Koskinen 2005).

Stakeholder relationships are not within one organization but they also construct of the interaction in the owner-managers' reality and therefore qualitative method was chosen to discover them. Also qualitative method is a viable mean to explore what the owner-managers actually think and acknowledge in their daily operation without providing them answers that they can agree with, regardless how true they are, using a survey.

The aim of this study is to find how the owner-managers of SMEs understand and comprehend environment and environmental sustainability and make the understanding part of scientific discussion. Qualitative method supports this aim (Koskinen 2005).

Semi-structured interview is the method for collecting data in this study. According to Hirsjärvi et al. (2007) the methods used for acquiring qualitative data should allow the voice and perspectives of the people that are examined to reach out and be observed. These methods include semi-structured interview (Hirsjärvi et al.

2007). Semi-structured interviews should be targeted at the interviewees experiences on situations that the researcher has analyzed beforehand and the researcher should be able to disseminate the experiences (Hirsjärvi & Hurme 2001). According to Hirsjärvi and Hurme (1982) semi-structured interviews are useful when the topics that are explored are poorly recognized and the interviewees are not well aware of them or are not used to discuss about them on daily basis. Based on the literature the environmental sustainability and stakeholders are not topics that the owner-managers of SMEs discuss every day (Schlierer et al. 2012). This suggests that semi-structured interview is a suitable method for acquiring the data.

When choosing the interviewees, discretionary sampling should be used in order to acquire useful data and every interview should be considered unique which affects the analysis (Hirsjärvi et al. 2007). Interview is a flexible method for collecting qualitative data because the interviewer and interviewee are interacting with each other using a language which enables the interviewee to steer and target the data collection in real time (Hirsjärvi & Hurme 2001).

3.2 The research process

The definition for a small or medium-sized company of European Commission is used in this study. SMEs can be classified in three groups based on their financial information and the number of employees. These are presented in Table 3.

The tool used in finding SMEs for this study was the search engine that can be used to find companies and it is available in the website of Kauppalehti (Kauppalehti n.d.). The tool enabled search of companies based on their industries and locations. Information about their size was not always disclosed and it was always asked from the contacted companies. In order to find SMEs that can provide reasonable data for the study, the search was focused on industries that definitely affect the environment. Since there are more than 1000 industries that can be used as search parameters in the engine, it is not feasible to search the

companies from all of them for a qualitative study since the amount of needed cases is a fraction of that. 30 industries were searched before the sufficient amount of interviews had been conducted. The industries that were explored were operating on construction, paper, plastic, rubber, fuel, food, electronics, metal, fertilizer, paint, environment, wood, engine, brewery, furniture, laundry and textile related industries.

Table 3. The classifications of SMEs (European Commission, n.d.)

Company category	Staff headcount	Turnover	or	Balance sheet total
Medium-sized	< 250	≤ € 50 m		≤ € 43 m
Small	< 50	≤ € 10 m		≤ € 10 m
Micro	< 10	≤ € 2 m		≤ € 2 m

162 companies were contacted by email and phone based on the contact information available in the search engine or company websites. All of the contacted companies were SMEs, some of them, however, were not operating anymore. Companies that were not operating were excluded from the study. 11 owner-managers of operating SMEs agreed to give an interview and two of them cancelled the interview. Total of nine interviews were conducted between 4th of July and 9th of October in 2016. The interviewed owner-managers' SMEs were operating on electronics, food, plastic, rubber, paper, fuel, furniture and construction industries.

According to Alasuutari (2007) the hypotheses should be operationalized to questions that would be asked from the informants. The research topics of this study found in the literature were operationalized into an interview script. The interview script is in Appendix 1.

The topics for discussion in semi-structured interviews should be flexible enough to enable the interviewees to provide insights to the topic as much as possible and also enable the interviewee to deepen the discussion if necessary (Hirsjärvi & Hurme 1982). The interviews in this study were very flexible conversations on the topic of environment and sustainability in order to explore the owner-managers experience and opinions of them in general and in the context of their business. The supporting questions and even some of the main topics were only asked if the answers were not received otherwise earlier in the conversation, the additional questions were mainly as a support for the interviewer to guide the conversation if it was necessary.

The interviews were conducted in the offices of the companies during working time, the owner-managers were instructed to reserve time for at least one hour for the interview. The interviews lasted from 16 minutes up to 40 minutes. The shortness of the interviews demonstrates how generally unfamiliar the owner-managers were with the topics and how unused they were to discuss them. The interviews were recorded and transcribed to make the processing of data easier and to avoid mistakes.

The interviews were conducted in Finnish because the SMEs and owner-managers communicated in Finnish fluently. The citations in the section 4 of this thesis were translated to English for practicality. No professional translator was used and the researcher excluded the extra words that are typical for spoken language and do not bring value to the message that is communicated. The original transcribed citations are in Appendix 2 in Finnish language.

3.3 Reliability and validity of the study

The reliability of a study, that is based on semi-structure interviews, depends on the whole research process. Also the researchers' own experience and understanding on how well the results describe the reality is a valid indicator of the reliability of the study (Hirsjärvi & Hurme 1982). Therefore the research

process was described in the previous section and researchers' understanding on reliability of the collected data is described in this section.

In this study the data is used as a lens to the reality so this study uses fact perspective. Alasuutari (2007) states that fact perspective is used when there is a possibility that the source of data can be dishonest. Since people were interviewed for this study and people can be dishonest, the idea of potential dishonesty of the interviewees cannot be completely rejected and therefore fact perspective is used. According to Alasuutari (2007) reliability is the criteria for useful research material. Koskinen (2005) states that it is important that the research objects are described well and flawlessly and then explained when using the fact perspective. According to Alasuutari (2007) the interviewees can be used as indicators because they were bothered for collecting the data and they were not told the research questions of the study, they had only vague understanding on the research problems. This increases the reliability of their answers as indicators because it decreases the reactivity of the interviewees (Alasuutari 2007).

Reactivity was observed but not as dishonesty. The interviewees knew that the study is about environmental sustainability which clearly restricted many of the answers and attempts to gain more profound answers. However, this was usually possible to be somewhat resolved by reformulating the questions or asking them again later. The interviews provided overall a negative image of the environmental issues and their handling in the SMEs' operation and therefore there is no reason to doubt that the owner-managers would have been dishonest when giving that impression.

To assess the validity of the research, also the researchers' own impact in the interviewees and their answers should be discussed. The interviewer, who in this study was also the researcher, definitely affected the situation because the questions and topics were represented by the researcher and the researcher also guided the conversations. However, the interviewees' answers were not affected, their voice and experiences were in the focus and therefore the interviewer avoided providing definitions and explanations for the topics. However, when the

interviewees asked for explanations or reformulating the questions, these were provided with as much caution as possible so that the answers would be as truthful as possible and reflect the real opinions and experiences of the interviewees.

The interviews were conducted in the offices of the owner-managers' during working time which may have affected the state of minds of the owner managers and may have, for example, restricted their answers. However, the owner-managers had been told to reserve time for at least one hour and agreed to the interview knowing the general topic of the interview. The interview environment were similar to the working conditions of the owner-managers and they were interrupted during their day-to-day work and therefore it can be assumed that the answers reflect how the owner-managers think and act in their day-to-day business as well which is the purpose of this study. This should also be the aim of every study (Hirsjärvi & Hurme 1982).

The sufficiency of the data was assessed based on the saturation principle. According to Koskinen (2005) the saturation principle is derived from the grounded theory and means that the researcher continues conducting the interviews as long as new insights are found and is constantly considering where the new insights can be found. The ninth interview of this study did not provide new insights, and the companies were very different, from different industries and in different stages of their life cycles and the owner-managers also had very differing experience. Therefore it can be stated that the data had saturated and the data collection could be stopped.

Therefore it can be concluded that the collected research material is reliable and valid. It does not provide the absolute facts about the reality. Instead, the research material is a lens which provides a view to the reality of the interviewed owner-managers and understanding on how they interpret their business environment, including the natural environment.

