

KAUNAS UNIVERSITY OF TECHNOLOGY SCHOOL OF ECONOMICS AND BUSINESS

Arta Grase

SUSTAINABLE CONSUMPTION BEHAVIOUR SPILL-OVER FROM WORKPLACE TO PRIVATE LIFE

Final Master Thesis

Supervisor

Assoc. prof. dr. Agnė Gadeikienė

KAUNAS UNIVERSITY OF TECHNOLOGY SCHOOL OF ECONOMICS AND BUSINESS

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Supervisor
Assoc. prof. dr. Agnė Gadeikienė
May 10, 2017
Reviewer
Assoc. prof. dr. Žaneta Piligrimienė
May 10, 2017
Duoiset made by
Project made by
Arta Grase, VMRen-5
May 10, 2017



KAUNAS UNIVERSITY OF TECHNOLOGY

School of Economics and Business
Arta Grase
Marketing Management, 621N50007

Sustainable Consumption Behaviour Spill-over from Workplace to Private Life

DECLARATION OF ACADEMIC INTEGRITY

10 May 2017

Kaunas

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SUMMARY

Relevancy of the research: Nowadays the global consumption patterns are so unsustainable that the efficiency gains and technological innovations simply are not going to be enough to recover the damage done by unsustainable consumption. We can significantly see the changes in the environment, ecosystem, biosphere and climate which regression is connected with human activity. The main problems regarding the environment and the human activity are related to the usage of energy, raw materials, waste management and pollution. This highly imply that there is a great conflict between opportunities for economic growth and sustainable consumption. For that reason, the sustainable consumption has emerged as one of the most challenging and in the same vital policy debates which need to be communicated in order to engage the society towards the sustainable consumption behavioural change.

Scientific problem: There are various studies investigating different aspects regarding sustainable consumption: general barriers regarding pro-environmental behaviour, underlining internal and external factors that influence individual's behavioural patterns whereas, sustainable consumption concerning household and workplace consumption behavioural patterns. Throughout these years, spill-over phenomenon has been rising awareness as it would allow to extensively move towards sustainable development. There have been various literatures regarding the positive spill-over, however, most of them have focusing on the spill-over across domains, but only some have investigating the spill-over across social settings. Only one study by Nik Ramli and Naja (2012) offered conceptual paper regarding the sustainable consumption spill-over from workplace to private life, proposing their theoretical framework. Therefore, there is an overall lack of scientific research that is contributed to the holistic evidence on the sustainable consumption behaviour spill-over from workplace to private life.

Consequently, **scientific problem** of the master's thesis is formulated as the following question: how to explain the sustainable consumption spill-over from workplace to private life?

Aim of the thesis: To determine patterns how sustainable consumption behaviour can be spilledover from workplace to private life.

Objectives of the thesis:

- 1. To analyse problematic aspects and priorities of consumer engagement into sustainable consumption behaviour at workplace and in private life in the context of sustainable development.
- 2. To analyse the sustainable consumption behaviour conception in the context of sustainable development and to conceptualise and reveal the contextual basis of sustainable consumption behaviour.
- 3. To reason the pattern of sustainable consumption behaviour spill-over from workplace to private life.
- 4. To compose a conceptual framework of sustainable consumption behaviour spill-over from workplace to private life.
- 5. According to the empirical research findings to propose recommendations for companies to incorporate efficient sustainable consumption behavioural activities into the everyday activities in order to encourage sustainable consumption behaviour spill over from workplace to private life.

Results of the study and their application.

In the Master Thesis the current environmental situation and aspects of engaging consumer into sustainable consumption are revealed as well as research approaches on sustainable consumption spill-over from workplace to private life are distinguished. Theoretical decisions are dedicated to the description of sustainable consumption concept and revelation of its expression fields both in workplace and in private life. The main theoretical result of the Thesis is the composed conceptual framework, which describes the pattern which is needed in order to spill-over sustainable consumption behaviour from workplace to private life. The research methodology is reasoned in the Thesis. It describes reasons of the banking industry choice as the case for the empirical study, explains the choice of two methods, i.e. analysis of secondary data and in-depth interviews both with managers and employees of banks operating in Latvia. After a research data analysis recommendations for banks are provided as well as trends for future research are indicated. Results can be applied both by practitioners and scientists, who are analysing this field of research.

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INTRODUCTION

Relevancy of the research: Nowadays the global consumption patterns are so unsustainable that the efficiency gains and technological innovations simply are not going to be enough to recover the damage done by unsustainable consumption (WDCSD, 2008). We can significantly see the changes in the environment, ecosystem, biosphere and climate which regression is connected with human activity (Krajhanzl, 2010). The main problems regarding the environment and the human activity are related to the usage of energy, raw materials, waste management and pollution (Krajhanzl, 2010). These are huge problems that are rooted in human behaviour, threatening the successful developments turning into the failure (Harris, 2000). People depend too much on the limited resources and their consumption patterns are seriously unsustainable, generating unacceptable and irreversible environmental impacts (Jackson, 2006). In 1994, Norwegian Minister of Environment stated that these unsustainable behavioural patterns are even more reinforced by the fact that countries are continuing to increase their incomes and gross national product which is subsequently increasing the consumption volume. Here we are in 20th century tackling the same and even more progressed problems that were recognised twenty years ago (United Nations Environment Programme, 2015). This highly imply that there is a great conflict between opportunities for economic growth and sustainable consumption (Norwegian Minister of Environment, 1994). For that reason, the sustainable consumption has emerged as one of the most challenging and in the same vital policy debates which need to be communicated in order to engage the society towards the sustainable consumption behavioural change (Jackson, 2006).

Scientific problem: There are various studies investigating different aspects regarding sustainable consumption. For example, Kollmuss & Ahyeman, (2002) investigated general barriers regarding pro-environmental behaviour, underlining internal and external factors that influence individual's behavioural patterns whereas, Maltzman and Shirley (2011) and Salo et al. (2015) studied sustainable consumption concerning household and Deanne and Loverock (2010) and Muster (2011) workplace consumption behavioural patterns. Throughout these years, spill-over phenomenon has been rising awareness as it would allow to extensively move towards sustainable development. Thorgersen and Olander (2003) found a weak spill-over effects between workplace and private life settings under normal conditions, whereas Blok et al. (2015) have verified that there is a possibility to prove the sustainable consumption behaviour spill-over from workplace to private life. In between, Tudor et al. (2007) examined the relationship between the work and home settings, indicating the strong link between behaviours in these two social settings. However, Deanne and Loverock (2010) and Muster (2011) in their studies found that workplace can be considered as an important place, accommodating the necessary environment that can encourage behavioural change and further rapid social change. Moreover, the both paper authors point out that the increasing numbers of companies which are engaging in corporate social responsibility activities are promising starting point for promotion of sustainable consumption both in workplace and in private life. There have been various literatures regarding the positive spill-over, however, most of them have focusing on the spill-over across domains (Lanzini, 2013), but only some have investigating the spill-over across social settings (Tudor et al, 2007, Seebacher et al., 2010; Muster, 2011; Loverock and Newell, 2012; Nik Ramli and Naja, 2012). Only one study by Nik Ramli and Naja (2012) offered conceptual paper regarding the sustainable consumption spill-over from workplace to private life, proposing their theoretical framework. Therefore, there is an overall lack of scientific research that is contributed to the holistic evidence on the sustainable consumption behaviour spill-over from workplace to private life.

Consequently, **scientific problem** of the master's thesis is formulated as the following question: how to explain the sustainable consumption spill-over from workplace to private life?

Aim of the thesis: To determine patterns how sustainable consumption behaviour can be spilledover from workplace to private life.

Object of research: sustainable consumption.

In order to perform the research in a more detailed way and in accordance with the aforementioned aim of the thesis, this research has been identified with the following objectives of the thesis:

- To analyse problematic aspects and priorities of consumer engagement into sustainable consumption behaviour at workplace and in private life in the context of sustainable development.
- 2. To analyse the sustainable consumption behaviour conception in the context of sustainable development and to conceptualise and reveal the contextual basis of sustainable consumption behaviour.
- 3. To reason the pattern of sustainable consumption behaviour spill-over from workplace to private life.
- 4. To compose a conceptual framework of sustainable consumption behaviour spill-over from workplace to private life.
- 5. According to the empirical research findings to propose recommendations for companies to incorporate efficient sustainable consumption behavioural activities into the everyday activities in order to encourage sustainable consumption behaviour spill over from workplace to private life.

Research methods: While performing theoretical analysis, methods of systematic and comparative analysis of scientific literature were applied. Empirical research was carried out while applying qualitative secondary data analysis method and in-depth interview method. For the analysis of empirical data the method of qualitative content analysis was applied.

1. PRIORITIES AND PROBLEMATIC APSECTS OF CONSUMER ENGAGEMENT INTO SUSTAINABLE CONSUMPTION BEHAVIOUR AT WORKPLACE AND IN PRIVATE LIFE

1.1. Current environmental situation and problematic aspects of engaging consumers into sustainable consumption behaviour

The 20th century was a beginning of a significant change and progress of humankind, involving increase in population, average incomes, consumption rates, urbanisation and intense growth in production activities (United Nations Environment Programme, 2015). Certainly, in many countries these tendencies have contributed to a great economic and human development, creating jobs, increasing the material standard of living, enabling investment in public infrastructure and reducing poverty. Nevertheless, all these great advancements have come at a cost that the world cannot afford (United Nations Environment Programme, 2015). The growing use of natural resources coupled with extensive growth in waste and emissions, all contributing to a high pressure and impact on the environment, reaching the ecosystem limits (United Nations Environment Programme, 2015). The world is already operating 40% above our environmental resources budget and 1.2 million wealthier people account for around 75% of total emissions (United Nations Environment Programme, 2015; Munasinghe, 2010). Moreover, the global demand for all major environmental resources is projected to increase over the years (UNEP, 2012). Accordingly, the global consumption patterns are so unsustainable that the efficiency gains and technological innovations simply are not and not going to be enough to recover the damage done by unsustainable consumption (WDCSD, 2008; United Nations Environment Programme, 2015). In the view of that, consumers should not only be seen as a part of the problem, but also the solution (Munasinghe, 2010). Especially since sustainable actions are considered to be faster and more achievable than a lot of technological solutions (Munasinghe, 2010). For that reason, one of the key propositions in achieving sustainable development is considered the transition towards sustainable consumption and production (SCP) (UN, 2015). Therefore, finding the best way to incorporate social phycology and economics in persuading people to acquire sustainable consumption behaviour while tackling unsustainable consumeristic way of living and the symbolic role of consumer goods has been the aim for authorities, policy makers and authors for a quite long time (Shove, 2004).

The economic aspects of the different disciplines focus on production, ranging from labour and management to the rise of industrialism, trade and finance, overlooking consumption as a part of it (Princen, 2002). Consumption is mainly treated as a passive process which is a natural result of economics, specifically production (Princen, 2002). There is a belief that if the economy produces goods, and these goods are good enough that consumers buy them, then there is need for a greater

amount of goods (Princen, 2002). This greatly highlights the economic side of the understanding which suppose that consumption is only needed to estimate the demand (Princen, 2002), thus forcing the development of highly consumeristic society (Jackson, 2005). However, this is clearly overlooking that consumption is the required counterpart to production, as every economic activity consumes some kind of resource either in a product or service acquisition, processing or distribution (Princen, 2002). Moreover, all people, also in production process, at the end of the day are the same consumers who are buying products, using services, travelling around, consuming energy, generating waste in their day-to-day operations in the workplace and also in their private life (Muster, 2001). Accordingly, there are around seven billion people in the world who are involved in countless forms of consumption and production activities (United Nations Environment Programme, 2015). Moreover, the areas like resource efficiency are only achievable if consumers either individuals or institutions, demand sustainable products, considering that manufacturers produce mainly what consumers will buy (United Nations Environment Programme, 2015). For that reason, there is a need to acknowledge both production and consumption as unified and interdependent categories, therefore, requiring integrated focus on both in order to deal with the problems our world has been challenged with and move towards the sustainable development (Princen, 2002; Jackson, 2005). Consequently, there is a necessity to find the best way to encourage the shift across businesses and the general society towards sustainability.

There already have been various efforts to communicate the benefits achieved from the sustainable consumption and production, but not many changes have been attained. For instance, the simplest linear progression strategy has been highly used where it is assumed that more knowledge will lead to more considered behaviour (Kollmuss and Agyeman, 2002). This has proved to be mistaken since this have not led to any noteworthy behaviour changes since 1970s when the model was introduced (Kollmuss and Agyeman, 2002). One of the main reasons this does not work is that it does not take into consideration any individual, social and institutional constraints, but it supposes that humans are rational human beings and that they will make use of any information that is available to them (Blake, 1999, cited in Kollmuss and Agyeman, 2002). Moreover, nowadays consumers are attacked with a high volume of information which they just simply start ignoring or cannot apply to themselves (World Economic Forum, 2009). Likewise, when people recognise that someone is trying to persuade them, it makes them to take the opposite view (NEF, 2005). For that reason, the policy makers have been challenged with finding the new ways of society's engagement in the change towards the sustainable consumption, including consumption in production process. Despite the consensus on methods to influence consumption through the classic instruments of policy such as regulatory, economic and informational, almost inevitably authorities have been coming back to the idea that focusing on the lifestyles and behavioural change is going to be the vital in order to make a

progress on sustainable consumption and also production (European Commission, 2012). However, the lifestyle change is enormously complex and challenging aspect to change as it is hard to find the way to persuade people to shift their behaviour and lifestyle.

Even the overall awareness has been growing regarding the environmental challenges; many consumers have not made any changes in their general behaviour, lifestyle and/or purchasing decisions (WDCSD, 2011). There are various individual barriers to that like self-image, habits, working patterns, disempowerment, scepticism and resistance to change (Kollmuss and Agyeman, 2002; DEPRA 2008). Besides, the lack of ability to evaluate an individual pro-environmental contribution is considered as important reason why it may seem that the pro-environmental behaviour and also spillover among the domains being a slow and weak process (Thogersen, 2003). Moreover, there is a variety of difficulties to the practical progress that is even more discouraging the change like the poor waste management systems, housing and transport infrastructures (OECD, 2002), inadequate environmental information on products, premium pricing on sustainable products and services (DEFRA and DTI, 2003), and ineffective means of communicating the environmental problems (OECD, 2002). Accordingly, although it is considered that consumers have freedom of choice, we can conclude that there is a great amount of influences to customer behavioural patterns like macro environmental factors, production culture, social and physical infrastructure (United Nations Environment Programme, 2015). All these aspects constrain individuals and institutions into the environmentally damaging practices that they have little or no control of (OECD, 2002; United Nations Environment Programme, 2015).

Priorities for a business in acquiring sustainable consumption behaviour in the workplace

The study has discussed a variety of reasons why sustainable consumption and production is an essential step towards sustainable development. However, living in such a consumeristic, intense and competitive business environment (UNEP, 2012), there should be highly significant reasons for organisations to acquire and maintain sustainable activities. Consequently, a variety of propositions has underlined costs, benefits and public policy as the main drivers (Hohnen and Potts, 2007).