4 FINDINGS

This section presents the key findings that provide understanding on the research problems. Firstly, the sample is described. Secondly, the findings provide information on the relationship of environment and the owner-managers. Third part presents how environment related information flows in the operation of SMEs which provides evidence of one aspect of the nature's voice: the information. Finally, the comprehension of the owner-managers' companies' stakeholders is presented, especially the environment related interaction with the acknowledged external entities.

4.1 Sample

Firm A

The firm was found 10 years ago and it is operating on electronics industry. The original business idea of the company was to commercialize superconductive sensors that are used in medical devices and currently it is part of the supply chain of those devices by buying and testing the sensors and supplying them further to the supply chain. The firm also does electronics building. The company is micro-sized. The owner-manager has managed the company since its foundation.

Firm B

The company is a project company which intends to open a bioethanol producing factory. The bioethanol will be refined from side streams of industries that operate with wood. The bioethanol will be sold to the big oil distributors that operate in Finland to be added as a green component in their gasoline. Even though the final product will decrease unsustainability of traffic, the production of bioethanol is an industrial process itself. The company has been operating for some time but it is still planning the factory so it is still micro-sized. The owner-manager manages

several environmental sustainability related companies and has been working for 40 years within the environmental industry.

Firm C

The firm produces ergonomic devices that decrease the negative physical effects of desk jobs and working on computer. The firm has been in operation since 1989 and it was one of the first firms on their market but nowadays they face heavy competition with foreign products. The company is micro-sized. The owner-manager has been in charge of the company with his wife since its foundation.

Firm D

The firm designs, markets and sells spicy sausages. The sausages are produced by a subcontractor which is a larger company. The meat used in the sausages is purchased from small Finnish meat producers. Firm D is a micro-sized company. The company has operated for three years and the owner-manager has managed the company since its foundation.

Firm E

The firm produces products that are used in marketing and non-electronic communication, such as files, books, bags, printing etc. They can be customized in the needs of customer. Designing service enables the firm to design the products with the customer. The company has a factory for assembly but the materials such as papers and cardboards are provided by suppliers. The firm has operated for 49 years and it is currently small-sized.

Firm F

The firm was founded in 1956 it has been Finland's smallest manufacturer of household plastic for decades. The company is micro-sized and produces also plastic containers for, for example, fishermen and devices for closing bags and

measuring spoons that can have customer's logo printed in them. The company has uncertain future because the owner-managers are pensioners and no-one wants to continue the operation. Because of the uncertainty of the future the firm does not make new investments anymore. The manager was an officer in Finnish Navy but agreed to help his wife with the company and switched his career.

Firm G

The company produces electronic components for machines such as chippers. Firm G is a small-sized company.

Firm H

The company is a micro-sized company that is starting its operation. The product is an innovative urban renewal element system. It is based on plastic elements and therefore it has a large carbon footprint. However, it has a very long life cycle, it is energy efficient and easy to build.

Firm I

The firm is micro-sized and it is operating in technical rubber industry. It has operated for 60 years.

Summary of the sample

All of the companies are mainly B2B companies, only few of them have conducted business with consumers. Two of the companies are working with electronics, one with innovative building element, one within foodstuff industry, four companies make products from various materials such as cardboard, wood, plastic or rubber. Only one company is working to decrease environmental unsustainability by intending to produce bioethanol. None of the companies is medium-sized, two are small-sized and seven are micro-sized. The managers have very differing

backgrounds and experience, the companies are in different stages of their life cycles and the companies are from various industries.

4.2 Owner-managers and environment

4.2.1 Comprehension

Table 4 demonstrates how the environment is present in the owner-managers' lives, which was the first part of the interview. The aim is to explore the interaction between the owner-managers and environment and how the owner-managers make sense of the environment and sustainability. This section is a part of exploring the arrow A in Figure 3.

Table 4. The owner-managers' opinion about the significance of environment

Comprehension	Firm	A	B	C	D	E	F	G	H	I
I		x	x		x		x			
II			x			x	x	x		
III			x							
IV		x			x					x
V				x					x	

I) Significance depends on the point of view II) Environment is important III) Environment is necessary for human life IV) Environment is refreshing for humans V) Did not answer

None of the managers stated that the environment is not important. However, managers of Firm C and Firm H did not state that environment would have any significance in their lives. Many managers stated that environment is important and has value but did not specify or explain what they meant. Three managers

stated that environment has a refreshing effect on humans: manager of firm I had environment related hobby and the owner-managers of Firm D and Firm A stated that environment can have a favorable, refreshing, effect on employees.

Four owner-managers stated that the significance of environment and environmental issues differ based on the point of view.

"Environment does not mean anything to me as a manager. As a human it, of course, matters to me."

-The owner-manager of Firm A

Manager of Firm F stated that as a consumer he tries to minimize his impact on environment, manager of Firm B stated that environment can be examined from many different perspectives and therefore different issues can be highlighted. The owner-manager of Firm B was the only interviewee who acknowledged that environment is necessary for human life.

Table 5. The owner-managers' conception on environmentally sustainable development

Comprehension	Firm A	Firm B	Firm C	Firm D	Firm E	Firm F	Firm G	Firm H	Firm I
I						x		x	
II	x	x	x	x	x	x	x	x	x
III	x								
IV		x							

I) Consideration of future generations II) Minimizing the harm caused by human activities
 III) Taking care of the environment IV) Fighting the climate change

All of the managers stated that in order to make human activities environmentally sustainable the humans should minimize the harm caused to the environment.

This includes minimizing and avoiding emissions, operating reasonably and rationally and recycling waste.

"Well, of course nature should be conserved and sustainable development is definitely part of that so we should use cars and other natural resources as little as possible. Recycling is important today so that we could re-use the material."

-The owner-manager of Firm I

Manager of Firm A suggested that humans should take care of the nature actively. Manager of Firm B stated that the most important way to achieve environmental sustainability is to fight climate change. According to the managers it is sufficient to minimize the environmental harm caused by the business in order to achieve environmental sustainability. This means that eliminating the harm or improving the environment is not considered necessary in SMEs' business operation or in human activity overall.

4.2.2 Owner-managers' experience on environment and environmental sustainability in the context of their own business

The owner-managers assessed how the environment has been visible in the business by giving examples of what kinds of environmentally conscious actions their firms have done in order to minimize their environmental effects. These are summarized in Table 6.

SMEs sort and recycle their waste if possible. Two managers stated that they are intending to grow their business and they have considered greener business models.

"We are a small company seeking growth and therefore we often consider new business ideas. Environmental sustainability is a path that can be taken if we want to develop our business because new business idea should address things that people need such as health, environment and big themes like these. Environment

is like this and from there it is possible to crystallize the business ideas. This is something that could be considered."

-The owner-manager of Firm A

Table 6. The environmentally conscious aspects in business acknowledged by the owner-managers

Comprehension	Firm	A	B	C	D	E	F	G	H	I
I		x		x			x			x
II		x							x	
III			x	x	x	x	x		x	
IV			x		x		x			x
V						x				x
VI		x	x			x	x	x		x

I) Sorting and recycling waste II) Considering new greener business models III) Less harmful raw materials and final products IV) Increasing efficiency V) Less environment damaging production technology VI) Compliance with environmental regulation

The owner-manager of Firm A thinks that environment is its own business area and a way of becoming environmentally friendly is to implement a business idea for new business in the area of environmental sustainability so that it creates value for people.

Many of the owner-managers said that they have improved their products so that the raw materials and final products are less toxic to the environment and have longer life cycle, some of the final products do not cause any harm to the environment and are recyclable or produced from recycled material. Two of the SMEs had improved and renewed their production technology to be more energy efficient and less damaging to the environment. The manager of Firm E stated that

environmental sustainability is considered when the firm makes investments such as expansion of factory. Majority of the SMEs have had to take environmental regulation into account. Five managers mentioned that REACH has forced them to take environment related actions.