UNEP (2012) in their report has discussed various business drivers in relation to resource efficient and sustainable business strategies, for example: new investment opportunities, sales growth and duration of sales, and reduced dependance on natural resources. However, *not only financial benefits will be gained, but also social which are directly related to the employee performance.* For example, company managers believe that empowering activities which support employees' sustainable behaviour result in a low rate of sick leave, low employment fluctuation and a good workplace atmosphere (Seebacher et al., 2010). In contrast, disengaged and dissatisfied employees can be expensive as they can affect consumer satisfaction and the company's profits (Hohnen and Potts, 2007). Therefore, social aspects are also highly important, especially since employees are considered

as one of the most important company's assets which help business to achieve their objectives (Hohnen and Potts, 2007). Hence, it is clear that the company perspectives and the everyday life perspectives of employees are linked to one another (Seebacher et al., 2010).

From 2015, the universal agreement provides with a variety of ways for international communities, national governments, partnerships, business sector and other stakeholders to implement the sustainable development in unified manner (United Nations, 2012). For example, in a national level, the changes will affect a lot of businesses considering the increase in taxes to reduce further damange to the environment (UNEP, 2012). For that reason, organisations can prepare early for rising costs regarding environmentally damaging practices. In view of that, United Nations Environmental Programme (2015) has proposed starting with the reassessment of the product life-cycle and its value chain, as it can reveal environmental and socio-economic impact it has been causing during manufacturing. This would allow to evaluate various phases of production, and accordingly decrease environmental impact, reduce production costs, and recognise new opportunities, markets and competitive advantages. For example, production costs could be saved by reducing the use of natural resources and related waste and emissions or by recycling as it has been considered as an important contributor to eco-efficiency because many materials have a great recycling potential (United Nations Environment Programme, 2015).

Similarly, there are changes also happening in business-to-business sector. For example, businesses with active sustainability strategies are demanding for their suppliers to meet their standards (UNEP, 2012). Therefore, sustainability is at that point where it starts infleucning business-to-business relationships and opportunities (UNEP, 2012). Since a corporation's stakeholders include lenders, intergovernmental bodies, investors, the corporate social responsibility (CSR) could be great in supporting their cooperation. Particulary in these days, the regulator and capital provider expectations of businesses are raising, implying greater pressure and cost for those who fall behind social and environmental metrics, but significantly reward with greater tax regimes and reduced cost of capital those who take an action (UNEP, 2012). Nevertheless, the amount of socially responsible companies is rising which will also encourage other stakeholders both internal and external to acquire the same CSR strategic approach, especially in such a globalised world (White, 2012).

There are a lot of reasons why companies should obtain sustainable activities in their workplace and become socially responsible organisation, including various internal and external motives. The rising tendency towards sustainability is affecting the economic market which will be more reinforced by new universal agreement and other regional and national incentives (European Commission, 2011a). Accordingly, by incorporating sustainable activities in the organisation, it can bring a lot of benefits starting from risk management to global supply chains (Hohnen and Potts, 2007; European Commission, 2011a). Therefore, companies that understand and take this opportunity to shift their

operations toward sustainability, will have a great advantage in the market (UNEP, 2012).

1.2. Research approaches on sustainable consumption and its spill-over from workplace to private life

Numerous studies have been investigating different aspects of pro-environmental behaviour in order to find the best way to encourage the sustainable development. There are studies which have been investigating barriers regarding pro-environmental behaviour, underlining internal and external factors that influence individual's behavioural patterns (Kollmuss & Ahyeman, 2002). Similarly, various studies have been focusing on household sustainable consumption behaviour, investigating drivers and constraints of acquiring sustainable behaviour in the household social setting (Maltzman and Shirley, 2011; Salo et al. 2015). For example, two studies, one by Thorgesen and Olander (2002) and the other by Thorgensen (2011) suggest that people's sustainable behaviour at home is driven by a person's knowledge, experience, and a concern for the environment.

Throughout a variety of studies many important aspects have been introduced that drive people to behave as they do and the types of social factors influences that. Those findings have underlined the general factors regarding individual's sustainable behaviour, while other studies further explored sustainable behaviour across domains (Lanzini, 2013) and sustainable consumption concerning different social settings (Thorgersen and Olander, 2003, Tudor et al., 2007, Seebacher et al., 2010, Muster, 2011, Blok et al. 2015). Lanzini (2013) investigated the spill-over across domains, suggesting a positive spill-over between non-correlated pro-environmental behaviours. This study was based on Theory of Planned Behaviour which assessed the intentions of acting pro-environmentally. One of the important aspects the author identified is that habits play a significant role in influencing spill-over across different pro-environmental behavioural domains. The results suggest that well-established habits will influence other green behaviours. Nevertheless, the author emphasises the importance of habits as interacting and influencing element of attitudes and norms in researching the proenvironmental behaviour. Jackson (2005) underlines that our daily lives are filled with repetitive actions starting with an everyday route to work, buying a specific brand coffee, to running an evening shower or bath. Therefore, decisions about all these activities are taken with a little conscious thought or automatic with almost no thought since they are a part of daily routine. There are various situations where individuals act instinctively, automatically, out of routine or habit, or driven by emotional responses which occur despite the best intentions to act differently, causing problems for theoretical models that consider that behaviour is driven by intentions. This means that even if people are persuaded to change their attitudes and beliefs, and behave in regard the social norms, there is no guarantee that they will actually act in regard. In view of that, Lanzini (2013) identifies that greater habits an individual has, the harder is to change them, and other way round. Therefore, changing

frequently performed behaviour requires conscious decision making in order to implement new and divert old well-practised behaviours (Lanzini, 2013).

Seebacher et al. (2010) in his study suggest that everyday workplace setting is convenient for establishing and promoting sustainable consumption behavioural patterns. Particularly since in the workplace setting individuals are free of private or household responsibilities and interruptions, which is good aspect in developing learning atmosphere (Muster, 2011). Seebacher et al. and also Klade et al. (2013) study respondents have identified behavioural changes, highlighting a workplace setting as a great encouragement for the behavioural change in the private environment. Nik Ramli and Naja (2012) discussed in their study a need to continuously support the sustainable behaviour with information, activities, and responsibility which all would influence their behavioural manner and determine the way they should behave in the workplace. For instance, Klade et al. (2013) study participants discussed that the sustainable behavioural patterns in the workplace like eating more fruits, has influenced their snack choice at home. In view of that, workplace can be even perceived as a place for learning, subsequently fostering a part of the living pattern which can be overtaken to their private life setting (Muster 2011). However, not only Seebacher et al. (2010), but also Akenji (2012, cited in United Nations Environment Programme, 2015) indicated that a precondition for successful spill-over is a good atmosphere that promotes understanding and collective communication between the colleagues within the workplace. Whereas, Tudor et al. (2007) underline that also individual sustainable behavioural patterns at home supports similar behaviours in the workplace settings.

Even though, there is a great range of studies that have investigated parts of the sustainable consumption behaviour spill-over from workplace to private life, there is an overall lack of scientific research that is contributed to the holistic evidence. However, there are different findings that can support the current study. For instance, Thorgersen (2012) found that behaviours themselves have a direct positive influence on attitudes, underlining that actual behaviour in one domain improved the attitudes towards pro-environmental behaviour in general. Another study is by Loverock (2010), where the author examined employee pro-environmental behaviours and a workplace as a driver for social change. This study is based on three theories concerning attitude and behaviour change such as: Norm-Activation Theory, Theory of Cognitive Dissonance, and Self-Perception Theory. The findings suggest that the workplace is an effective place for learning pro-environmental behaviours, underlining essential aspects that foster behavioural change like a working environment and empowerment from the management. Following study by Nik Ramli and Naja (2011) where they examined a person's sustainable behaviour in an organisation and his personal behaviour outside an organisation. The authors discussed that the sustainable behaviour should be structured and consistent which should foster the necessary attitude and further become a great foundation for the development of another sustainable behaviour. Thus, their theory is that behaviour in both settings should be consistent,

constructing their paper based on Theory of Cognitive Dissonance. The authors believed that the dissonance could arise when behaviour inside the organisation is contradicting with the behaviour in private life which will require the following actions (Nik Ramli and Naja, 2011).

Also, Nik Ramli and Wahid (2011) examined factors that influence the spill-over of proenvironmental behaviour process at both ends. Their analysis was based on self-constructed theoretical assumptions where they were able to prove the importance in spill-over process of both organisational and family factors. They concluded that clarity of organisational goals, training and teamwork are important factors in the workplace setting, whereas in the household setting these are: family cohesion and family support. The authors underlined that the positive impacts should not be limited to the physical and organisational level, but also focus on the development of an individual's attitude and behaviour. Likewise, another study suggested the framework in explaining the process of the proenvironmental behaviour spill-over (Nik Ramli and Naja, 2012). The authors divided the phenomena in three stages, using The Social Identity and Place Attachment Theory to explain the formation of attitude and behaviour in the workplace and Theory of Cognitive Dissonance to explain a need to keep consistent in the private with the behaviours acquired in the workplace. Furthermore, in 2015, Blok et al. conducted study to identify workplace factors which would enhance a sustainable behaviour also in the household setting. The study proved that the Theory of Planned Behaviour greatly works in explaining the sustainable behaviour in the workplace. Accordingly, the authors were able to underline leadership support and exemplary behaviour by leaders as important positive impacts on employee's'. However, the study results also uncovered the managerial implications that negatively influenced employees' behaviours in the particular organisations. Nevertheless, the study was able to indicate the clear difference between factors influencing pro-environmental behaviour in work and household settings.

In the conclusion, it has been recognised that the global demand for all major environmental resources are expected to increase over the years, even more increasing the global consumption patterns, consequently also the pollution. In view of that, the term consumption has to be revised since it has been mainly treated as a passive process, being a natural result of economics which certainly is not. There is a need to recognise vital aspects that have been overlooked. Firstly, employees are the same consumers at the end of the day, thus consumers should not only be seen as a part of the problem, but also the solution (Munasinghe, 2010). Secondly, both production and consumption should be considered as unified and interdependent categories which requires integrated focus on both so as to deal with the problems the world has been faced with, moving towards the sustainable development (Princen, 2002; Jackson, 2005). For that reason, one of the main propositions in achieving sustainable development is considered the transition towards sustainable consumption and production, involving a great share of the society (UN, 2015). Although, there is a need to find the

most efficient way to engage these consumers in the sustainable consumption, encouraging to shift their behavioural patterns both in workplace and in private life. There is a good amount of empirical evidence supporting a sustainable consumption spill-over from workplace to private life which is a great starting point in developing more sustainable society (Seebacher et al., 2010). Workplace has been recognised as an inducing source for sustainable behaviour, however there is high importance on a household setting support in the process. Therefore, both settings are as important in the spill-over process. Nevertheless, the spill-over can greatly encourage a social change which would be an important step forward the sustainability if a widespread reinforcement of more sustainable everyday life settings would be proposed (Deanne and Loverock, 2010, Seebacher et al., 2010, Klade et al., 2013. Especially considering that the climate change in its nature relates to collective action at the global scale, considering that most of greenhouse gasses build up over time from different individuals, communities, companies and countries merge globally and affect each other (IPCC, 2014). For that reason, proving the spill-over of sustainable behaviour across the social settings would give policy makers and authorities a great way to address the environmental situation (Nik Ramli and Naja, 2011).

2. THEORETICAL DECISIONS ON SUSTAINABLE CONSUMPTION AT WORKPLACE AND IN PRIVATE LIFE

2.1. Sustainable development as a fundament of sustainability trends

The term sustainable development was internationally introduced in the United Nations Conference on Environment and Development in which they developed *Our Common Future* or also known as Brundtland Report, addressing the conflict between environment and further development objectives (WCED, 1987). The conference concluded with the recognition of the unsustainable pattern of consumption and production as the main cause of the environmental degradation. Accordingly, sustainable development means developing in a way that meets our needs, but do not compromise the needs of the future generations (WCED, 1987). It is the use of goods and services in the way that it meets our basic needs, enhances the quality of life, improves resource efficiency, increase the use of renewable energy sources, and reduce the emissions of waste and pollutants that affect the life-cycle (Norwegian Minister of Environment, 1994). Accordingly, sustainable development involves the discussion around three dimensions: economic, environmental and social (Harris, 2000). All three dimensions are based on the sustainable development goals, for instance, decent work and economic growth; no poverty; good health and well-being; responsible consumption and production, and industry, innovation and infrastructure (United Nations, 2015). All these activities underline that the conducts should be established in the way that would encourage more socially and ecologically sustainable consumption, while maximising the economic opportunities (Seyfang, 2011). All these aspects itself indicate addressing behaviour in order to change unsustainable patterns (European Environmental Bureau, 2009). Nevertheless, it is important to acknowledge that unsustainable behavioural patterns and its consequences are caused by multiple and interacting drivers that compile over the time (Nelson, 2005). Direct drivers like climate change, pollution, and land conversion clearly influence the ecosystem processes, however indirect like change in demographics, economic, and cultural operate more unclear (Nelson, 2005). Both direct and indirect are vital since they are interdepending and highly influencing each other at different levels ranging from individual to global (Nelson, 2005). These drivers significantly underline that all three dimensions are integrated and interdependent, therefore, requires according actions.

The sustainable development requires the engagement of all its stakeholders in the process, however, the complexity of this rises on regional and international level where a lot of interests' overlap and contradict each other (Manzhynski et al. 2016). For example, since the sustainable development has elaborated as one of the political plans with various sustainability objectives integrated into most of public institutions, organisations and companies, in more than 20 years the

situation has got even worse (European Environmental Bureau, 2009). One of the reasons is that the benefits of environmental improvements are overwhelmed by the increased consumption patterns (European Environmental Bureau, 2009). As a result, the unsustainability has brought us melting ice caps, reduced and/or failed harvests, droughts, floods, forest fires, loss of biodiversity, and other environmental degradation (European Environmental Bureau, 2009). Therefore, further actions need to be acquired. The European Environmental Bureau (2009) indicates that there is a critical need for the new policies and delivery approaches to encourage collective human action, especially in the areas where the impact is the greatest such as: food, drink and related agriculture, transportation, tourism, and housing. Of course, it is recognised that the single policies will not be enough to encourage individual citizens to acquire sustainable consumption patterns, therefore there is a necessity for new approaches that would enhance collective behavioural change (European Commission, 2016). The behavioural change is highly complex and challenging, because it is hard to find the way to persuade individuals to shift their behaviour and lifestyle (Jackson, 2006). Especially challenging it is because people have different ways to gain awareness and different intentions to act sustainably, therefore there is a need to find the most effective approach which would involve as many individuals in the society as possible (Carvalho et.al., 2015). Nevertheless, the transition has to start now because it is a longterm action that will greatly contribute to the sustainable development (European Environmental Bureau, 2009).