Table 7. The owner-managers' awareness of company's environmental sustainability issues

Comprehension Firm	A	B	C	D	E	F	G	H	I
I	x	x	x		x		x		
II	x	x		x	x				x
III					x	x			x
IV		x	x		x	x			x
V					x	x			x
VI								x	

I) Environmental aspect does not have high priority in operation II) Energy consumption III) challenges in recycling IV) lack of power V) lack of knowledge and capabilities VI) the product is environmentally unsustainable

Five managers said that environmental sustainability does not have great priority in their operation. Some managers said that the markets do not appreciate it. From some managers it is expected that the environmental issues of the business have been taken care of and no environmental crimes are done in the operations and the products are environmentally safe. One manager stated that environment does not have a high priority in the operation because the whole future of the company is unclear and the operation of the company will most probably stop in the near future. The owner-manager of Firm I noted that their product does not consist of green raw materials but it has a long life cycle. Overall the managers stated that

environmental sustainability does not provide them competitive advantage in their business and it has not been considered much in the business operation.

"It [environmental sustainability] is not a good sales argument and no one asks for it either. -- For customers it is important that supplier does not get caught from hiding toxic barrels underground. -- We have constantly formal -- REACH related activity. -- How it happens is that we send forms all over the place in which the suppliers assure that everything is in compliance with the directives and we believe it. We do not have a smallest chance to verify if it is true but we send those papers in which we ask that the suppliers promise so."

- The owner-manager of Firm G

Five managers were aware of that their operations consume energy and therefore cause emissions. Three managers stated that their end products or waste produced in their operations are somewhat problematic to be recycled. Five managers said that their firms are small and have no impact or power which forces them to accept the norms set by other entities that have more power such as big companies and officials.

"We are a small company within the energy industry. We are not going to play an industry-changing role. We are too small for that. We are operating in the modern and changing energy economy as one actor and pretty much accept the circumstances. We are too small to change the energy regulation and we play by the rules that are given to us"

-The owner-manager of Firm B

The same firms that were aware of the problems of recycling were also aware of that those problems are caused by lack of knowledge and capabilities both within the companies but also among end users and other actors within the industry.

"We have always been thinking about what to do to the waste rubber in our operation. We have been thinking about it a long time but we have not found a use for it -- because the natural rubber is expensive and when it is used nowadays it is

pretty peculiar and difficult because we just have to throw the expensive [vulcanized waste] rubber away. That is something that could be utilized but we have not found a way to utilize it and neither have the big firms found a way."

-The owner-manager of Firm I

Based on how managers view the environment and what kind of human activity is environmentally sustainable, the SME activity and environment are considered separate. Environment is not considered in business but it is considered as a resource. Therefore it seems that owner-managers are not proxies for nature's voice in SME operations. The only sustainability related business model examined in this study was implemented by an owner-manager who is concerned on the climate change so it was the owner-managers' values that were base for the company. In that sense the owner-manager can be a proxy for the environment. The owner-managers stated that their operation is environmentally friendly because their products or raw materials are environmentally friendly, meaning that their final products, raw materials, and business processes do not release hazardous emissions to the environment.

4.2.3 The interaction between SMEs and environment

This section summarizes the key elements on how the owner-managers understand the interaction between their companies and environment: how the company affects the environment and how the environment affects the company. It is derived from the wide definition of a stakeholder. This section includes only what the owner-managers are aware of.

The impact of the companies on environment

The managers of Firm A, Firm E, Firm F and Firm G consider that their companies do not have any environmental impacts. This is because their products are not hazardous to the environment and materials used in their operations do not cause poisonous emissions to the environment. Also their operation is small-scaled and causes only small amount of waste. They also reason that larger companies within

the industries cause more harm to the environment and that their smaller companies do not cause environmental impacts themselves because they buy certified materials from their suppliers. The firms elsewhere in the supply chain are the ones that affect the environment instead of the owner-managers' small firms. Therefore the industry may affect the environment as a whole but their firms do not, according to the owner-managers.

"We do not produce waste water, not a single drop, we do not have a chemical process so all we have is the plastic that is processed in our machines. -- The raw material that we use, the colors that we use are already emission-free and so our final products do not cause emissions"

- The owner-manager of Firm F

The managers of Firm B, Firm C, Firm D, Firm H and Firm I are aware that their operations have some environmental impacts. They state that the waste produced and gasoline used in transportation are things that affect environment. Manager of Firm H is aware that their product is based on environmentally unsustainable material with a large carbon footprint but the long life cycle and low costs to use the product are the benefits of the product. Manager of Firm I states that their greatest impact on environment is the smell caused by burning rubber.

"We need to use car but only a little. -- But meat industry affects the environment. -- and we are classified as a sausage factory so we are part of the meat industry."

-The owner-manager of Firm D

According to the managers, the environmental impacts caused by their operations are what can be observed in the production process such as waste and environmental impacts of raw materials, the environmental impact of the final products, and emissions caused by transportation. The product of the companies is in the focus when the owner-managers discuss their environmental impact, not their entire operation which includes the operation of their plants and offices and the supply chain is ignored by stating that the raw materials are emission free.

The impact of environment on the companies

Every owner-manager said that environment does not affect the operation of their firms. Two managers stated that environment can have a refreshing effect on employees which can have positive effect on the firm and therefore environment has an indirect positive effect on their firms. The reason for founding Firm B was the worry of climate change but environment does not affect the firm, according to the owner-manager.

"Well it [the environment] does affect our firm at all other than sometimes it tries to come inside from the window and we try to keep the windows closed. So if we consider environment as the natural environment, we do not have anything to do with it."

-The owner-manager of Firm A

Some owner-managers stated that environment affect the operation so that they take environment into consideration when making investments or other decisions.

"Well [environment affects us so that] if some option is more environmentally friendly than other option, and the price difference is not very large, we choose the more environmentally friendly option with higher price so in that way it affects that we favor [more environmentally friendly option] even if it costs more"

-The owner-manager of Firm E

So to some managers environmental sustainability may be a question of conscience but environment itself is not considered to have a direct impact on the operation of firms. It is a place outside the company where the employees can travel to rest. This means that the managers do not consider that they are operating within the environment and they do not consider having a direct link to the environment. The owner-managers consider environment separate from business, their business is not anyhow dependent on the environment and environment is not essential for the business operations directly or indirectly. If it is, it is not acknowledged and the managers are not aware of it in the daily

operations which practically means that environment has no stake in their operations.

4.3 Environment related information flow

4.3.1 Sources of environment related information

Environment related information includes any information and knowledge that can be received in daily life and business and describes any aspect of the living environment of humans. It can vary from news to observing the environment and measuring the environmental performance of the company. Table 8 demonstrates the sources of environment related information mentioned by the interviewed owner-managers.

Table 8. The owner-managers' sources of environment related information

Comprehension	Firm	A	B	C	D	E	F	G	H	I
I		x	x	x	x	x	x			x
II						x	x			x
III				x				x		x
IV					x					
V									x	
VI			x		x					

I) Media II) business organizations and associations III) other companies IV) officials V) carbon footprint calculation VI) general knowledge and education

Media that transfer information about environment to the owner-managers include internet, newspapers, e-mail, TV and other broadcasts. Business organizations and associations provide information about materials, recycling and sustainability in general. Other companies that require and provide environment related information for SMEs are their suppliers, customers and bigger companies within their industries. One owner-manager receives information about how to comply with environmental regulation in their operation from governmental official. One owner-manager has calculated the carbon footprint of their product and states that the process provided information about environment. Two owner-managers stated that knowing about environment is part of general knowledge and education.

None of the owner-managers has consciously acquired information about environment straight from the environment itself by observing it, one firm has calculated its carbon footprint which provides some information about the damage caused by the production of their product. Many firms need to comply with environmental regulation. However, only one owner-manager has received information from officials on how to comply with the regulation. Many owner-managers receive their environment related information like normal consumers and in addition they receive some industry-specific environment related information from their business partners and organizations.

4.3.2 Effect of the information

The actions that SMEs have taken based on the environmental information are statement acquisition, as can be seen in Table 9, and provision that REACH and also other company specific environmental programs require. This create awareness within the supply chain but does not lead to improvements in environmental sustainability.

"And very soon it transitions to self protection with these statements. ROS and REACH are that same thing in which the basic idea of protecting the environment

has become a very distant principle. It has transitioned to avoidance of [moral and criminal] responsibility."

-The owner-manager of Firm G

Table 9. The effect of environment related information in SMEs

Comprehension Firm	A	B	C	D	E	F	G	H	I
I	X		X		X		X		X
II	X	X	X	X	X	X	X	X	X

I) providing and acquiring statements II) no concrete and sustaining changes in operation caused by environment related information

Firm E had developed less environment-harming product, a cardboard made from used napkins, because they thought it would have demand based on what happened on markets. However, the product was not viable because its price rose so high that it did not meet the demand. The production was stopped and so the change was not permanent or further developed.

The owner-managers have an awareness about environmental issues and they receive industry specific information about environmental sustainability. However, the awareness does not convert into concrete actions to improve their business to less environment damaging direction as Table 6 illustrates.

4.4 Stakeholders

4.4.1 Stakeholders of SMEs based on the wide definition

This section presents what kinds of entities the owner-managers are aware of having an impact on their companies or whom their SMEs can have an impact on and what kinds of entities they need to take into consideration when they are

making decisions within the company. Table 10 shows that customers and officials are most often seen as entities that affect the SMEs.

Table 10. The acknowledged entities that affect the operation of SMEs

Comprehension Firm	A	B	C	D	E	F	G	H	I
I	x	x	x	x	x	x	x	x	
II		x			x	x	x	x	
III	x		x		x	x			
IV	x	x		x					
V	x	x		x	x	x	x		x
VI		x	x	x					
VII		x							
VIII		x	x		x				
IX				x	x				
X					x		x		
XI						x			x
XII			x						
XIII						x			

I) customers II) suppliers III) partners IV) employees V) officials VI) owners VII) environmental organizations VIII) big companies within the industry IX) subcontractor X) financiers XI) housing association XII) competitors XIII) business organizations and associations

"A company can function only if its owners have the will to operate it, it can succeed only if it has good employees and the company does not exist if it does not have any customers. Those are three the most important [stakeholders] and they affect how the firm operates."

-The owner-manager of Firm B

Table 11. The acknowledged entities that can be affected by the firm's operation

Comprehension Firm	A	B	C	D	E	F	G	H	I
I	x	x	x				x		x
II		x		x			x	x	x
III	x								
IV	x	x		x					x
V		x		x					
VI		x							
VII							x		
VIII									x

I) customers II) suppliers III) partners IV) employees V) owners VI) environmental organizations VII) financiers VIII) neighbors

Table 11 shows that the owner-managers estimate that their SMEs have overall less or no effect on stakeholders compared to the effect that the stakeholders have on their companies, no owner-manager mentioned new entity that they could affect compared to the mentioned entities that can affect their firm. Two owner-managers were unable to identify any entity that could be affected by the operation

of their companies in any way. The SMEs' managers considered that they mostly have impact on their customers, suppliers and employees.

"We can definitely not affect how the officials operate because we are so small company that it is a one-way road but of course we try to affect the buying habits of our customers and when we cooperate with our partners we affect each other in both directions."

-The owner-manager of Firm A

The managers defined the impact as economic or forcing power over someone. Cooperation, information sharing and other ways of having interaction and so affect others were not considered by the owner-managers.

"The officials affect by implementing regulation which is much more effective and stricter way to affect."

-The owner-manager of Firm B

"[No one] can affect [our firm] except by buying our products, that is the way."

-The owner-manager of Firm C

The mentioned entities are the entities that the managers are aware of. Other entities may or may not have effect on the companies and also the companies can also have effects that they are not aware of. If those entities exist, they are currently irrelevant in the operation because the managers are not aware of them.

4.4.2 Environmental stakeholders of SMEs

Table 12 summarizes the owner-managers' comprehension about the entities that have environment related interaction with their companies. They are called environmental stakeholders in this thesis but to determine whether they actually have an environmental stake in the companies or are purely proxies for environment is excluded from this study.

Table 12. The environmental stakeholders of the SMEs

Comprehension Firm	A	B	C	D	E	F	G	H	I
I	x	x		x			x		
II	x				x				
III	x		x	x	x			x	x
IV	x								
V		x							
VI				x	x			x	x
VII						x			
VIII					x				

I) officials II) suppliers III) customers IV) housing association V) world's superpowers VI) employees VII) business organization / association VIII) Financiers

Regulation enforced by officials has forced some of the SMEs to consider how they operate. The owner-managers of Firm B and Firm D could not operate without cooperating with supervising officials. The owner-managers of Firm G and Firm A consider regulation as the only mean to improve the environmental performance of their companies.

"If someone wants to make our firm to pay attention to the environment, it is through legislation because we are not operating in the environmental business specifically."

-The owner-manager of Firm A

The interviewed owner-managers have environment related interaction more often with customers than with suppliers. Environmental interaction between customers

and suppliers is mainly bureaucratic statement trading to ensure that no one will receive bad publicity or criminal charges.

"Of course customers demand various statements and for example we have to have our raw materials and products inspected so that they are in compliance with REACH and have that certificate."

-The owner-manager of Firm E

The interviewed owner-managers have environment related interaction more often with customers than with suppliers because the suppliers are supposed to mind their own environmental sustainability and the SMEs explored do not have power over their suppliers' environmental performance.

"We cannot now that ourselves because the recipes used [by suppliers] are secret and we do not get all the information about what it [the raw material] contains but they have assured that it does not contain environmentally bad substances so we are dependent on them that it is sort of assured."

-The owner-manager of Firm I

However, the owner-manager of Firm E stated that they consider environmental issues when making investments and if necessary, they will go and check their suppliers' facilities. Firm E has received an environmental loan from their financiers to buy machines that would eliminate the need of hazardous materials in production. The owner-manager of Firm C stated that their customer who distributes the products of Firm C uses the environmental friendliness as a sales argument. Environmental friendliness refers to the fact that the product of Firm C contains some palm oil and is not completely made by refining petroleum.

The owner-manager of Firm A points out the fact that the housing association that facilitates companies that mainly do desk jobs has an impact on how environmentally friendly the operation of the company is in its facilities.

The owner-manager of Firm B states that world politics determine how the environmental performance of whole humanity. And the most important entities in global environmental politics are India, China, and USA and what those two countries decide to do affects how everyone else act.

Several of the SMEs state that they are internally trying to improve their operations so that it can have a direct or indirect positive effect on their environmental performance. This means brainstorming how to utilize waste and how to be more efficient and effective with existing resources. The source for motivation to do this is the potential for economic benefit but efficiency can improve environmental performance.

"We are doing that all the time: making plans with our employee -- and constantly developing our system in daily or weekly meetings what we have and that definitely has an impact on environment in long term."

-The owner-manager of Firm D

The owner-manager of Firm F has affected the whole industry by being active in the business association of the industry and helping to implement rules that prohibited the use of cadmium within the industry and so decreased the environmental risk that the industry constituted.

Overall, the owner-managers consider themselves too powerless to actually achieve environmental sustainability. The environment related interaction with external stakeholders is ensuring that the company will avoid bad publicity and criminal charges. However, the interaction with internal stakeholders, the employees, is more constructive and aims to both improve the efficiency of companies and therefore decrease their environmental unsustainability, even if it was not the main purpose.

4.4.3 The environmental relationships of SMEs and their stakeholders

Table 13 is a three-dimensional summary of the presented tables. It demonstrates that the stakeholders of SMEs have different roles. Every firm is unique but the main patterns are visible.

Table 13. SMEs' power relationships with their stakeholders with environmental aspect included

Firm	A	B	C	D	E	F	G	H	I
customers	2 3 4	3 4	1 2 3 4	2 3	2 3	3	3 4	2 3	2 4
suppliers	2	3 4	1	3 4	2 3	3	1 3 4	3 4	1 4
partners	3 4		3		3	3	1		
employees	3 4	3 4		2 3 4	2			2	2 4
officials	2 3	2 3		1 2 3	3	3	2 3		3
owners		3 4	3	3 4					
NPOs		3 4							
large companies		3	3		3		3 4		1
financiers					2		3		
housing association	2					3			3
competitors			3						
business organizations					1	1 2 3			1
super powers		2							
media	1	1	1	1	1	1			1
education		1		1					
neighbors									4

1) source of environment related information 2) environment related interaction partner 3) entity that can affect the SME 4) entity that can be affected by the SME

Some stakeholders only provide environment related information and act as informants. The informants are media, education and business organizations and associations. Some stakeholders act as influencers that mainly affect the companies' operations such as officials and larger companies. Some entities are cooperative partners with whom the influence is both-sided, customers are often cooperative partners based on Table 13. Table 13 also demonstrates that every SME with their stakeholder interaction is a unique case and one entity can have several different roles as a stakeholder. Table 13 illustrates that there are various mismatches that increases understanding on what makes it difficult for SMEs to become environmentally sustainable: the sources of environment related information are not often involved in environment related interaction and cooperative partners are not often environment related interaction partners. In addition, as mentioned in 4.3.2, the environment related cooperation is usually statement trading required by law or companies that want to avoid moral responsibility.