One step in the sustainable development direction has been already taken, as the first universal Agreement introduced by the international authorities and signed by 196 countries will support and continuously monitor national environmental impact, encouraging each participating country to improve their contribution (UN, 2015; EY, 2016). All these plans and agreements are great start toward the sustainable development which provide the ways for international communities, national governments, partnerships, business sector and other stakeholders to implement the sustainable development in unified manner (United Nations, 2012). Still highly important changes will be also needed in people lifestyles and behavioural patterns in order to deal with these global challenges (WDCSD, 2008). Princen (2002) underlines that every time the environmental report is released, researchers throughout a variety of ideological fields emphasise the need for a fundamental change in how people relate to the environment.

Overall, the key role of consumer behaviour and household consumer behaviour in particular, in driving environmental impact has been recognised already for a long time (Jackson, 2005). People's choices, behaviours and lifestyles play a vital role in achieving sustainable development which is one of the aspects the international authorities have agreed upon (Jackson and Michaelis, 2003, cited in Jackson, 2005). Therefore, understanding consumer behaviour is a pre-requisite for understanding how to motivate and encourage pro-environmental consumer behaviour (Jackson, 2005).

2.2. Sustainable consumption concept in sustainable development theory

There have been a variety of interpretations of the term sustainable consumption (see Table 1). While some of the definitions suggest sustainable consumption in regard to consuming less or consuming differently, the other ones focus on the three dimensions that contribute to the sustainable development. However, regarding this paper the most appropriate definition would be where sustainable consumption is defined as a consumption of more sustainable products and services, focusing on the aspects that would encourage more socially and ecologically sustainable consumption, while maximising the economic opportunities (Norwegian Minister of Environment, 1994; Seyfang, 2011; European Commission, 2016).

Table 1. Defining sustainable consumption

The use of goods and services that respond to basic needs and bring a better quality of life, while minimising the use of natural resources, toxic materials and emissions of waste and pollutants over the life cycle, so as not to jeopardise the needs of future generations (Norwegian Minister of Environment, 1994)

Continuous economic and social progress that respects the limits of the Earth's ecosystem, and meets the needs and aspirations of everyone for a better quality of life, now and for future generations to come (DEFRA and DTI, 2003, p.10)

Sustainable consumption is implicitly defined as the consumption of more efficiently produced goods, and the green and ethical consumer is the driving force of market transformation, incorporating both social and environmental concerns when making purchasing decisions (Seyfang, 2011, p.3)

Sustainable consumption and production maximise business' potential to transform environmental challenges into economic opportunities and provide a better deal for consumers (European Commission, 2016)

This may mean consuming less, or it could mean consuming differently. Either approach requires big leaps in our understanding and our actions – not simply how we produce and distribute goods and services, but how we organise our societies, government policy, and our lives (Sustainable Consumption Institute, 2016)

The main idea is to find the best way to meet our needs without diminishing the planet's natural resources (Jackson, 2006). For example, the use of products and services in a way that minimises the impact on the environment; reduce water usage, recycle, and manage the energy better (DEFRA. 2008). All these sustainable activities are related to environmental or so called pro-environmental behaviour which is the behaviour that has a reduced impact on the environment (Jackson, 2006). These can be done in a variety of ways as simple as switching the lights off, walking not driving short trips, consuming and recycling sustainable products (Jackson, 2006; DEFRA. 2008).

Most of previously mentioned sustainable consumption activities are mostly associated to an individual and household consumption, however sustainable consumption also involves communities, government, and businesses which are contributing to environmental quality through the efficient production, the product and service innovation, and their own consumption patterns (European Commission, 2016). Nevertheless, there are sustainable consumption aspects that each of these stakeholders can do specifically for the sustainable development such as: community members could encourage each other to recycle (New Economics foundation, 2005); the government and authorities could establish the right pricing and tax policy (DEFRA and DTI, 2003); and the business could offer

more sustainable products and services (DEFRA, 2008). These are just a few things each of the groups as a whole could do, while we have to remember that at the end of the day all individuals of these and other stakeholder groups are the same consumers who are buying products, using services, travelling, consuming energy, generating waste in their day-to-day operations both in the workplace setting and also in their private life. So, the consumer behaviour is significant contributor to the impact that the society has on the environment (Jackson, 2005). In view of that, businesses can be seen as really important stakeholders of sustainable development, since they have great potential to reduce the environmental issues, while maximising the economic opportunities, and providing better opportunities for consumers (European Commission, 2016). Therefore, sustainable consumption and production are considered to be significant in promoting the sustainable development which will further contribute to the long-term economic growth hand in hand with environmental and social needs (OECD, 2008; United Nations Environment Programme, 2015).

The transition towards sustainable consumption and production has been indicated as one of the key parts in achieving sustainable development (United Nations Environment Programme, 2015). A lot of products and services are involved in the complex industrial life-cycle networks ranging from resource extraction to waste management which all consume energy and other resources, while produce pollution (United Nations Environment Programme, 2015). This is highly important to acknowledge that not only end-consumers consume in the same time producing pollution, but also producers consume to produce and vice versa (United Nations Environment Programme, 2015). Accordingly, different resource consumption and pollution emitting are connected with all stages of production and the end-of-life management (United Nations Environment Programme, 2015). There are different ways these can impact the environment like through toxic release, greenhouse gas emission and nutrient discharge to water (United Nations Environment Programme, 2015). However, only few people are aware of how these products and services have been produced and what environmental, social and economic impact those have caused throughout their life-cycle (United Nations Environment Programme, 2015; IDEO, 2017) (see Figure 1). Moreover, not many people think about what will happen to the products that they are currently using or have finished using, therefore not paying attention to the ways they could be taken care of in a sustainable way (United Nations Environment Programme, 2015).

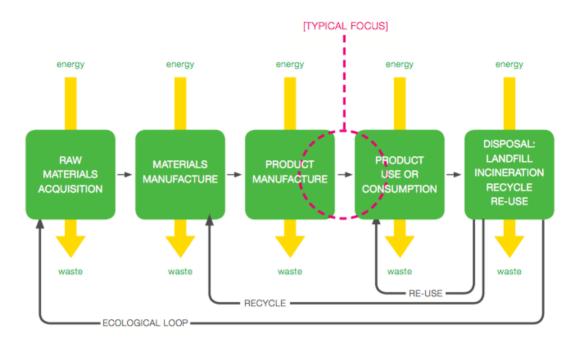


Figure 1. Product life cycle (IDEO, 2017, p.14)

For those reasons, it is important to engage the private sector in the society's shift towards sustainable consumption and production, especially since they are well informed and familiar with the full life-cycle of their products and/or services (United Nations Environment Programme, 2015). In view of that, companies should use their knowledge and abilities in a way that will improve the environment while meeting customer needs and maintaining financial gains (World Economic Forum, 2009).

2.3. Sustainable consumption in private life and its expression

Household consumption behaviour is an essential part of production-consumption chain, as the consumers make the final choice regarding the goods and services they consume, and their lifestyles define how these influence sustainability practices (Gibson et al., 2013). Consumption can be considered as a functional attempt to improve individual and collective well-being by acquiring the goods and services that are required to meet people's wants and desires (Jackson, 2005). People vary from each other which is articulated in their actions which depend on their experiences and ideas about the good life. Their value orientation is important in defining their idea about the good life, for instance, personal, material goods and culture, followed by the capabilities of the physical, social and economic conditions to realise them (Egmond, 2014). Nevertheless, *living in highly consumeristic society which places consumption in the centre, drives people to focus on volume of goods and services rather than on consuming right and efficiently* (Jackson, 2005; World Economic Forum, 2009). This underlines the need to redefine the consumeristic view, shifting from stuff to value, from quantity to quality, and from products to services (World Economic Forum, 2009). However, it is

important to consider that consumers buy goods and use services to achieve certain goals which mostly come from personal, social and moral values (Jackson, 2005). These can be considered as outcomes that consumers seek in purchasing goods and using services (Jackson, 2005). Therefore, their choices base on the four basic elements of consumer preferences which are:

- the consumer's available income;
- the price of goods and services;
- the consumer's tastes or preferences;
- and the behavioural assumption of utility maximisation (Begg et al, 2003, in Jackson, 2005).

In other words, each consumer chooses goods and services from the available ones in a way to maximise his subjective expected value, considering the constraints of his available income (Begg et al, 2003, in Jackson, 2005). In view of that, for people to acquire some specific behaviour, it needs to be considered as a worthy behaviour to acquire (Deanne et al, 2010). Especially, since the behaviour in the household setting is more voluntary-based, also depending on socio-demographic (household size, income level), psychological (attitudes, values and beliefs), and contextual variables such as infrastructures, incentives, and social norms (Jackson, 2006; Staddon et al. 2015; United Nations Environment Programme, 2015).

A household consists of people in a family or other group of people who are living together in one house (Merriam-Webster, 2016). Accordingly, the sustainable household consumption implies to the series of the everyday decision such as: on what goods and services to buy and how to use them, where to live and work, what kind of home to have, how to manage their waste and where to go on vacation (OECD, 2002; United Nations Environment Programme, 2015). These people's choices, behaviours and lifestyles have a great impact on the environment, contributing to the increase of the household consumption by almost 25% since 1996 (European Environment Agency, 2014). Household consumption patterns comprise energy, transport, waste, water, and food (OECD, 2002). The greatest shares of European consumption expenditures are on housing, food and transport which are the ones which has the highest environmental impacts (European Environment Agency, 2014; United Nations Environment Programme, 2015). These three are intersecting areas which highly consume water, energy and produce waste, affecting and also being affected by almost every consumer lifestyle domain (United Nations Environment Programme, 2015). Within these areas, a wide category is consumer goods which refer to manufacture, use and disposal of lifestyle goods like electronics, home appliances and clothing (United Nations Environment Programme, 2015). Even though the environmental impact of individual households is minor compared to other stakeholders like industrial and public, the collective impact of all households is a significant contributor to a variety of environmental problems such as: air and water pollution, waste generation, habitat alteration and climate change (OECD, 2002).

The household impact to the environment is divided into direct emissions which are caused by household directly, for instance, by driving a car and indirect emissions which are required to produce goods and services that the household consumes such as emissions of the car factory (Hertwich, 2006). It seems that individuals have only control over the direct emissions, however that is not true (Maltzman and Shirley, 2011). For instance, by buying the environmentally friendly car and using the most environmentally-friendly petrol, people constitute to a significant reduction of negative production and consumption consequences by choosing the environmentally friendly products and services. Likewise, by purchasing sustainable products and services, families can stimulate innovation in businesses (Munasinghe, 2010). However, it is not enough to only constitute to the reduction of the indirect emissions, it has to be combined with the direct emission reduction in order to make some significant changes (Maltzman and Shirley, 2011). For that reason, the understanding of the environmental problems and its relationship to the household consumption is really important for individuals to voluntary acquire sustainable consumption behavioural patterns (Salo et al., 2015). When this voluntary decision to include such behavioural patterns in the household setting has been taken, it highly increases the likelihood for these activities to become part of routine and then their habit (Barr and Gilg, 2006).

Table 2. Material issues in direct household consumption (OECD, 2002, Hertwich, 2006, Two Tomorrows, 2012 in UNEP, 2012, United Nations Environment Programme, 2015)

Household consumption	Material issues
	• Waste
	• Water
Food and beverages	 Energy
	 Resource use
	 Increasing meat consumption
N. 1.22. /	 Emission
Mobility/transport	• Fuels
	• Water
1741141	 Nuclear power
Utilities	Water use
	Waste disposal

The study by Carvalho et al. (2015) have identified five main personal sustainable consumption drivers which are: health reasons, information, crisis scenarios, connection to nature, and sense of responsibility. The study indicated that there is a growing interest in wellness and healthy lifestyle that is building awareness of sustainable products. However, the study underlined that an information that is essential in acquiring sustainable behaviour should not only be accessed on the Internet, but also incorporated in the educational way. Hence, it would raise awareness of:

- organic farming;
- exclusion of chemicals in food and products that are not tested on animals;
- rearrange the household spending underlining the need to avoid wasting money;
- foster social welfare;
- encourage a fair economic development.

Consequently, the authors concluded that also in the household setting all three dimensions (social, economic, and environmental) are highly integrated together.

Furthermore, the New Economics Foundation (2005) were examining the principles of human behaviour and psychology that impacts consumption behaviour. The principles highlight the way individuals could be encouraged to act in a sustainable way through the various individual, peer and society's incentives. The underlying principles have been identified:

- explaining that people's behaviour is strongly influenced by other people and their behaviours, comparing and evaluating both;
- people are highly driven by their habits; people have a sense of fairness to "do the right thing" which motivates to act in a particular way;
- people act in a way that justifies their values and attitudes;
- people would make large risks to avoid losses, but would avoid small risks to gain something, but fairly fast they add extra value to something that is considered "theirs";
- people are bad at calculating possibilities and are strongly influenced by how the problem is presented to them;
- people like feeling involved in the decision-making and be a part of something empowering.

There are different factors that influences the household consumption patterns, depending on a variety of internal and external conditions. The main household consumption involving areas are energy, water and production of waste, followed by transport and food. All consumer everyday choices, behaviours and lifestyles consume all of these resource areas and produce some kind of waste, affecting the environment either directly or indirectly. Therefore, in order to make a conscious consumption decision, it is required to have the environmental awareness and appropriate knowledge to understand environmental problems and the methods these can be reduced. However, it is essential to consider that each household resident is an individual who is not only part of the residence, but also a part of some other kind of institution at different periods of life whether it is a school during childhood, university during youth, and/or workplace in the adulthood (Muster, 2011). These different organisations play essential role in an individual's everyday life at different life periods (Muster, 2011). People live and consume within these social settings, learning new things, establishing routines and supporting peer groups (Muster, 2011). Hence, these structures need to be developed in a way that

supports the sustainable behaviour, including production and consumption (European Environmental Bureau, 2009).

2.4. Sustainable consumption at workplace and its expression

According to Muster (2011), the key to the behavioural change is the understanding of normality. The notion of normality refers to the repetition of certain activities and behavioural patterns to the point when the individual interprets it as normality, integrating them into the everyday life. In view of that, these activities that are promoting sustainable consumption have to be incorporated into everyday settings in order for them to become familiar to the individuals and later even habitual. The workplace is one of the places where adults spend around one-third of their everyday lives. Each workplace has their own workplace settings including policies, colleagues and general organisational culture which have an ability to shape people's attitudes and behaviour. Moreover, through the work people develop their skills, relate with others in the common tasks, and contribute to the greater society (Muster, 2011). However, a workplace is also a complex social setting where there is a high interplay amongst individuals that influence employees' sustainable behaviour such as: interactional, situational, cultural and structural aspects (Muster and Schrader, 2011; Muster, 2011). Therefore, only by creating the environment where sustainability is a common objective, it becomes easier for people to learn and engage in everyday sustainable behaviour (United Nations Environment Programme, 2015). Moreover, there are three key pre-conditions to achieve sustainable consumption and production which are: right attitude by all stakeholders in the production-consumption system; facilitating system and social infrastructure to translate attitudes into actions; and sustainable infrastructure (Akenji, 2012, cited in United Nations Environment Programme, 2015). However, these would be a good start to incorporate sustainable consumption within an organisation, but could not be enough to foster a behavioural spill-over to private life. There is a need for some greater organisational culture approaches in employee engagement in order to encourage sustainable consumption within an organisation and further in the private life (Wang, 2012). Then, by adopting an essential workplace atmosphere for sustainability, companies would have a great power to contribute to the development of the more sustainable society which is not only beneficial to the company itself, but also the general society (Seebacher et al. 2010).