Table 13 reveals that the combination in which the SME has environmental cooperation with a stakeholder and can also affect the stakeholder is rare. It exists among SMEs' interaction with customers and employees. This means that the SMEs do not consider that they have any influence in their other stakeholders in many issues, such as environmental issues.

"No we do not actually have [environmental effects] because our process is such as we do not load the environment ourselves other than in transportation of the goods.-- The suppliers change their processes when they know that [the regulation] changes and that is how they make their products environmentally friendly.-- After all, we operate on the side of paper industry so these things are handled in the larger circles and we just follow from small distance.-- So our suppliers are these larger firms and we trust that they have everything in order and we do not inspect them more closely."

-The owner-manager of Firm E

"World politics play a big role. The most important players there are USA, India, and China. Their decisions can solve many things because all other countries will follow what they do."

- The owner-manager of Firm B

"Our suppliers have taken care of that all we buy is environmentally friendly in a sense and that is sufficient for us."

-The owner-manager of Firm F

This means that SMEs use certified materials and by also complying with regulation such as REACH they consider that their operation is environmentally friendly even though the industry harms the environment. The environmental impacts of the SMEs' products are outsourced or externalized and distributed to many entities and as long as the SMEs comply with law and stay small, officials and the public are not especially interested in their environmental impact. The manager of Firm B notes that everyone is relatively powerless and world politics, that are significantly affected by the decisions made by USA and China, will affect everyone globally.

Some managers also state that environmental issues of their industries can be solved in the future and therefore their operation is not harmful for the environment. Therefore the environmental responsibility is also sometimes outsourced or externalized.

"If someone started to collect plastic to use as a base for a road, I would start providing them plastic if it was not too difficult -- what is sad and gives plastic bad value overall is the plastic that ends up in the ocean -- and I say it is sad and it is sad as long as someone finds a mean to fix that problem."

-The owner-manager of Firm F

Next section will discuss how these findings can be used to determine the voice of nature in SMEs' operation based on existing theories.

5 DISCUSSION

In this section the voice, the understanding, of the owner-managers is added to the theoretical discussion by addressing the research questions derived from the existing literature.

5.1 How is the voice of nature present in the operation of SMEs?

Raar (2015) found that the owner-managers of SMEs are not generally aware of the problems and concrete effects that environmental deterioration causes. This study shows that the environmental information does not spread directly from the environment to the SMEs. Instead, it comes elsewhere from the business environment and does not cause concrete and acknowledged changes in the operations of SMEs. There is no cooperation with any stakeholder to make the companies green or even less unsustainable. In fact, the cooperation is statement trading which is meant to cover the companies from responsibility. The owner-managers have not taken active role to make their companies green and the SMEs are continuing business as usual. These are illustrated in Figure 4. This is consistent with Uhlaner et al. (2012) and Deltchet-Cochet et al. (2015) who suggest that owner-managers' ignorance and continuing business as usual are causal.

Against Baden et al. (2011) media had no effect on the SMEs. None of the owner-managers considered that customers would have driven their environmental sustainability, which is in contradiction with the findings of Kusyk and Lozano (2007). Regulation is forcing but there is no actual environmental information or support for SMEs from the officials based on the study which does not help the SMEs' green reform as has been also found by Baden et al. (2011).

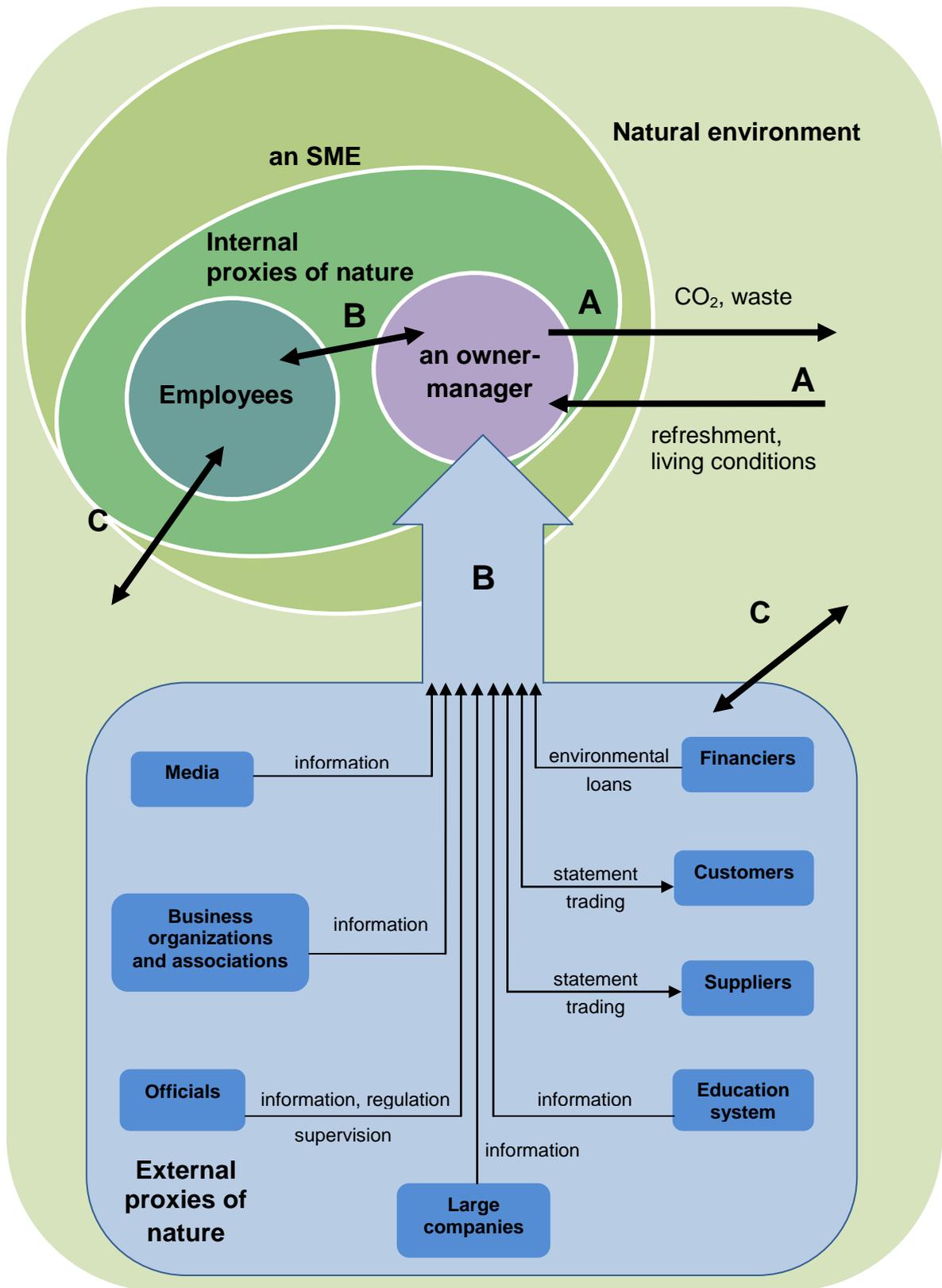


Figure 4. The voice of nature in SMEs' operation.

A: the relationship of the owner-manager and environment **B:** the relationship of owner-manager and stakeholders **C:** the relationship of stakeholders and environment

This study explored the interface of the owner-managers - environment and environmental stakeholders - the owner-managers. The interface of environmental stakeholders and environment was not explored. However, the Figure 4 shows that the entities that have environment related connections with SMEs are not direct proxies for environment: they have other agendas as well. The chain of proxies between SMEs and environment causes the actual voice of the nature to distort and mostly disappear before it reaches SMEs and can affect their operation which is also suggested by Haigh and Griffiths (2009).