Each company depend on all three sustainable development dimensions which are human (employees), planet (raw materials) and economy (income) (European Environmental Bureau, 2009). Through each of value chain steps, business is consuming a variety of resources and producing waste (UNEP, 2012). The main resources demanded by businesses are energy, steel, food and water (McKinsey & Co Global Institute, 2011 in UNEP, 2012). It is forecasted that the demand for these resources will even more grow in next 20 years. Of course, the kind and amount of resources used and

waste generated depend on the business sector an organisation work in (see Table 3). For example, manufacturing sector is responsible for 35 percent of electricity use, around 20 percent of CO₂ emissions, and over 25 percent of primary resource extraction (UNEP, 2012). The combined use of resources put a lot of pressure on water, land and biodiversity (UNEP, 2012). The Table 3, greatly underlines that each business sector relies on energy, water, and natural resources while producing emission and degrading the environment.

Table 3. Material issues by selected sectors (Two Tomorrows, 2012 in UNEP, 2012, p.8)

Sector	Material issues
Building and construction Housing Industrial Infrastructure construction	 Energy use and emissions Materials use Waste Water
Food and beverage Agricultural production Processing Food production Distribution Retail Catering	 Overfishing Increasing meat consumption Environmental degradation Resource and energy use Water Waste
Tourism Lodging Recreation Restaurants and bars Events Tourism services Culture Tours and excursions	 Environmental degradation Water and resource use Waste
Transport Air Rail Shipping Road Vehicles	 Environmental degradation and land use Fuels Emissions
Extractives Mining of minerals and metals Oils and gas	Environmental degradationEnergy and water use
Utilities Water and waste management Energy production and distribution	EmissionsNuclear powerWater useWaste disposal

Seeing the situation, Seebacher et al. (2010) offers two strategies to companies that would foster the development of sustainable consumption. Firstly, a company should focus on their processes and products, seeking to minimise environmental impacts like a business model, product and service innovation, supply chain management, and elimination of product components that can cause a risk to the humans and/or environment (WBCSD, 2010). Secondly, they can broaden their view, recognising their responsibility to the society they operate in (Seebacher et al. 2010). Therefore, every responsible

business is associated not only to the environmentally friendly behaviours, but also with developing social values and ethical principles (Seebacher et al. 2010). For instance, social values can be encouraged by offering incentives either in reward or appraisal way as a means of enhancing employees' willingness to introduce innovative ideas or to encourage their engagement with company's sustainable practices (Muster, 2011). Nevertheless, by incorporating at least one of the sustainable strategies into business consumption and production, they would already be reinforcing a particular part of the sustainable development within their business and the general society (WBCSD, 2010). However, both these strategies collectively could be expanded to the Corporate Social Responsibility (CSR) which is defined as the responsibility of companies for their impact on the society in regard to the social, environmental and economic effects (European Commission, 2011). Socially responsible organisations incorporate all three dimensions in their values, culture, decision making, strategy and operations in a clear and accountable manner (Hohnen and Potts, 2007). Therefore, it is long-term strategic approach that is exploring opportunities for innovative products, services and business models that contribute to societal well-being, leading to greater product/service quality, more productive jobs, eventual reduction of production costs, financial gain for the companies, and social goals related to sustainable development (Loverock and Newell, 2012; United Nations Environment Programme, 2015). Moreover, since the Agreement of the UN Framework Convention on Climate Change are including various business related incentives like taxes to energy and other environmentally-friendly activities, it becomes even more encouraging for business to acquire sustainable consumption and production in their business operations (EY, 2016).

A great range of interventions are available to make employees' consumption patterns more sustainable like influencing mobility or eating habits and enhancing employees' knowledge and motivation to consume differently (Klade et al, 2013). Workplace can be even perceived as a place for learning, afterwards fostering a part of the living pattern which can be exceeded to their private life setting (Muster 2011). The Seebacher et al. (2010) study respondents have identified behavioural changes, highlighting the work setting as a great stimulus for the behavioural change in the private environment. As a result, the authors state that there is a great possibility of the sustainable consumption spill-over from workplace to private life which is a great starting point in developing more sustainable society.

2.5. Factors influencing the sustainable consumption behaviour at workplace and in private life: similarities and differences

According to Staddon et al. and Blok et al. (2014), the workplace and household behavioural determinants regarding sustainable consumption varies. They suggest that the workplace

environmental behaviours depend on both individual determinants like attitude towards the behaviour and organisation-specific influences like social norms and management support to perform the behaviour (Staddon et al. 2015). However, the behaviour in the household setting is more voluntary-based, accordingly suggesting that it depends on socio-demographic (household size, income level), psychological (values and attitudes), and situational (infrastructure) variables (Kollmuss and Agyeman, 2002; Staddon et al. 2015). Moreover, the family cohesion and support are highly important factors in voluntary acquiring new behavioural pattern in private life.

Despite different social setting driving factors, the behaviour is performed by the certain person either it is at workplace or at private life setting. Therefore, according to Blok et al. (2014), the individual or so called internal factors such as social, cognitive and affective, influencing behaviour should stay consistent in both environments. Social factors consist of social norms which present personal beliefs on how to act and group-shared beliefs on how to act. Cognitive factors refer to the environmental awareness and perceived behavioural control. The environmental awareness can be seen as environmental knowledge and the recognition of the environmental problems. Third internal factor is affective which refers to the general values, environmental values and attitudes toward the environment. It is suggested that the attitude toward environment has great encouragement to act proenvironmentally. These are mutual variables that dot not differ considering the setting (see Table 4).

Table 4. Main factors influencing the sustainable behaviour in workplace and private life (Kollmuss and Agyeman, 2002; Blok et al., 2014, Staddon et al. 2015, Salo, 2015, United Nations Environment Programme, 2015)

Social setting	Factor
Workplace	Individual identity (values, attitude and behaviour) Organisational culture (social norms, management support and colleagues) Infrastructure
Household	Individual identity (values, attitude and behaviour) Socio-demographic aspects (household size, income level) Family/household cohesion and family support Situational aspects (infrastructure and place)

However, the external factors are the ones that shape the individual behaviour patterns in regard to the setting (Blok et al., 2014). These are situational or also called institutional factors which refer to the required conditions and infrastructure that need to be available in order to perform the environmental behaviour. For example, the recycling can be done if the necessary waste management services are provided (Kollmuss and Agyeman, 2002). The poorer the services are, the less likely people will be willing to change their behaviour (Kollmuss and Agyeman, 2002). Moreover, if there is a need for specific services that supports the behavioural actions in the household setting, it can require additional expenses, accordingly the household income plays great role in encouraging the behaviour

(Kollmuss and Agyeman, 2002; Staddon et al. 2015; Salo, 2015). Nevertheless, each social setting should address the system in which consumption takes place and seek to address the social and physical infrastructure that enables consumption (United Nations Environment Programme, 2015).

The main mutual factor in these social settings is an individual himself with his cognitive and affective internal traits who is consuming energy, water, food and producing waste and pollution. All other factors depend on the social setting which differ between work and private settings. In a workplace, behaviours are assisted by the management and colleagues, but at private level it is more related to the household socio-demographic variables and family support. Nonetheless, workplace is a great place to enlighten people, supporting formation of new attitude and behaviours which could be spilled-over to private life.

2.6. Sustainable consumption spill-over from workplace to private life

Employees are human beings who learn and develop environmental attitudes and behaviour both in workplace and private life (Muster and Schrader, 2011) (see Figure 2). Human behaviour, including attitude, values and norms, are what makes a person who he is, no matter what social settings an individual is in (Nik Ramli and Naja, 2011). The social setting where a person has to suppress his identity, adapting in regard to the situation, it could conflict and cause a disturbed inner feeling (Nik Ramli and Naja, 2011). Accordingly, people are expected to have a strong desire to be consistent in their attitudes, beliefs, words, and behaviours, developing a work-life balance (Nik Ramli and Naja, 2011; Muster and Schrader, 2011). In view of that, the workplace could be a great starting point of the positive spill-over process (Muster, 2011), generating positive influences that would encourage environmentally-friendly behaviour both in workplace and in the private life (Muster and Schrader, 2011).

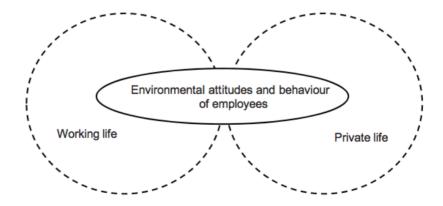


Figure 2. Environmental attitudes and behaviour as composition of experiences gained in working life and pri\vate life (Muster and Schrader, 2011, p.144)

Everyday settings are convenient for establishing and promoting sustainable consumption behavioural patterns, particularly, since in the workplace setting individuals are free of private and/or household responsibilities and interruptions, which are great in developing learning atmosphere (Seebacher et al., 2010 and Muster, 2011). However, Seebacher et al. (2010) and Akenji (2012, cited in United Nations Environment Programme, 2015) point out that the first precondition for successful spill-over is good atmosphere that promotes understanding and collective communication between the colleagues within the workplace. Likewise, Wang (2012) underlines the importance of employee engagement with an organisation as an essential aspect in fostering a good organisational atmosphere.

According to Wang (2012), engagement requires systematic thinking, understanding that engagement requires a set of building blocks such as: people-centric values, delivery and communication styles. First is people-centric values which refer to a genuine understanding of their employees before actually engaging them. The key elements are: culture (societal norms, communication preferences, and global outlook), community (internal and external stakeholders) and credibility (earning trust through actions). The author underlines the importance of effective leadership style and the interaction between employees. However, not only values will be enough to engage employees successfully, but also the styles those are communicated (Wang, 2012). The communication styles involve channel (face-to-face, virtual, web), content (internal, paid, analytic) and cadence (the frequency of engagement). Lastly, Wang (2012) indicates the right time drivers as a last piece in the engagement. The main aim in this part is to inspire action through context (location, business process, role), catalysts (campaigns, offers, loyalty programmes), and currencies (cash, rewards, recognitions, and access). Subsequently, if the organisational environment is good for fostering a sustainable behaviour, two important long-term driven approaches can be used to cultivate learning in order to obtain good spill-over effects: "learning though examples" and "learning by doing" (Seebacher et al., 2010).

Firstly, "learning through examples" which works are emulation and imitation (Seebacher et al., 2010). This can be encouraged from two sides: the management and the colleagues. The study suggests that the peer-to-peer learning is more influential, since colleagues discuss experiences and encourage each other to try new behavioural patterns and to join courses and/or trainings. Moreover, phycologists have emphasised that it is more influential when people are encouraged by someone they like (NEF, 2005). However, the peer-to-peer learning should be accompanied with a management support since they are the ones who are initiating the sustainable activities in the company, accordingly becoming the role models (European Environmental Bureau, 2009; Blok et al., 2015). The courageous, skilled and inspiring business leaders are seen as a great encouragement for the behaviour implementation (European Environmental Bureau, 2009). Particularly, as leadership style sets the

organisational culture and influences the manner employees interact with each other (Wang, 2012). Two studies, one by Nik Ramli and Naja (2011) and the other by Blok et al. (2015) indicated that managerial support of employees to act pro-environmentally have a strong positive effect on pro-environmental behaviour, underlining that employees need to see that their organisation is committed to reduce their negative environmental impact in various ways. Nevertheless, it is important that the employees' sustainable contribution is empowered for the right motives, not for the sake of organisational selfish reasons (Nik Ramli and Naja, 2011).

Secondly, "learning by doing" should be encouraged by daily life routines within the workplace (Seebacher et al., 2010). It is important that these sustainable practices are repeated and trained in order for them to become habitual (Seebacher et al., 2010; Nik Ramli and Naja, 2012). People's everyday lives are filled with repetitive activities which turn into embedded habits, allowing to perform routine actions with little or no consideration (Jackson, 2005). The evidence underlines that habit is a fundamental component in a variety of environmentally important activities like travelling, shopping, and waste disposal (Jackson, 2005). Therefore, habits are considered as a great factor in influencing spill-over as people with deeply rooted habits are expected to feel a need for consistency in their behaviours (Lanzini, 2013). In a view of that, it is suggested that there is a need to develop a stable workplace context which would foster an active employee involvement (Nik Ramli and Naja, 2012; Lanzini, 2013) and support inspiring approaches toward change while reinforcing the formation of habits (European Environmental Bureau, 2009). These approaches should be process-oriented, allowing to try the new behaviours into conventional structures, for example courses and training, preferably with the field experts (European Environmental Bureau, 2009). Also, the associations like UNESCO (2005) suggest practical training as an essential contributor to the knowledge and skills required to make decisions and perform the work in a sustainable manner. Accordingly, environmental issues can be integrated into these learning processes (Muster, 2011). Nik Ramli and Naja (2012) state that all these activities and experiences practiced by individuals will at some point have some kind of effects on their attitude, values and norms. Nevertheless, eventually the main idea is to develop inspiration, creating legitimacy and collective action, while reducing hesitation and ignorance (European Environmental Bureau, 2009).

The main idea is to create new habits, by bringing awareness to the subconscious action and raising it to a conscious level where people can evaluate the principles of new behaviour (Jackson, 2005). People can acquire a new behaviour, repeating it till it becomes a habit (Jackson, 2005). Therefore, *learning within the company is considered as the advantage, since the familiar social context allows employees to concentrate on the new information that need to be acquired* (Seebacher et al., 2010). For example, Muster (2011) states that employees who are working in companies that already practice sustainability in the workplace, are greatly informed and exposed to the sustainable

behavioural patterns, allowing to experience the immediate results of sustainable consumption and making mindful decisions to acquire these behavioural patterns in the private life settings (see Figure 3).

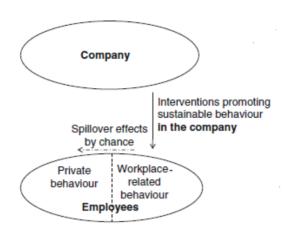


Figure 3. Sustainable consumption spill-over from workplace to private life (Muster, 2011)

Nevertheless, various studies discuss the possible drivers of negative spill-over between these social settings. Kollmuss and Agyeman (2002) highlight the lack of infrastructures available in the private setting could be highly important factor that could constraint people from their intended behaviour. Moreover, Loverock and Newell (2012) underlined that some environmental behaviours could be associated with workplace but not with the home setting, therefore not traslating across. Whereas, Muster and Schrader (2011) suggests that behaviour with problematic environmental effects in one social setting could generate or strenghten similar behaviour in the other setting. For example, life-to-work difficulties may arise when an individual daily practice non-environmentally friendly behaviour at home, but work-to-life might occur when a company fails to provide the necessary infrastructure for environmentally-friendly behaviour and to engage their employees in successful environmental activities.

There are various pre-requisites that need to be acquired in order to engage employees in sustainable consumption behaviour in a workplace. Therefore, primarily it is important for a workplace to develop the organisational culture that would be encouraging the commitments of all employees and having a strong support from the management in a variety of ways (Muster and Schrader, 2011). And only then, an organisation can move forward in developing greater long-term sustainable commitments. This is certainly a great starting point in changing employees' consumption behavioural patterns which could further benefit the greater society and the company itself (Seebacher et al., 2010). Despite that, every employee is an individual who is influenced by their personal environmental knowledge, experiences and other social groups including their family and household members (Jackson, 2006 and Muster and Schrader, 2011).

2.7. Theories supporting the sustainable consumption behaviour spill-over

Jackson (2005) and Thorgensen (2012) in their papers discuss self-concept, cognitive dissonance and spill-over as mutual notions that explain the individual's intentions and engagement to behave proenvironmentally. There is an overlap between social and psychological functioning as individual's thoughts, feelings and behaviour are related to his physical and social surroundings (Jackson, 2005; Pickens, 2005). In view of that, Nik Ramli and Naja (2012) have proposed the three-stage theoretical model in order to support pro-environmental spill-over phenomenon from a workplace to private life setting, including theories such as Social Identity Theory, Place Attachment Theory and Theory of Cognitive Dissonance (see Figure 4).

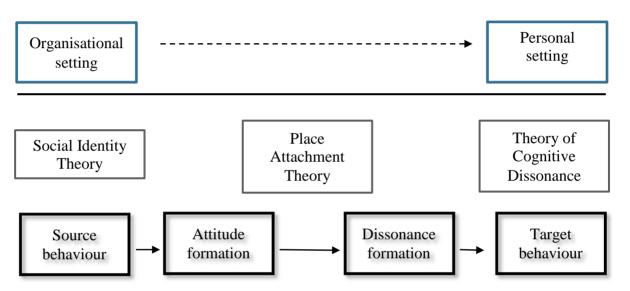


Figure 4. Theoretical model of the sustainable consumption behavioural spill-over (Nik Ramli and Naja, 2012, p.1063)

Theory of Cognitive Dissonance

Human behaviour (attitude, values and norms) is what makes a person who he or she is, no matter what social settings an individual is in (Nik Ramli and Naja, 2012). Therefore, an individual cannot have two personalities that switch in regard to the social situation, as it would conflict and cause a disturbed inner feeling so called cognitive dissonance (Nik Ramli and Naja, 2012). *The Theory of Cognitive Dissonance* is essentially about making sense of how people try to make sense concerning their social environment and their behaviour (Aronson, 2011). People are trying to guide their lives in turn for them to be sensible and meaningful at least in their own minds (Aronson, 2011). *People experience the dissonance mainly in a social context, therefore, this context in which an individual behaves in, need to be considered in order to explain the contradictions in their beliefs* (Matz and Wood, 2005; McKimmie, 2015). When the dissonance in the individual's perceptions arise, the individual strives to eliminate this inconsistency. The Cognitive Dissonance Theory suggests that individuals tend to seek consistency in their cognitions which are: knowledge, beliefs and opinions

(Festinger, 1957, cited in Jackson, 2005). Knowledge encompasses attitudes, values, behaviour, other people, ourselves, general or any other target (Pickens, 2005). These cognitions could be very explicit parts of information or general concepts and relations (Wicklund and Brehm, 1976). Thus, implications in individual's mind can arise from a variety of means, for example, cultural values, pressure to be logical, behavioural commitment, or past experience (Wicklund and Brehm, 1976). If there is an inconsistency between their cognitions and behaviours, there is a need for a change that will eliminate this dissonance (Festinger, 1957, cited in Jackson, 2005). This internal discomfort motivates people to reduce these inconsistencies in their cognitions that they hold about themselves, their behaviour and/or the environment they are in (Festinger, 1957, cited in Jackson, 2005). However, the degree of dissonance depends on importance of the elements that are dissonant, the greater degree, the greater dissonance that needs to be eliminated (Festinger, 1957, cited in Jackson, 2005). This dissonance can be resolved in one of the three basic ways: change beliefs, change actions, and change perception of action (Festinger, 1957, cited in Jackson, 2005). Nevertheless, Wicklund and Brehm (1976) discuss that the theory does not assure that an individual will successfully reduce or eliminate dissonance, however, it certainly motivates to reduce it. Moreover, the way in which an individual attempt to reduce dissonance depends on the resistance to change regarding the relevant cognition. There are two main sources to resistance to change which are clarity of reality and difficulty of changing the recognised event. For that reason, it is essential to consider both sources in order to reduce the resistance.

Thogersen (2012) suggests that cognitive dissonance may lead to the positive behavioural spillover, primarily when an individual feel morally obligated to act in an environmentally responsible way. The greater the pro-environmental values and norms, the greater desire to avoid behavioural inconsistencies. Accordingly, an individual who is keen in behaving in one of the pro-environmental domains, is more likely to acquire some other pro-environmental behaviours, relating it to the cognitive dissonance. For example, a positive attitude towards one domain, and negative attitude towards other domain would cause cognitive discomfort that would require the elimination of this dissonance. Therefore, there is a great possibility that this may shift a negative towards positive attitude in order to create consistency. Moreover, Thogersen (2012) found that behaviours themselves have a direct positive influence on attitudes. The actual behaviour in one domain improved the attitudes towards pro-environmental behaviour in general. In view of that, considering the social benefits that can be fostered within a workplace environment, there is a need to explain aspects that drive sustainable behaviour to be acquired also in a private life setting. Nik Ramli and Naha (2012) have proposed that Social Identity Theory and Place Attachment Theory are the ones which can greatly explain the arousal of the cognitive dissonance, therefore, supporting pro-environmental spillover phenomenon from a workplace to private life setting. The authors believe that source behaviour,

in this case pro-environmental behaviour, in a workplace will lead to a development of a new attitude which will further arise dissonance between workplace and private life behavioural patterns.

Social Identity Theory

The idea proposed by Nik Ramli and Naja's (2012) is that the formation of new attitude will start the spill-over process. Attitudes are complex combination of personality, beliefs, values, behaviour and motivations (Pickens, 2005). They result from learning, observing others, and individual's personal experience with other people and situations, influencing people's decisions, guiding their behaviour and impacting what they remember (Pickens, 2005). Pickens (2005) underlines that attitudes are produced in a socialisation process throughout an individual's lifetime, therefore, attitude transformation takes time, effort and determination. However, the influence can flow both ways, individual's attitudes are influenced by social worlds and social world can be influenced by individual's attitudes (Pickens, 2005). Nik Ramli and Naja (2012) believe that very structured and formal setting greatly stimulates the effects on attitude and behaviour, suggesting that repeated behaviour and active employee engagement with the environmental activities both in consumption and production can greatly contribute to the formation of an attitude.

Not always individual's behaviour can be explained by referring to his personal identity, but there are situations in which people's social identities may lead their perceptual, affective and behavioural responses (Ellemers et al., 2002). A part of individual's social identity comes from groups whom people associate themselves with (Talfej, Billig and Turner in NEF, 2005). Thus, social environment plays an important role in providing a person with a sense of self-meaning and also influencing social behaviour which reflects role-associated aspects of self (Hogg et al. 1995). As regards, Social Identity Theory suggests that individuals as group members adopt the group membership as a part of their self-concept, forming their group identity through the socialisation process (Tajfel, 1974). Therefore, the social or group pressure in a workplace setting can play a great role in an attitude and norm development (Nik Ramli and Naja, 2012). Each of these memberships is embodied in the individual member's mind as a society identity that both describes and prescribes one's attributes as a member of that group (Hogg et al. 1995). In other words, it defines how one should think, feel and behave. Group members are strongly motivated to embrace behavioural strategies for reaching or maintaining so called in-group (Hogg et al. 1995). Moreover, it allows to underline distinctions from other relevant groups, favouring in-group and the self (Hogg et al. 1995). This social classification has two functions. Firstly, it cognitively assembles the social environment, providing the individual with a systematic way of defining other. Secondly, it enables the individual to locate himself in the social environment. Therefore, the social groups allow people see themselves and others around them, reflecting on the social context they function in (Ellemers et al., 2002). Accordingly, it allows to interpret the process of categorising oneself in terms of a particular group membership which would further encourage greater commitment to addressing environmental problems (Fielding and Hornsey, 2016).

Place Attachment Theory

Furthermore, Nik Ramli and Naja (2012) proposed *Place Attachment Theory* in order to explain the positive spill-over process from a workplace to private life. The theory refers to the emotional bond between person and a place which progress through emotional connection, meaning and understanding developed over a period of time (Wolf et al. 2014). It suggests that an individual holds the attachment to a place, person, and processes related to that place, assigning the meaning to that bond, such that it becomes a part of an individual's identity (Hay, 1998 cited in Nik Ramli and Naja, 2012 and Scannell and Gifford, 2010). Therefore, the attachment can occur in either of these dimensions, relating their bond either to personal drivers and experience; place and its social and physical aspects; and/or processes within the organisation (Scannell and Gifford, 2010). The attachment dimensions may overlap but they are also separable. In context of this study, the important dimension is the process which accompanied with the following two would strengthen the potential spill-over process. The process dimensions of place attachment consider the way an individual and groups relate to a place as affect, cognitions and behaviour (Scannell and Gifford, 2010). Affect would be related to emotional bond, cognition to knowledge, memories and meaning, whereas behaviour to proximity-maintaining and reconstruction of place (Scannel and Gifford, 2010). It is considered that behavioural level of place attachment would encourage to stay close to a place and reconstruct a place or find similar place. In view of that, a sustainable workplace setting can intensify the sense of environmental responsibility through employee bond to a place (Waske and Kobrin, 2001, cited in Wolf et al., 2014). For that reason, Nik Ramli and Naja (2012) believe that the workplace attachment could be an important factor which would be rising the cognitive dissonance regarding the sustainable behavioural patterns in a private life. Therefore, by fostering the sustainable workplace, there is a great possibility for a successful sustainable consumption behaviour spill-over.

Nik Ramli and Naja (2012) have proposed a three-stage theoretical model which greatly supports the validation of spill-over, considering the Theory of Cognitive Dissonance as the foundation that could encourage behavioural change based on the behavioural patterns in workplace. Theory of Cognitive Dissonance is considered to be an action-opinion theory, proposing that actions can influence following belief and attitude (Dickerson et.al., 1992). Therefore, theory suggests that if behaviour is changed, there is a great possibility that a change in attitude will also occur. However, for the dissonance to occur, there is a need to interrupt an important element of a person's cognitions which are related to morality, competence and consistency, assisting as the standards which behaviour is compared to (Dickerson, 1992; Aronson cited in Harmon-Jones, 2002). In this study, the workplace plays a role in supporting with these standards through the organisational environment and activities

promoted within the organisation. Social Identity Theory and Place Attachment Theory can explain the new attitude formation, and cognitive dissonance could be rising the desire to stay consistent, however, there is a need to investigate household as a place where this behaviour should be spilled. There are numerous factors influencing consumer behaviour in private life, suggesting that even an individual who would be willing to acquire sustainable behaviour, various factors are constraining that. Moreover, in regard to previously mentioned theories, it is important to recognise how social context and place with its dimensions can support the development of sustainable attitude and influence the behaviour in private life which have not been considered by Nik Ramli and Naja (2012). Especially, since each individual is unique, placing the importance on social groups differently and growing the attachment to a place in different manner. For some people, it will be related to people in the organisation, for some it could be place itself, or for others processes within the organisation. Nevertheless, it is important to consider a possibility that sustainable behaviour in private life could be influencing or strengthening sustainable behaviour in workplace. All previously mentioned reasons underline the great need to develop a sustainable workplace culture in all aspects in order to encourage spill-over to private life setting. Although, the household as a target social setting should be as nurturing, as the workplace setting which is encouraging the sustainable behaviour. As a result, this study highlights the necessity to focus more specifically on workplace as a source behaviour, individual's dimension of attachment and the household in order to understand the possible spill-over from workplace to private life.

2.8. Conceptual framework of sustainable consumption behaviour spill-over from workplace to private life

The key role of consumer behaviour in a sustainable development has been recognised for a long time. People's choices, behaviours and lifestyles play a great role in achieving sustainable development either it is in workplace or in private life. People consume in every step of their everyday activities, starting with their morning coffee which requires a lot of resources in a production process, delivery and use. This underlines that consumption and production are interdependent, consuming resources in work and/or in private life. The main consumption areas that overlap between social settings are energy and water while producing waste and pollution. Likewise, consumers in both settings consume food and use transport either related to their work and/or in their private life. Accordingly, engaging as many consumers as possible in a change towards sustainability, would be a great step forward in achieving sustainable development. In view of that, workplace has been recognised as a good place for learning and fostering a part of the living pattern which could be taken over to private life. However, there are a variety of factors influencing that. For example, workplace should be fostering sustainable organisational culture, cultivating sustainable activities using long-term approaches "learning through examples" and "learning by doing" (Seebacher et al., 2010) (see figure

5). The main aim is to create new habits, by rising awareness to a conscious level where people can evaluate the principles of new behaviour. Supported sustainable consumption and production in workplace for an individual would be easy to acquire as the necessary situational context would be provided which is a highly constraining aspect in private life setting. If a workplace setting is set for sustainable activities, in private life these should be acquired voluntary. Accordingly, for an individual to obtain new behaviour, it has to be worthy behaviour to acquire. Consumer engagement is highly complex as it is influenced by a variety of different factors, varying between both social settings. For that reason, reflecting on Nik Ramli's and Naja's (2012) theoretical model, not only a workplace should be considered, but also private life setting and its influencing determinants for successful spill-over. Nik Ramli and Wahid (2011) underlined factors that influence the spill-over of proenvironmental behaviour process at both ends, proving the importance in spill-over process of both organisational and family/household factors. They concluded that clarity of organisational goals, training and teamwork are important factors in the workplace setting, whereas in the household setting these are: family cohesion and family support.

In terms of the organisational environment, influencing factors could be driven by long-term approaches suggested by Seebacher et al. (2010) earlier in the paper. These long-term approaches further should be raising the place attachment. Scannell and Gifford (2010) underlined that the attachment bond could be fostered through place, people and/or process. These might be occurring in either of these dimensions, relating their bond to personal drivers and experience; place and its social and physical aspects; and/or processes within the organisation. In context of this study, the important dimension is *the process* which accompanied with the following two would strengthen the potential spill-over process. Nik Ramli and Naja (2012) believe that the workplace attachment could be an important factor which would be rising the cognitive dissonance regarding the sustainable behavioural patterns in a private life. Accordingly, in private life, family related determinants should be considered with the situational aspects that highly influence individual behaviour (Nik Ramli and Wahid, 2011). Consequently, considering both ends of process, it could give more insights of spill-over process and support the explanation of positive spill-over outcome (see Figure 5).