According to Hörisch et al. (2014), Wysocki (2012) and Philips and Reichart (2000) humans should act as proxies between corporations and environment. However, the companies explored in this study had only other organizations as proxies for environment and the organizations can have several other agendas that they drive instead of merely driving environmental sustainability.

Wysocki (2012) states that nature does not have the acknowledged role of the facilitator of human life in human action. The findings are consistent with this as the owner-managers consider humans and business operations separate from environment. None of the explored SMEs even measured or observed the environmental conditions directly or their impact on the environment comprehensively. This causes the owner-managers to be unaware of their impacts and being unaware of own impact causes the firm to be unaware of its stakeholders (Sen & Cowley 2013). This also means that even if the nature has a voice, it can be unheard in the business operation if the management does not assess the impacts of a company comprehensively and profoundly.

Based on the model of Mitchell et al. (1997) it is possible to assess and classify the discovered entities presented in Figure 4 that have environment related interaction with SMEs. Media and education system do not have any of the stakeholder's attributes defined by Mitchell et al. (1997) and therefore they are nonstakeholders in environmental issues. Business organizations and associations and suppliers have legitimacy and can have urgency because they provide information about how to comply with new regulation which makes them a

dependent stakeholder in environmental issues (Mitchell et al. 1997). Financiers, customers and officials have power, urgency and legitimacy which makes them definitive stakeholders in environmental issues (Mitchell et al. 1997). Large companies have power which makes them both dormant and latent stakeholders of SMEs in environmental issues based on the model of Mitchell et al. (1997).

When considering the definition of environmental stakeholder stated by Onkila (2011), it seems that none of the listed entities has an environmental stake in the SMEs since the interaction is merely information distribution and statement trading based on the findings and the focus is not in protecting the nature or becoming environmentally sustainable. However, this would require future study to be confirmed. Media and education system are nonstakeholders of SMEs in environmental issues. However, they affect people and education has a long term effect in the whole society including the people who will become the future owner-managers of SMEs. In that sense, they can be considered as stakewatchers of environment. They have already shaped how present owner-managers perceive the environment as this study shows. This is in compliance with Fassin (2009): not all who represent a stakeholder are necessarily stakeholders of the company, they are stakewatchers between stakeholders and companies providing voice for the stakeholder which in this case is the nature.

As a conclusion and answer to the research question: nature's voice in SMEs is indirect and distorted by many proxies with their own differing priorities. The voice of nature does not conduct to the business operation but it is mediated by several proxies. The nature itself has not forced the owner-managers to take it into consideration in their business operations. This may arise question of what can be interpreted as a voice of nature if it is observed. We already know that the living environment of humans is being destroyed by ourselves so the voice has been observed, perhaps not completely but sufficiently to take it seriously. The question is, why does the unsustainable human operation continue?

5.2 What is the status of environment in the operation of SMEs based on stakeholder theory and empirical evidence?

None of the SMEs in this study had a stakeholder orientation that has been defined by Ferrel (2010). This and other findings, such as management's focus in the product, demonstrate the lack of strategic thinking in SMEs which was also found by Revell et al. (2010). The owner-managers are aware of many of their stakeholders but the product is in the focus and the owner-managers reflect everything based on their product which may make them ignore other aspects of their operation.

Nulkar (2014) found that SMEs consider their impact on environment negligent. Some scholars have found that SMEs do not know their impact on environment (Seidel et al. 2009; Oxborrow & Brindley 2013). The results of this study are consistent with these studies. The owner-managers do not know how their operation affect the environment. They know their products and how toxic or non-toxic their raw materials and final products are but otherwise even the small emissions are not considered to have a deteriorating effect on the environment. If supply chain as a whole is polluting, it is on the responsibility of the other actors within the supply chain.

Haigh and Griffiths (2009) argue that nature's proximity makes it the primary stakeholder of companies. The proximity is not acknowledged by the SMEs and the managers are not aware of it. Therefore the proximity of environment does not affect the operation of SMEs.

When using the stakeholder models of Mitchell (1997) and Fassin (2009) it can be concluded that none of the SMEs in this study considered that environment would have a stakeholder status, which means that the environment is a nonstakeholder in the operation of the SMEs. Even when using the broadest possible definition for stakeholder, the "can or can be affect" principle (Freeman 1984, cited by Gibson 2012), the environment is not a stakeholder because the owner-managers do not consider that they significantly affect, can affect or are affected or can be affected

by the environment and therefore the environment does not have stakeholder-like status in the operation of SMEs; the potential interests of environment are not considered or addressed in the business operation.

By definition a proxy in stakeholder theory means the intermediary or representative for a real stakeholder and its voice (Fassin 2009). The proxies discovered in this study do not make the SMEs to really consider their environmental impact and change their behavior. In other words, the proxies are not real proxies but insignificant parts of a larger chain of proxies.

Waddock (2011) presented the idea of Gaia and that everyone is a stakeholder of Gaia. This thinking was not observed among the owner-managers. In the owner-managers' opinion environment exists for humans and their dispose. This might, however, change if environment becomes an urgent stakeholder so that its ability to facilitate life significantly decreases and humans are forced to take the environment in a stakeholder-like position.

It can be concluded that environment is not an acknowledged stakeholder or does not have a stakeholder-like status in SME operation. Environment can be considered as a latent primary stakeholder based on the model of Mitchell et al. (1997) which contradicts with Onkila (2011), Waddock (2011), Bazin (2009), Gibson (2012) and Philips and Reichart (2000). However, it can be argued that defining the precise stakeholder status of environment is not relevant. What affects the environmental sustainability of SMEs' operation is how the voice of the nature conducts to the business operation and affects the choices and decisions made in the business. Vague and distorted voice does not affect anyone, direct and strong voice can have an effect. What allows the conduction to occur within the SMEs is awareness of environmental issues, awareness of how the company affects the environment and awareness of the significance of environment as a living environment of our species.

5.3 Why is it problematic for SMEs to become green?

The findings support what was found by Seidel et al (2009), Nulkar (2014) and Oxborrow and Brindley (2013): SMEs do not have the capabilities to become green. If an SME operates in an unsustainable way, the company does not have the knowledge or resources to make the firm deliver same value without damaging environment and it is not even a business goal in those companies. In some cases the markets do not need or specifically appreciate environmental sustainability efforts which is consistent with the results of both Revell and Blackburn (2007) and Nagypál (2014).

If environmental sustainability was a goal in an SME, it would be difficult to reach if its meaning is unclear and it has no priority or visible effect in the business and there are no easy or even available means to reach the goal. The unawareness and lack of nature's direct voice contribute to the current situation in which the companies, that act in an unsustainable way, carry on business as usual or if they implement environmental actions it is because the law requires to do so or owner-manager's conscious demands actions so that the company's image would improve.

SMEs are unique and therefore it is challenging to generalize ES theories that would concern every SME. Some of the SMEs are small and pollute without power to change the circumstances but some SMEs have a business model that is based on positive contribution to ES. In this study, there was one owner-manager who acknowledged that human is dependent on its environment which is being destroyed by greenhouse gases. Even though the company of this manager would be a normal modern factory, its final product would be part of solutions that aim to decrease the amount of fossil fuels used in traffic. The personal values and understanding on the importance of environment of the owner-manager affected the business idea. This is consistent with Revell et al. (2010) and suggests that owner-managers who are direct proxies of environment in the SMEs have the ability to make SMEs green by founding companies that have a green business agenda. None of the explored SMEs in which the owner-manager does not

recognize the environment necessary for human life has a business agenda that aims to contribute to reaching environmentally sustainable development of the society.

The owner-manager is in the core of the idea of green revolution among SMEs, even though it is dependent on several other factors as well. If the owner-manager is a direct proxy for environment, the voice of nature would also be in the core of SME's decision making. If SMEs had stakeholders, that would also be direct proxies for environment and have power in SMEs, the development of SMEs' ES could happen. For example if officials would enforce regulation that has only one agenda, environmental sustainability, it could help SMEs to improve their environmental performance, eliminate environmentally unsustainable SMEs and create demand for environmentally sustainable SMEs.