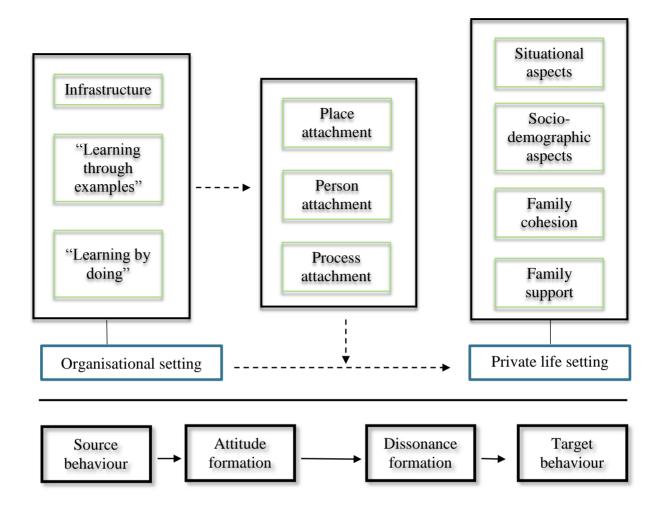


Figure 5. Theoretical model of the sustainable consumption behavioural spill-over from workplace to private life (adapted from Nik Ramli and Naja, 2012, p.1063, Scannell and Gifford, 2010, and Seebacher et al., 2010, Nik Ramli and Wahid, 2011)

If this spill-over from workplace to private life could be successfully justified, this would allow extensively to reinforce change toward sustainable consumption, helping authorities towards sustainable development. There had been various methods used in order to enlighten society regarding the environmental problems which have only raised awareness, but have not changed consumer behaviour. Hence, this thesis will be based on Nik Ramli and Naja (2012) proposed conceptual framework which have not be tested yet, accompanied with additional focus on organisational social setting influences and on household influencing determinants in order to explain the spill-over process from workplace to private life.

3. RESEARCH METHODOLOGY ON SUSTAINABLE CONSUMPTION SPILL-OVER FROM WORKPLACE TO PRIVATE LIFE

3.1 Reasoning the context of empirical research

The rising tendency towards sustainability in most of the Western countries is starting to affect the economic market (UNEP, 2012; Lursoft, 2015). Especially, since the CSR in Europe has changed from simple environmental reporting to sustainability including all three dimensions (Abou-El-Fotouh, 2016). Already 6000 companies in 2017 will be reporting their CSR practices (European Commission, 2014, cited in Abou-El-Fotouh, 2016). The growing amount of socially responsible companies is also starting to encourage other stakeholders both internal and external to acquire the same CSR strategic approach, particularly in such a globalised world (White, 2012). For that reason, the CSR could be great in supporting the national and international business cooperation, especially being part of European Union. However, the situation in Baltic countries especially in Latvia is highly alarming as companies do not address their liability issues regarding CSR (Lursoft, 2015). The main reasons for that are indicated as the lack of knowledge in analysing the company's responsibilities and sustainability risks, and lack of tendency to invest in the risk management (Lursoft, 2015). Nevertheless, 87% of the companies in Latvia believe that CSR is highly important or appropriate for the business interests (Lursoft, 2015). While, the main businesses reporting their social responsibilities are international companies or franchise holders operating in Baltics (Lursoft, 2015). For that reason, this research study has focused on international banks operating in Latvia.

According to Abou-El-Fotouh (2016), CSR practices are most frequently applied to banks' core business which are credit and investments. For that reason, typically bank's CSR activities are related to their core business activities and their impact on the environment has been mostly neglected. Their indirect impact is related to their core business activities which should support environmentally-friendly commitments in their credit decisions. Yet banks have also indirect impact on the environment which is based on consuming paper, energy, managing waste and means of transport used in their everyday operations. Therefore, their sustainable consumption activities can involve reduced use of paper and energy, waste management, and requiring suppliers to keep up with their socially responsible standards. While other CSR activities are concerned with the community involvement, ranging from charities to provision of academic scholarships. Therefore, this research will be looking at bank's activities concerning their indirect impact on the environment and the influencing factors in encouraging the employee sustainable consumption behaviour which could be supporting the spill-over process to private life.

3.2. Research problem, aim and objectives

Research problem: how employees from socially responsible companies are encouraged to acquire sustainable consumption behaviour and transfer it to their private life?

Research aim: the aim of this study is to explain the sustainable consumption spill-over from workplace to private life on a case of banks operating in Latvia. By determining the influences workplace has on an individual in acquiring sustainable consumption behavioural patterns which could further also encourage behavioural overtake to private life setting, would be a remarkable step towards the change towards sustainability and forward in achieving sustainable development. In order to do so, it was necessary to choose the appropriate theoretical tools that would allow development of analysis on the sustainable consumption especially considering the complexity of this phenomenon.

Research objectives:

- 1. To identify aspects concerning sustainable consumption in workplace, communicated by banks operating in Latvia in their websites.
- 2. To identify individual sustainable consumption activities in workplace performed by employees in banks operating in Latvia.
- 3. To determine how management of banks operating in Latvia encourage sustainable consumption within the workplace.
- 4. To identify individual sustainable consumption activities in private life performed by employees in banks operating in Latvia
- 5. To determine sustainable household consumption support and activities.
- 6. To identify similarities between sustainable consumption behaviour between social settings, underlining the spill-over effect.

The structure of research is based on the conceptual model indicated earlier in the paper, starting from *source behaviour* and ending at *target behaviour*. Accordingly, the main aspect is to define *the source behaviour* or the influencing factors in workplace that are encouraging employees in acquiring sustainable consumption behavioural patterns. Therefore, it is important to investigate how workplace can encourage the sustainable consumption behavioural spill-over process to private life, followed by other enhancing aspects along the spill-over process way

.

3.3. Research method and sample selection procedures

Research method

The complexity of this phenomena requires *qualitative approach* which allows to explore in detail social and organisational characteristics, individual behaviours and their meaning (Lapan et al. 2012). Research data have been critically collected recognising that reality is constructed through the meaning individuals give to a particular phenomenon, in the same time focusing on the way power is rooted in the social settings and how individuals become empowered to change themselves, the social settings around them, and even society as a whole (Schensul, 2012). For that reason, the information had been obtained by collecting primary data through *in-depth interviews* (Lapan et al., 2012). In order to get as thorough data as possible, the second research method was selected – *qualitative analysis of the secondary data*. While applying this method analysis of webpages of banks operating Latvia has been performed. This method allows to gather data needed to implement the first objective of the research. In-depth interviews have been carried out in order to reach other research objectives.

Sample selection

While implementing the *qualitative analysis of the secondary data* webpages of all banks operating in Latvia are going to be analysed. All information regarding the particular bank's sustainable or socially responsible activity is going to be considered as valuable data for the research.

For the in-depth interviews the **research target audience** is employees of different levels working in banks which operate in Latvia.

Interviewees selection

Since the research is aimed to analyse the employee's activity in the socially responsible banks operating in Latvia and their households, the employees of these companies are considered to be the target audience of this research. Therefore, interviewees' selection was based on the criterion sampling method (see Table 5). However, the names of the companies participated in the study are sealed to ensure their anonymity.

Table 5. General information of the selected study participants

Industry type	Interviewee position within the company
Banking	Management
	• Employees

Qualitative research emphasis is on validity rather than generalisability, therefore, it requires less for randomised sample, as the objective is to obtain significant data (Schensul, 2012). This kind of research is purposive, sampling participants according to their knowledge and experience in regard to the phenomenon (Schensul, 2012). This study is based on *criterion sampling*, determining set of criteria: 1) in the socially responsible bank in Latvia 2) the study respondents should be both from

management and staff (Schensul, 2012). Both sides of company stakeholders have been questioned in order to see the scene of different standpoints, reducing bias and errors of judgement in interpretation (Olsen, 2012). 8 out of 15 in-depth interviews were collected from management. Accordingly, 7 interviews were collected from employees. The similar patterns were drawn within and across the stakeholder groups. However, the approach of qualitative research using multiple qualitative approaches to data collection helped to obtain and learn about the perspectives, meanings, and understandings of people who live and work in specific social settings more carefully (Schensul, 2012).

3.4. Development of the research instrument for in-depth interviews

The research questions as research instrument was used to collect data through in-depth interviews (see Table 6). The questions are designed based on literature review and in accordance to the research objectives since there is not clear theory and framework in this field yet.

Table 6. Research objectives and questions

Research objectives	Questions to interviewee's
To identify individual sustainable consumption activities in workplace performed by employees in banks operating in Latvia	Managers: Tell about your daily routine activities related with sustainable consumption both at workplace. Please give concrete examples. Employees: What does sustainable consumption mean for you as an employee in socially responsible company? Tell about your daily routine activities related with sustainable consumption both at workplace. Please give concrete examples
To determine management of banks operating in Latvia support in acquiring sustainable consumption activities within the workplace	Managers: What does sustainable consumption mean for you as a manager in socially responsible company? Who and what supports your sustainable consumption at workplace? What do you think is a role of manager in encouraging sustainable consumption of all employees at workplace? Employees: Who and what supports your sustainable consumption at workplace? What do you think is a role of manager in encouraging sustainable consumption of all employees at workplace? Do you see his/ her behaviour as an exemplary?
To identify individual sustainable consumption activities in private life performed by employees in banks operating in Latvia	Managers: Tell about your daily routine activities related with sustainable consumption in private life. Please give concrete examples. Employees: What does sustainable consumption mean for you as an employee in socially responsible company? Tell about your daily routine activities related with sustainable consumption in private life. Please give concrete examples
To determine support of sustainable household consumption	Managers and employees: Who and what supports your sustainable consumption in private life? How many people you have in your household

Research objectives	Questions to interviewee's
	including you?
	What is the total monthly household income after
	taxes?
	Where do you live / what region?
	Managers and employees: How sustainable
To identify similarities between sustainable	consumption at workplace is reflected in sustainable
consumption behaviour between social settings,	consumption in private life?
underlining the spill-over effect	Could you say that you are more environmentally
	aware since you have started working here?

The research questions were designed differently between the management and their employees as the in-depth interviews with the management aimed to obtain systematic data, whereas with employees' interviews aimed to identify commonalities and differences on study topic (Schensul, 2012).

During in-depth interviews the follow up questions were asked in order to encourage discussion regarding the phenomena.

The exemplar in-depth interview plans are provided in the Appendix 1. Each of them starts with the introductory part during which the research aim and research context are presented to the interviewees consistent with the Information Sheet for Participants (Appendix 2). Then main research questions are included (Appendix 3). The third part of interview is dedicated to finalise discussion. Also, it is asked if the interviewee sees necessity to add something important what was not mentioned during the interview.

3.5. Implementation of the research and research data analysis method

The research was organised in two stages:

- 1. The analysis of the websites of banks operating in Latvia in order to understand the banking sector liabilities regarding sustainable consumption in Latvia;
- 2. The primary data collection which was collected during in-depth interviews.

The process of gathering primary research data took place from 3rd until 21st of April.

The main difficulties in organising the research were related with getting in touch with target audience and organising the meeting as people were not keen on being interviewed. There were companies that even never replied or declined the invite.

Research data analysis method: the qualitative content analysis was applied for the analysis of both primary and secondary data results. The process of qualitative data analysis was as follows:

- 1. Preparing the data in text format;
- 2. Defining the unit of analysis;
- 3. Grouping primary units into groups and themes according to their semantic meaning;
- 4. Titling categories and subcategories;

- 5. Testing the coding scheme;
- 6. Coding all the text;
- 7. Drawing conclusions from the coded data;
- 8. Reporting methods and findings.

4. RESEARCH ON SUSTAINABLE CONSUMSUMPTION SPILL-OVER FROM WORKPLACE TO PRIVATE LIFE FINDINGS AND DISCUSSION

In this section, the study results are discussed according to the research objectives. Firstly, the secondary research results regarding sustainable consumption in workplace communicated by banking sector in Latvia is presented. Afterwards, the primary research data analysis is presented and analysed regarding sustainable consumption in workplace and private life communicated by the bank management and employees operated in Latvia.

4.1. Identification of aspects concerning sustainable consumption in workplace, communicated by banks operating in Latvia in their websites

The secondary data analysis is based on the official websites of international banks operating in Latvia. This section is discussed in relation to the first research objective which is "to identify aspects concerning sustainable consumption in workplace, communicated by banks operating in Latvia in their websites". Results of secondary data content analysis are presented in the Table 7. It is needed to be mention that the websites use both Latvian and English languages in information provided regarding CSR.

Table 7. Sustainable consumption communicated by banks operating in Latvia in their websites

Category	Subcategory	Workplace	
	Infrastruktūra (Infrastructure)	saglabāt veselībai nekaitīgu darba vidigalvenā biroja mājair funkcionāla un kvalitatīvaapkures, ventilācijas un apgaismošanas sistēmas demonstrē augstākos ilgtspējīgas ēkas apsaimniekošanas principusatkritumu šķirošanas pakalpojumusbankas korporatīvajiem velosipēdiemarī cilvēkiem ar īpašām vajadzībām.	
Ilgspējīga darba vieta (Sustainable workplace)	Samazināts patēriņš (Reduced consumption)	samazinājies izmantotā papīra daudzums. Atkritumu apjoms samazinājiesenerģijas patēriņš sarucisūdens patēriņš samazinājiessustainable use of earth's finite resources and lower greenhouse gas emissions through all its businessesresource efficiencyreduce the indirect climate impactsreduce our greenhouse gas emissionsreduce our air travel, cash handling and security transportspromote digitisation through projectsincreased the share of renewable energypalielināt otrreiz pārstrādājamā papīra īpatsvaru.	
Atbildīga uzņēmējdarbība (Responsible business)	Vērtējot darbiniekus (Valuing people)	veicināt ikdienas mācīšanos un zināšanu apmaiņu starp darbiniekiemvadītāju profesionālās izaugsmes programmasuzlabojot darba apstākļus un novēršot saslimšanas ilgtspējas pasākumu pietiekamu aktualitāti visās uzņēmuma	

Category	Subcategory	Workplace
		struktūrvienībās.
		Darbinieku aptauja
		long-term relationships with customers and employee.
		investing more in our employees and creating a corporate
		culture that engages.
		professional leaders and an inspiring work environment.
		Our governance is based on employees being familiar with and
		working together to achieve common goals.
		aicinot piedalīties dažādās mācībās, kā arī izglītojošās un
		radošās darbnīcās.
		darba devēja orientācija uz darba un ģimenes dzīves
		saskaņošanu, nodrošinot elastīgu darba laiku, veselības
		aizsardzību darba vietā, atbalsta nodrošināšanu bērniem un
		ģimenēm veltītiem pasākumiem
		rādot pozitīvu piemēru arī citiem.

The first column named *category* indicates unit of analysis which have been communicated by banking sector in Latvia regarding sustainable consumption. The column named *subcategory* identifies the main aspects considered by banks in Latvia in fostering sustainable consumption at workplace. By exploring the information available on all official bank websites operated in Latvia, two categories related to sustainable consumption in workplace were identified.

The first category is **ilgspējīga darba vieta** (sustainable workplace). The main themes indicated in websites were concerning **infrastructure** provided by the workplace in fostering sustainable consumption, activities and already accomplished **reduced consumption** outcomes. In regard to infrastructure, the banks mainly discuss their "efficient head office buildings" and "waste management opportunities". Whereas, in reduced consumption outcomes, banks are discussing a variety of activities integrated such as: "reduced consumption of paper", "reduced consumption of energy", "reduced water consumption", "promote digitalisation through projects" and means of transport used in work related mobilisation like "reducing air travel".

The second category is **atbildīga uzņēmējdarbība** (responsible business) which is looking how companies support their employees in their workplace (**valuing people**). Employees are company's main asset and they are the ones who are consuming in workplace. Therefore, subcategory is looking at how companies are encouraging their employees. For example, "investing more in our employees and creating a corporate culture that engages." The ways companies foster their "corporate culture" includes how sustainable consumption patterns are integrated and accomplished.

According to the secondary research of official international bank websites operated in Latvia, some important aspects were drawn. First of all, the *banks in Latvia mainly communicate their socially responsible activities focused on the society*. The main themes regarding social responsibility were related to community involvement, ranging from sponsoring a variety of projects and events to helping disadvantaged part of society. Accordingly, the website overall information regarding sustainable

consumption is limited. However, there were some companies in this industry that also recognised their environmental impact, reducing their consumption amounts in areas like energy, water, waste and also pollution. These companies discuss their consumption reductions, indicating activities that are incorporated in their everyday operations.

Another aspect look at in the websites was the *organisation focus on their employees as a part of socially responsible business agenda*. It was identified that those banks which communicated their responsibility to the environment also greatly considered their responsibility to their employees, recognising them as an important asset in their companies. The main themes regarding the employees were related to educational programmes, organisational culture including employee relationships and general employees' well-being.

It can be concluded that banking industry do not relate themselves as companies causing high environmental impact, therefore, focusing on the areas they believe they can give the greatest contribution to. Since, their impact on the environment has not been broadly discussed, it gives only general idea about the ways the banking sector lessen the damage caused to the environment. The main areas related to the environment mentioned in websites were use of paper, water, and energy, waste management, pollution caused by mobilisation, while only briefly mentioning the actual resource use reduction activities and infrastructure supporting them. Accordingly, the main sustainable fields of expression are in resources, utilities and mobility.

4.2. Identification of sustainable consumption activities practiced by employees in banks operating in Latvia

In this section, the sustainable consumption in workplaces will be examined, discussing it regarding the first primary research objective which is "to identify individual sustainable consumption activities in workplace performed by employees in banks operating in Latvia". Accordingly, the sustainable activities are examined in relation to the first long-term strategy "learning by doing" which in this case from the perspective of management is "leading by doing". The results are presented and discussed from the management (see Table 8) and their employees' (see Table 9) viewpoints in order to determine both side sustainable consumption practices in workplace.

The *category "leading by doing"* identifies the sustainable activities that management has already incorporated into everyday life at work. The *subcategories* are defining the fields of expression underlined by management in workplace, followed by *sub-subcategory* indicating material issues.

Table 8. Management "leading by doing" sustainable activities

Category	Subcategory	Sub-subcategory	Workplace
"Leading by doing"	Resources	Use of materials	iniciēju ekrānus darbāizvēlos prezentusvenīrus, kā papīra pildspalvastaupīt drukāšanu, mazāks papīra patēriņškvītis klientiem-samazinātas no trīs uz vienas lapaspirkt reti un kvalitatīviinterneta vidē daudz informācijas apgrozasefektivitātes nemitīga meklēšanailglietošanas, preču lietošana tiešām ilgtermiņā. Visi uzņēmuma darbinieki cenšas taupīt resursusresursi tiek izmantoti efektīvāk, tiek meklēti veiksmīgāki risinājumirakstu uz abām pusēm papīram.
	Utilities	Energy use	nedegt lieki gaismupārdomāta resursu lietošanaefektivitātes nemitīga meklēšana.
		Water use	netērēt lieki ūdeni.
	Mobility/transport	Emissions	daudz kājām staigāju. ar sabiedrisko.

Management discusses various sustainable consumption activities that they practice themselves and encourage others in their workplaces. Most of the activities that they mention are focused on the manager everyday practices like "choosing present souvenirs like paper pens", "reducing client's receipt from three pages to one" and "buying products for long-term usage". Whereas, some activities they discuss are also related to everyday workplace operations such as "save in printing", "not to waste water and electricity" and "use of screens" in branches. Nevertheless, the main aspects the management encourage their employees are concerning the reduced consumption of paper and energy. Whereas, the managers themselves are looking for more efficient ways of consumption that can be incorporated in their branch operations. Therefore, it can be concluded that main sustainable consumption activities are practised and encouraged are resource and utility fields of expression. Although, the managers discuss the same sustainable consumption activities which from point of view underline the same pattern of sustainable activities encouraged, but from the other, it underlines the lack of diverse fields of sustainable expression in workplaces.

The *category* "*learning by doing*" identifies the sustainable activities that employees practice in their everyday life at work. The *subcategories* are defining the fields of expression underlined by

employees, followed by *sub-subcategory* indicating material issues.

Table 9. Employees determining sustainable activities in workplace

Category	Subcategory	Sub-subcategory	Workplace
Resources	Use of materials	tiek likts uzsvars uz papīra mazāku lietošanuatkritumu maisiņu izmantošanas samazināšanakonverti tiek lietoti atkārtotitiek vairāk attīstīta interneta vide, lai mazinātu izdales materiālusinformājas apmaiņa notiek caur internetu tika aizvākti visi papīrgrozi pie darbinieku galdiem, lai samazinātu atkritumu maisiņu patēriņu.	
"Learning by doing"	Utilities	Waste management	papīra smalcināšanas iespēja, kas vēlāk tiek nodots pārstrādes firmāmjāiztiek ar atkritumu tvertnēm, kas ir virtuvēs. Kafiju cenšos dzert no savas krūzītes, ne no vienreizējās papīra. Atkritumu šķirošanane plastmasas pudeļu izmantošana.
Mobility/transport		Energy use	nelietoju gaismu, kad nav nepieciešams. Nededzu lieki gaismu. izmantot efektīvi elektroresursusizslēgt gaismu. lieki netecinu ūdeni.
		Water use	Ūdens filtrēšana krānā, ne plastmasas pudeļu izmantošana.
	Emissions	Autoparkā izmanto arī hibrītautomašīnas. Tiecamies lidot/ceļot mazāk, tā vietā izmantot telefon/video konferences. Vai arī doties vienā mašīnā, ja vairāki kolēģi dodamies vienā virzienā.	

The employees underline diverse sustainable consumption activities practised in workplace in regard to three fields of expression. Firstly, in relation to resources, the interviewees indicate the "reduced use of paper", "reduced plastic bag consumption" and increased "use of electronics instead of paper" as their main sustainable consumption activities in workplace. Secondly, various sustainable activities concerning utilities are indicated. The main one is related to waste management, discussing activities such as: "shredded paper is given away to waste processing company", "use of reusable coffee cup" and "waste sorting". Moreover, some other sustainable activities are mentioned like "switching the light off" and "not wasting the water". Thirdly, the use of "hybrid cars in the parking lot" as means of transport in work related matters, "reduced use of travelling by plane" and "travelling

together if more colleagues are going in the same direction" have been discussed in regard mobility related to workplace. Therefore, it can be stated that employees indicate a great variety of sustainable activities practiced in workplace, comprising resources, utilities and mobility fields of expression.

Both management and employees' interview results indicate some important aspects regarding sustainable consumption in workplaces. Firstly, the interviewees underline sustainable consumption activities related to innovative service, highly incorporating digitalisation in their everyday operations. The managers talk about "the use of screens for information" in their branches while employees about "more developed internet environment" and "audio/video conferences" in terms of information exchange. Both the managers and employees discuss that these innovations "help to reduce printing material" and therefore "reduce the consumption of paper and other resources related to printing". There is an evident pattern that sustainable consumption activities are discussed in terms of reduced consumption. However, only small emphasis is put on utilities as sustainable field of expression, especially considering already available infrastructure in workplaces in fostering most of these sustainable consumption activities. Thus, it can be concluded that banks in Latvia only partially support sustainable consumption behaviour activities in their workplace. For that reason, the "learning by doing" has not been supported in a way that would foster habits and induce spill-over effect.

4.3. Determination how management of banks operating in Latvia encourage sustainable consumption within the workplace

In this section, the sustainable consumption in workplaces will be considered, discussing it regarding the second primary research objective which is "to determine management of banks operating in Latvia support in acquiring sustainable consumption activities within the workplace". The analysis is based on the second long-term strategic approach "learning through examples" which in this case from the perspective of management is "leading through examples". Furthermore, the results are presented and discussed from the management (see Table 10) and their employees' (see Table 11) viewpoints in order to determine both side encouragements in practicing sustainable consumption activities.

Table 10. Management on their importance in leading sustainable activities

Category	Workplace
"Leading through examples"	vadītājs nosaka kompānijā uzņēmuma politikusvarīgi atbalstīt. Owneriem jārāda piemērs, kā pārņemt ideju un ieviest ikdienā. Tam jānāk no augšas ar piemēriemkolektīvs seko. Lead by example. Leading by exampleuz pasākumiem organizēšanai censties izīrēt lietas, kas pēc tam vairs nebūs nepieciešamas, vai izvēlēties tādas, kurās iespējams izmantot vairākas reizes.

The management emphasise their own importance in fostering sustainable consumption activities in their workplaces. They underline that "owners have to show examples", "it has to come from the top with examples" and they have to "lead by example". It is interesting that the interviewees used English term "leading by examples" considering that the interviews were in Latvian language. Furthermore, considering the importance of management, the interviewees state that "the boss sets the politics in the organisation" which greatly accentuates the responsibility of management in developing corporate culture, including behavioural activities in relation to sustainable consumption.

The category "*learning through examples*" looked into the importance of **management** and **colleagues** in acquiring sustainable activities in workplace.

Table 11. Employees on the sustainable activity support in workplace

Category	Subcategory	Workplace	
"Learning through examples"	Management	Vadītājam darba vidē ir liela nozīme, var ietekmēt darbinieku domāšanu Tā ir visa uzņēmuma atbildībacenšoties ieviest pasākumus resursu taupīšanaivadība uzņēmumā nodrošina papīra smalcināšanas iespēju, kas vēlāk tiek nodots pārstrādes firmām. Bez vadītāja ieinteresētības un atbalsta tas nav iespējams vai dos ļoti mazu ieguldījumuja priekšnieks brauks ar mašīnu, kas patērē daudz degvielu, tas noteikti nebūs piemērs un darbiniekus tas nemotivēs. Jūtu, ka manā uzņēmumā tiecamies veicinātmērķis skaidrs visiem kopānodrošināt gan ražošanas procesos, gan darbinieku sadzīvē ilgtspējīgam patēriņam labvēlīgus apstākļus un efektīvu resursu izmantošanu. Jāskaidro uz ilgtspējīgu patēriņu balstītu lēmumu pieņemšanas iemesli. Valdība, ilgtspējas komiteja. Augstākā valdība, cenšoties ieviest pasākumus resursu taupīšanai. Valde. Katram darbiniekam ir nozīmīgi saprast, ka darba devējs domā par kopējo sabiedrības labumulabi piemēri viegli pielīp.	
	Colleagues	Leading by exampleikviens darbinieks to piekopj/atbalstaatgādinu kolēģiem, lai netērē elektroenerģijudarbinieki atbalsta. Šo to var "nokopēt".	

Employees underline the importance of management support and exemplary behaviour in the workplace by saying "without the manager interest and support this is not possible". One of the examples mentioned is that "the management provides paper shredder which further is transferred to

processing firms". Likewise, it has been said that "if the boss drives a car that consume a lot of fuel, it will certainly will not be an example and will not motivate employees" which clearly indicate that without their exemplary behaviour there will be no changes in organisation as it is the main source of motivation in acquiring new behavioural patterns. Nevertheless, a few study participants mention also the importance of their "colleagues with the same set of minds", as being part of encouragement. Also, colleagues "remind others not to waste electricity". However, the interviewees indicate that peer-to-peer learning is not effective if it is not supported by the management as "the higher management introduce with activities related with the resource efficiency". Therefore, employees believe that the management sets the organisational culture and influences the manner they interact.

Both the management and employees highly underline the importance of management support and exemplary behaviour in the workplace. The management understand their responsibility in leading through examples, likewise the employees indicate the need to see their management to acquire the activities that they encourage their employees to practice in workplace., it can be concluded that the "learning through examples" is influential method of learning in encouraging sustainable consumption activities in banks operated in Latvia. This can be greatly supported by one interviewee saying "I feel that my company strive to promote".

4.4. Determination of sustainable household consumption support and activities

In this section, the sustainable activities practised in private life are discussed in relation to the research objective "to identify individual sustainable consumption activities in private life". Since this part of the spill-over process in the target behaviour social setting, it has been briefly examined in order to draw similarities between the social settings.

The *category* "sustainable consumption activities" identifies the sustainable activities that employees practice in their private life. The subcategories are defining the fields of expression underlined by managers and employees, followed by sub-subcategory indicating material issues.

Sub-Category **Subcategory** Private life subcategory Vietējā pārtika. ...vietējais tirgus. ...vasarā laukos. Pirkt reti un kvalitatīvi. Pirkt lokālo. Vietējā pārtika. Vietējais laiku tirgus vasarā Sustainable Use of Resources consumption activities materials laukos. ...ekoloģiskus risinājumus ikdienā. ...videi draudzīgu tīrīšanas līdzekļu

izmantošana.

Table 12. Sustainable consumption in private life

Cenšos mazāk izmantot plastmasas maisinus.

Iepērkoties izmantot auduma maisiņu.

Category	Subcategory	Sub- subcategory	Private life
			Maz drēbes utml modes preces.
			Ilglietošanas preču lietošana tiešām
			ilgtermiņā.
			Cenšos neiesaistīties mirkļa vājuma pirkumos.
			Izvēlēties preces ar eko marķējumu.
			tiecos izvēlēties preces no uzņēmumiem,
			kas atbalsta izglspējīgu ražošanu.
			Atkritumu šķirošana.
			Video draudzīgi tīrīšanas līdzekļi.
		Waste	talko, paceļu atkritumus sēņojot.
		management	Atkriumu šķirošana.
	Utilities		Nepirkt drazas, kas piesārņo vidi.
			Lietas, kuras neizmantoju ziedoju labdarībai.
			slēdzam gaismu ārā.
		Energy use	Enerģijas patēriņa samazināšana.
			Pērku ekonomiskās spuldzes.
			daudz kājām staigāju.
	Mobility/transport	Emissions	ar auto vienu reizi nedēļā.
			ar sabiedrisko, īpaši tramvaju.