The explored owner-managers make their decisions like consumers and they seem to have the same comprehension about environmental sustainability as average consumers. The green revolution in SMEs' operation starts from the basics: by educating the importance of environment and what does it mean to be environmentally sustainable.

It seems that the SMEs cannot become green unless they gain capabilities to separate from their unsustainable operations, raw materials and products and learn how to deliver their value in novel, sustainable ways, in other words, taking the focus off of the product and think strategically. It may be easier to found a green SME than make existing environmentally unsustainable SMEs green.

5.4 Limitations of the study and suggestions for future research

This study does not provide results that can be generalized to all SMEs because the sample size is small and SMEs are very unique. The sample consists of Finnish SMEs that are operating on business-to-business sector which can affect the results. The owner-managers of SMEs that operate in different sectors may

have differing views. In addition, none of the companies in this study is operating in the primary sector of the economy. Therefore this study helps to understand what kind of a standing nature has in these companies: Finnish SMEs that operate in business-to-business basis. Therefore future research on the voice of nature could address several limitations of this thesis and explore:

1. the voice of nature in SMEs that operate closer to the nature: in the primary sector of the economy.
2. the voice of nature in SMEs that operate on business-to-customer basis
3. the proxies of nature, especially the relationship of the proxies and nature and how the proxies present the voice to relevant entities
4. holistic cases in which all the arrows, A, B and C in figure 1 are explored thoroughly in the case companies and their networks to gain better understanding on the voice of nature.

6 CONCLUSION

This thesis explores how environment is present in the operation of Finnish SMEs and aims to gain understanding in why environmental sustainability is a problem in SMEs. Because of the nature of the research problem, the qualitative research method was chosen and nine owner-managers of Finnish SMEs were interviewed using semi-structured interviews. The results provide understanding on the environmental issues at the interface of the owner-manager and environment and on the other hand at the interface of the owner-manager and the proxies of environment and how it affects the environmental sustainability of the SMEs. This enables the determination of the stakeholder status of environment in the operation of SMEs and how the proxies of environment, the environmental stakeholders of SMEs, represent the environment in the operation of SMEs.

The results demonstrate how separate the managerial thinking is from the environment, even though humans, including the owner-managers, are not separate from the environment. SMEs are unique but their common features are lack of power, lack of resources and conception of their operation as independent from the environment. Environment is not an acknowledged stakeholder of the SMEs but it does not exclude the potential of it becoming the primary stakeholder of the firms. Environment may not have a stake in companies but companies may be forced to take the environment in a stakeholder-like position in their decision-making.

Humans as a part of the fauna on the Earth and the unsustainable consumption of natural resources and pollution caused by human activities, significant part of it being caused by the operation of SMEs, is an interdisciplinary research object and requires more study to support the decision making of regulators, consumers and entrepreneurs. The interface of environmental stakeholders and environment and the chain of proxies were not explored. It would, however, provide insights in where the voice of nature loses on its way to the SMEs and can be explored in future studies.

The owner-managers are in key position to amplify the voice of nature in business and therefore providing information and awareness for the future owner-managers in the form of education is a long-term decision. To make the voice of environment's proxies stronger requires that the proxies, such as officials and media, gain more direct information about the environment and the effects of human activities. New technologies are needed to support the environmental sustainability, the state should consider its role as a supporter of human's quality of life. It is preferable that the human proxies provide sufficiently strong voice of nature in human operations. It is more preferable than the voice of nature caused by the physical power of nature triggered by the destruction of the capabilities of the environment to support life as we know it.

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APPENDICES

Appendix 1. The interview script

Appendix 2. The original transcribes of the used quotes

Appendix 1

The interview script

1. Taustatiedot

Yrityksen liikeidea ja toimiala

Koko

Johtajan kokemus

2. Ympäristö ja kestävä kehitys

Mitä tarkoittavat?

Minkälaista on ihmisen ja yrityksen toiminta kun se on ympäristöllisesti kestävää?

Ympäristön ja kestävä kehityksen merkitys johtajalle

Minkälaiset asiat yritystoiminnassa ovat saaneet kiinnittämään huomiota ympäristöön ja kestävään kehitykseen?

Millä tavoilla ympäristöön ja kestävään kehitykseen liittyvät asiat ovat olleet esillä toiminnassanne?

3. Ympäristöön ja kestävään kehitykseen liittyvä tieto

Onko hankittu? Miten?

Tuleeko sitä jostain? Mistä?

Kuinka ja mistä hankitte tai teille tulee tietoa ympäristön tilasta?

Yrityksen ympäristövaikutuksiin liittyvän tiedon hankinta ja saaminen

Hankitaanko? Saadaanko? Tuleeko pyytämättä? Mistä? Minkälaista? Keneltä? Mihin liittyen?

Onko saatu tieto johtanut toimenpiteisiin yrityksessä?

4. Sidosryhmät

Onko olemassa yrityksen sisäisiä tai ulkoisia tahoja joilla on tai voi olla vaikutus yritykseen? vaikutus yrityksen etuun, toimintaan, päätöksentekoon?

Onko tai voiko yrityksellä olla vaikutus jonkin yrityksen sisäiseen tai ulkoiseen tahoon? tahon etuun, toimintaan, päätöksentekoon?

Onko ollut ulkoisten tai sisäisten tahojen kanssa ympäristöön liittyvää toimintaa, vaatimuksia, yhteistyötä? Mitä tahansa toimintaa jolla olisi ollut vaikutus ympäristöön?

Vaikuttaako luonto ja ympäristö yritykseenne? Miten?

Vaikuttaako yrityksenne luontoon ja ympäristöön? Miten?

Appendix 2

The original transcribes of the used quotes

p. 61 "Ei merkitse johtajana tässä mitään. Ihmisenähän se merkitsee tietysti." -
The owner-manager of Firm A

p.62 "No kyllähän se tietysti pitäs vähän säästää luontoa että kestävä kehitys ilman muuta kuuluu siihen että mahdollisimman vähän käyttää esimerkiksi autoo tai muita luonnonvaroja mitä niinku on. Kyllähän se kierrätys on se tän päivän sana että voitais käyttää materiaalia uusiks uudestaan että." - The owner-manager of Firm I

p. 62-63 "Kun bisnesideoita miettii niinku sitä monasti miettii kun on kuitenkin pienehkö yritys ja sitte haluais kasvaa nii sehän on yks polku jota pitkin voi lähteä miettimään että jos haluaa ylipäänsä niinku millä tavalla nyt sitte jotain yritystoimintaa vois kehittää nii pitäis miettiä ehkä sellasia no, pikku asioita ja sitte isompia asioita että mitä ihmiset tarvitsee ja ja sitte ja monasti tulee sitte mieleen niinku terveys ja ympäristö hyvinvointi ja tällasia isoja teemoja ja sit sieltä voi lähteä miettimään sitä bisnesideoita ja tarkentamaan että ympäristö on siinä niinku yks tällanen asia mikä niinku ajatuksen tasolla voi tulla mieleen." - The owner-manager of Firm A

p.65 "Se [ympäristöllinen kestävyys] ei ole mikään erityinen myyntivaltti, eikä sitä kukaan koskaan kysele. -- Ostajille on tärkeää että toimittaja ei jää kiinni siitä että se laittaa myrkkytynnyreitä maan alle -- Meillä on jatkuvasti tämmöstä muodollista toimintaa joka liittyy -- REACHiin -- Miten se tapahtuu on niin että me lähettelemme kaavakkeita ympäriinsä joissa toimittajat vakuuttavat että ne ovat sen direktiivienmukaisia ja me uskomme siihen. Meillä ei ole pienintäkään mahdollisuutta todentaa sitä, onko näin, mutta me lähettelemme niitä papereita joissa me pyydämme että toimittajat näin lupaa." - The owner-manager of Firm G

p.65 "Me ollaan kuitenkin tässä energian maailmassa pieni yritys. Että meillä ei tuu olemaan sellasta minkäänlaista semmosta energiamarkkinoitten muuttajan roolia. Me ollaan liian pieni yritys siinä. Että me toimitaan tässä modernissa muuttuvassa

energiataloudessa tavallaan yhtenä toimijana ja paljolti hyväksytään ne annetut puitteet. Me ollaan liian pieni yritys muuttamaan energialainsäädäntöä ja me toimitaan niillä pelisäännöillä jotka meille annetaan." - The owner-manager of Firm B

p. 65-66 "No ei kyl on täs tietysti omassa toiminnassa on aina mietitty että mitä vois tehdä tolle hukkakumille että ollaan tosi kauan sitä mietitty et sille vois jotain käyttöä keksii mut ei oo vielä oikee... -- koska ensinnäki toi maksaa aika paljon toi raakakumi tänä päivänä ku se tehdään ne on aika erikoisia ja nii sit siin on aika hankala se ku sitä tavallaa kannetaan roskikseen sitä kallista raaka-ainetta [vulkanoitua raakakumia] nii siitä vois yrittää miettiä jotain mutta ei oo vielä keksitty oikee eikä nää isotkaa firmat oo vielä oikee keksiny." - The owner-manager of Firm I

p. 67 "Ku meil on se että meil ei oo jäteväettä, meil ei tuu tippakaan jäteväettä, meil ei oo mitää sellasta kemiallista prosessia et ainoo mitä meil on se että koneissa tehdään muovitavaraa -- raaka-aineet mitä me käytetään ne väriaineet mitä me käytetään on jo tähän mennessä kaikki ja mistää ei tuu mitää saastutusta ja meidän valmiit tuotteet ei niinku sinänsä sillai saastuta." - The owner-manager of Firm F

p. 67 "Autolla joudutaan ajamaan ja mutta niitäkin vähäsen. -- Mutta kyllähän niinku lihateollisuus vaikuttaa luontoon -- mutta tavallaan meidäthän luokitellaan me ollaan niinku makkaratehdas ollaan osa sitä niin." - The owner-manager of Firm D

p. 68 "No ei sillä [ympäristöllä] yritykseen oo mitää vaikutusta muuten ku mitä se tuolta ikkunasta pyrkii sisään.. pyritään pitämään ikkunat kiinni. Että ei ole toistaseksi siis tämmönen jos ajatellaan ympäristöllä tämmöstä niinku luontoa niin ei ei olla sen kanssa nyt oikeestaan tekemisissä." - The owner-manager of Firm A

p. 68 "No [ympäristö vaikuttaa meihin] kyllä sillee että jos joku asia on niinku ympäristöystävällisempi ku toinen ja jos se hintaero ei oo hirveen suuri niin otetaan se ympäristöystävällisempi vaihtoehto vähän kovemmallalla hinnalla että

siinä mielessä vaikuttaa että suositaan vaikka maksaisi vähän enemmän." - The owner-manager of Firm E

p.70 "Ja hyvin nopeasti se muuttuu semmoiseksi itsensä suojaamiseksi tämmöisten todistusten kautta. ROS ja REACH on ihan sitä samaa että periaatteessa ympäristönsuojelu on muuttunut siellä aika kaukaiseksi tavoitteeksi. Se on lähinnä sen välttäminen että saa sen [moraalisen ja rikosoikeudellisen] vastuun itseltä pois." - The owner-manager of Firm G

p.73 "Yritys pystyy pyörimään vaan jos omistajilla on tahtotila pyörittää sitä, yritys menestyy vaan jos sillä on hyvä henkilökunta ja yritys ei oo olemassa jos sillä ei oo asiakkaita. Ne on ne kolme tärkeintä ja ne kaikki vaikuttaa niinku siihen että miten yritys toimii." - The owner-manager of Firm B

p.74 "No viranomaisten toimintaan me ei varmasti voida vaikuttaa, ollaan sen verran pieni yritys että se on yksisuuntasta se liikenne mutta muutenhan tietysti nii pyritään vaikuttamaan asiakkaiden ostokäyttäytymiseen ja yhteistyötä sitte ku tehdään nii vaikutetaan puolin ja toisin yhteistyökumppaneiden toimintaan." - The owner-manager of Firm A

p.74 "Viranomaiset vaikuttaa lainsäädännön kautta joka on paljon tehokkaampi ja paljon tiukempi tapa vaikuttaa." - The owner-manager of Firm B

p.74 "Ei juuri voi vaikuttaa [yritykseen] muuten ku tietysti ostamalla meidän tuotteita ja sitä kautta." - The owner-manager of Firm C

p.75 "Niin että jos joku nyt haluaa kiinnittää firman huomion ympäristöön niin se nyt on lähinnä tullu sieltä [lainsäädännön] kautta että kun me ei me ei tuota varsinaisesti ympäristöbisneksessä olla niin ei ole muuta." - The owner-manager of Firm A

p.76 "No tietysti asiakkaat -- vaatii hyvinkin paljon kaikkia näitä todistuksia ja ja.. esimerkiks -- pitää olla tää REACH et eurooppalainen mikä kemikaali eli meil on nii eli et ne tuotteet et ne raaka-aineet pitää olla niin tutkittu et siin on se niin sanottu REACH todistus et ei oo mitää." - The owner-manager of firm E

p.76 "Mehän ei sitä periaatteessa itse tiedetä koska näähän on nää reseptit mitä ne [toimittajat] käyttää nii ne on salaisii ne ei anna meille me ei saada tietää mitä se [raaka-aine] sisältää ihan tarkkaan mutta he on vakuuttanu ettei siin oo niitä aineita mitä näissä ympäristön kannalta huonoja aineita nii et me ollaa tavallaa heidän varassaan et se on niinku vakuutettu." - The owner-manager of Firm I

p.77 "No sitä me tehään täs koko ajan vähän punotaan niit juonii sillee tota työntekijän kanssa -- sen kanssa kaikkee siis no koko ajan tätä kehitetään tätä systeemiä mikä täs on päivittäin tai viikottaisii palavereita mitä on ja pitkällä aikavälillä vaikuttaa sit ympäristöönkin varmasti." - The owner-manager of Firm D

p.79 "Ei ei oikeestaan oo [ympäristövaikutuksia] koska meil on toi prosessi kyl semmonen että me ei pahemmin kuormiteta mitään niinku itse muuta ku tavaraa ku sitä täytyy liikuttaa onneks. -- Toimittajat muuttaa ku ne tietää et on tulossa muutoksia [lainsäädäntöön] nii ne muuttaa ne ympäristöystävälliseksi. -- Me ollaan kuitenkin niinku tää paperiteollisuuden ja näiden kyljessä niin nää asiat hoituu niinku noissa isommissa et me päästään vähän niinku tulee tässä vieressä mukana. -- Et tota joo ei edellee meidän kaikki nää raaka-ainetoimittajat on näit isoja valmistajii nii kyl me niinku luotetaan et niil on kaikki kunnossa et ei me lähetä niit sen kummemmin tonkimaan." - The owner-manager of Firm E

p.80 "Maailman politiikka näyttelee isoa roolia. Siellä on tärkeimmät pelurit eli USA, Intia ja Kiina ja niiden päätöksillä aika paljon voidaan ratkasta mitä tulee tapahtumaan koska kaikki muut maat seuraa mitä nää tekee." - The owner-manager of Firm B

p.80 "Mutta kyllä nää meidän toimittajat on pitäny huolen siitä että pysytään niinku tavallaan että kaikki se mitä me ostetaan on tavallaa niinku ympäristöystävällisiä ja sillä tavalla raaka-ainetta ja se riittää meille." - The owner-manager of Firm F

p.80 "Että tota mutta ku joku rupeis keräämään muovia maantienpohjakäyttöön nii kyllä mäki rupeisin jos se ei oo vaikee homma sinne toimittaa muovia nii kyllä mä rupeisin heti toimittamaan sinne -- se mikä on surullista kaiken kaikkiaan ja muoville huonoa tämmöstä arvoa niin on tää mereen joutuvat muovit -- ja mä sanon että se on surullinen koska niin kauan se on surullinen kunnes keksitään

konsti miten se hoidetaan pois päiväjärjestyksestä." - The owner-manager of Firm
F