It is evident that the interviewees relate sustainable consumption more with household and private activities. They discuss their shopping patterns, "using woven bags", "buying environmentally friendly cleaning products", and "buying local as much as it is possible". Similarly, they are underlining their "waste sorting" and mobility patterns such as "walking a lot" and "use of public transport, especially the tram". Moreover, they discuss the reduced use of energy in household too, not only by "switching the light off", but also using "the efficient light bulbs". Nevertheless, the most evident sustainable consumption activities discussed are regarding sorting waste and sustainable shopping patterns. Therefore, interviewees consider their sustainable consumption activities in private life mainly in resource and utility fields of expression.

The Table 13 indicate *category* which is called "*household support*" identifying the household member support in practicing sustainable consumption activities in their private life.

Table 13. Household support in practicing sustainable consumption activities

Category	Private life
Category Household support	Es un sieva. Ģimene. Es pats. Visa ģimenevecmammaiemācīju mājāsievesta kārtība Es un vīrs.
	Es un vai nu uzņēmumi vai organizācijas, kuras
	izmantoju/atbalstu, jo tām ir šāda pārliecība.

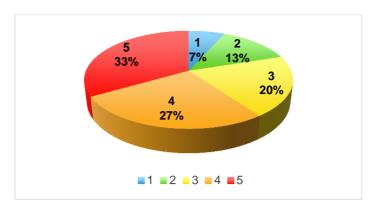


Figure 6. Amount of members in a household

The household support varies as the respondent household sizes range from living alone to five people household (see Figure 6). For that reason, there is not common pattern detected apart from the fact that most of them mention themselves as being one of those who is supporting sustainable consumption activities in their households (see Table 13). For example, "me and my wife", "me" and "me and my husband". Of course, the ways in which they support differs, but it indicates that they are to some extent environmentally aware. Therefore, in order to make some conclusion, there is a need for further household setting investigation. Similarly, the data collected does not allow to make any conclusions about family cohesion as interviewees discussed their own sustainable consumptions activities, not mentioning much about their family member sustainable consumption activities.

4.5. Identification of similarities between sustainable consumption behaviour between social settings, underlining the spill-over effect

This section is based on research objective "to identify similarities between sustainable consumption behaviour between social settings, underlining the spill-over effect". Firstly, the similarities between workplace and private life settings are discussed. Secondly, the study results regarding supporting aspects of spill-over process are indicated.

Similarities between sustainable consumption behaviour in social settings

The results underline the fact that the sustainable activities are performed by the same person either in workplace or in private life. This can be indicated while considering the main sustainable fields of expression, as both social settings are reflecting on the same three main fields which are: resources, utilities and mobility. The level of engagement in each of these fields are similar, however, the focus on each material issues varies. For example, regarding resources, workplace put emphasis on reduced use of paper in their everyday operations, whereas in private life the emphasis is on food quality. This can be explained by the fact that each social setting has its determinants in supporting sustainable consumption and related activities.

Spill-over

The *category* called "*spill-over*" determines **habits** and **information**, which are supporting the spill-over process. These *subcategories* explain important aspects discussed by manager and employees needed in stimulating spill-over process.

Table 14. Underlining the sustainable consumption spill-over process

Category	Subcategory	Workplace to private life	
	Habits	Veidojas ieradumi, kuri tiek ieviesti arī privātajā dzīvē. Lai veicinātu paradumusjāatstāj izvēles brīvībaiedvest domu par ilgtspējīgu patēriņu, viņš pats aizdomājas un ņemot piemēru no darba vietas sāk ikdiena meklēt efektīvākus risinājumus. Piekopjot ilgtspējīgu patēriņu darba vietā pamazām tas var tikt ieviests arī privātajā dzivē.	
Spill-over	Information	Liek aizdomāties un rada piemērus. Daļēji ietekmē, labi piemēri viegli pielīpvadītājs ietekmē darbinieku domāšanu, tādējādi veicinot ilgtspējīgu patēriņu arī privātajā dzīvēvairāk uzzinājusisanācis pamācīties, lasīt, klausīties citusdarba pienākumi liek uzzināt jaunucenšos stāstīt to visu darbiniekiemka vajag būt atbildīgiemmēs ne pēdējie šai pasaulērunāju ar jaunajiem biznesiem par materiāliem, procesiem, lai uz vidi pēc iespējas mazāka ietekmenedrīkst uzspiestkomunikācija, pareizi jākomunicē, jāskaidro kāpēc.	

The interviewees discussed that a workplace "raises awareness", pays their attention to "new ideas" and "gives examples" how to do sustainable activities. It has been underlined that "some examples from the workplace allows to look for more effective everyday solutions". Also, it has been emphasised that it is "one person in both settings", so if it is performed in one setting, it will be taken to some extent further in other. Therefore, some activities can be and "have become habitual and overtaken to their private life". Nevertheless, people believe that good examples always come around and become habitual, but it has to "come naturally with the support from workplace", allowing "the freedom of choice".

Place attachment

The *category* is named place attachment identifies what kind of bond employees have with their workplace. Thus, it was divided into three *subcategories*: **workplace attachment, person attachment,** and **process attachment.**

Table 15. Place attachment in underlining the spill-over process

Category	Subcategory	Workplace
Place attachment	Workplace attachment	Svarīga ir lokācija, apkārtējā vide, viegli pieejamaērtam un funcionālam.
	Person attachment	kam kalpo, galā ir cilvēksvērtības sākas ar cilvēka vērtībāmuzticēties kolēģiem. darbinieki, kas ir līdzīgi domājoši

Category	Subcategory	Workplace
		Cilvēki, savstarpējās attiecības.
		Patiesas attiecības.
		attiecības uzņēmumā.
		palīdzam viens otram.
		vairāk uzzinājusisanācis pamācīties, lasīt, klausīties
		citus
		laicīgi iedot padomus svarīgi atbalstīt.
	Process attachment	forši ir redzēt panākumusdarba augļus.
		rekomendēju savus darbiniekus.
		iedrošināt darbiniekus, stāstīt.
		apmēram 4 tūkstoši gadā, pamainīju pieeju.

Workplace attachment

The results do not indicate workplace attachment. Some specifics of location have been mentioned such as "the location is important" and "it has to be comfortable and functional", however, it does not clearly indicate any kind of bond between person and place related to sustainability.

Person attachment

It is discussed that good workplace environment cannot be without "truthful relationships", "ability to rely on colleagues" and "the management with similar values". Similarly, a few mention their individual attachment to the place like realisations, emphasising "saving around 4 thousand in one year", and experience, discussing "the knowledge gained from reading, learning and listening" in relation to the work tasks.

Process attachment

The process attachment is occurring on affective and cognitive level, however not related to the sustainable consumption. This is greatly connected with person attachment, as in some way it reflects the individual value and development. For example, "give the well-timed advice", "essentially to support" and "cool to see the results".

There are various sustainable activities that can be overtaken from workplace to private life. In view of that, the study results clearly indicate that interviewees believe that that good examples always come around, becoming part of daily routine. Accordingly, they state that workplace can engage employees in sustainable activities in a way that they become habitual and further be overtaken to their private life. However, interviewees imply that there should be freedom of choice, so it comes naturally. In view of that, *place attachment* is one of the various determinants naturally supporting this spill-over process. Interviewees highly emphasise the importance of people in their workplaces. The results clearly identified emotional bond related to person, occurring on individual and collective level in the workplace as the main dimension, only then followed by process dimension.

In the conclusion, it is suggested that people believe that banks operated in Latvia are good place for learning, practicing activities in workplace so these can be overtaken to private life. However, banks operated in Latvia should be supporting the information regarding sustainable

consumption possibilities and encouraging activities in workplace in a way that they become part of their everyday life practices. Then naturally building emotional bond related to person on both emotional levels in order to foster great workplace environment that will be supporting sustainable consumption activities in workplace and further in private life.

4.6. Summary of the research findings, recommendations and discussion

The banking sector do not relate themselves as companies causing high environmental impact, therefore, focusing on the areas they believe they can give the greatest contribution to. However, this neglects the important aspects in terms of the environment. Particularly important it is, since the main problems regarding the environment and human activity are related to the use of energy, materials, waste management and pollution (Krajhanzl, 2010). Even though, financing industry is service based, it does not mean that they do not affect the environment. Therefore, there is a need to acquire recommendations regarding sustainable consumption activities that would help to encourage sustainable consumption spill-over from workplace to private life.

Workplace as source behaviour encouraging the spill-over process

The study results indicate *resources* as the main sustainable field of expression in banks operated in Latvia, followed by *utilities* and *mobility*. A variety of sustainable consumption activities are related with resources, especially paper. The banks in their workplaces are acquiring more digitalised consumption behavioural patterns in order to reduce the use of paper and related resources for printing. There is an evident pattern that sustainable consumption activities are discussed in terms of reduced consumption. Unfortunately, only small emphasis is placed on utilities as sustainable field of expression in fostering highly important sustainable consumption activities like waste sorting, energy and water reduction. Thus, it can be concluded that banks operated in Latvia only partially support sustainable consumption behaviour activities in their workplaces. In view of that, the "learning by doing" has not been supported in a way that would foster habits and induce spill-over effect.

Each workplace has their own workplace settings, including policies, colleagues and corporate culture which have the ability to shape people's attitude and behaviour (Muster, 2011). For that reason, the influencing determinants vary across workplaces. Nevertheless, the overall study results indicate that "learning through examples" is the most influential long-term strategic approach in engaging employees in sustainable consumption activities in banks operated in Latvia. Employees underline the importance of "leading through examples" in the workplace, clearly indicating that without their exemplary behaviour there will be no changes in organisation as it is considered to be the main source of motivation in acquiring new behavioural patterns. Nevertheless, a few study participants mention also the importance of their colleagues as being part of encouragement, but the research results underline that peer-to-peer learning is not effective if it is not supported by the

management. Therefore, employees believe that the management sets the organisational culture and influences the manner they interact. Accordingly, only by creating the environment where sustainability is a common objective, it will become easier for people to learn and engage in everyday sustainable behaviours. For that reason, it can be concluded that "leading through examples" is highly important approach that need to be acquired by bank managers operated in Latvia in order to encourage sustainable consumption behaviours in workplace.

Private life as target behaviour in the spill-over process

Workplace has been recognised as an inducing source for sustainable behaviour, however there is high importance on a household setting support in the spill-over process. It is evident that the interviewees relate sustainable consumption more with household and private life activities. The interviewees consider their sustainable consumption activities in private life mainly in *resource* and *utility* fields of expression. The most evident sustainable consumption activities discussed are regarding sorting waste and sustainable shopping patterns.

Determinants encouraging the spill-over from workplace to private life

There are various sustainable activities that can be overtaken from workplace to private life. Everyday workplace setting has been considered to be convenient for establishing and promoting sustainable consumption behaviour patterns (Seebacher et al. 2010). In view of that, workplace is considered to be *source behaviour* as all activities and experiences practiced by individuals will have some kind of effects on their attitude, values and norms (Nik Ramli and Naja, 2012). Therefore, by encouraging sustainable consumption behavioural patterns in workplace, there is a great possibility to form new attitudes and behaviours which can further be overtaken to private life.

The managerial support of employees to act in sustainable manner has a strong effect on sustainable behaviour in workplace. Employees clearly indicate that good examples always come around, becoming part of daily routine. However, the employees underline the importance of management support and exemplary behaviour while giving the freedom of choice, so it comes naturally. In view of that, place attachment is one of the various determinants naturally supporting this spill-over process. In context of this study, the importance of the process attachment dimension accompanied with the following two was indicated, as it would strengthen the potential spill-over process (Nik Ramli and Naja, 2012). However, interviewees highly emphasised the importance of people in their workplaces, clearly identifying emotional bond related to person attachment dimension, only then followed by process dimension. Therefore, the theory proposed in the literature review was not fully supported by banks operating in Latvia. However, the long-term approach "leading through examples" and person attachment are encouraging the spill-over process only in different manner (Scannell and Gifford, 2010). In the conclusion, it is suggested that people believe that banks operated in Latvia are good place for learning, practicing activities in

workplace so these can be overtaken to private life. However, banks should be supporting the information regarding sustainable consumption possibilities and encouraging activities in workplace in a way that they become part of their everyday life practices. These would naturally encourage the development of greater process attachment bond and further raising the cognitive dissonance in relation to the sustainable behavioural patterns in a private life (Nik Ramli and Naja, 2012). Then, naturally building greater emotional bond in order to foster great workplace environment that will be supporting sustainable consumption activities in workplace and further in private life.

Recommendations for banks operating in Latvia:

- To communicate clearly about sustainable consumption initiatives inside of the company, expressing the role of management in supporting employees by "learning through examples" and "learning by doing".
- To develop infrastructure which would foster waste sorting, consumption of healthy homemade food.
- To train managers how to encourage employees in acquiring sustainable consumption behavioural patterns and activities.
- To organize events or competitions for employees and their relatives which incorporate sustainable activities and raise awareness in the field. This would also help to guarantee the spill-over effect when sustainability values are brought from work to home, through family cohesion.

Research validity, limitations and recommendations for future research

In researching complex processes such as sustainable consumption, it is important to construct a reliable and valid case. The primary data were gathered through interviews of study participants for explanations and interpretations of operational data. There were a few limitations to this kind of research as the information is received through the exchange of an individual and researcher, introducing biases into the process of analysis. Therefore, it is argued that single data collection like interview could present less accurate information, since interviewer and interviewee could have different word meaning assumptions that accordingly would misguide attributes that represent the theme. In this case, the understanding of word meaning to some extant miscarried to address the important aspects that needed to be considered. For that reason, the secondary data collected from written documents such as website assisted in uncovering inconsistencies between intent and outcome (Barbour 2008). Moreover, the ability to speak the local language enhanced the involvement in informed interviews, and related data collection activities (Schensul 2012). Viewing the limitation, the use of multiple resources of evidence helped to construct convergent evidence and to strengthen the validity of this study (Yin 2014).

With reference to the above mentioned insights, for the future research it is recommended:

- To repeat the research in other sectors, companies of which are considered as socially responsible.
- To research sustainable household consumption in order to gather more detailed information regarding expression of family support and cohesion.
- To research how balance between work and private life affects sustainable consumption spillover from workplace to private life.

CONCLUSIONS AND RECOMMENDATIONS

- 1. The analysis of problematic aspects regarding consumer engagement into sustainable behaviour indicated that they are related to various practical difficulties like waste management, premium pricing, and ineffective means of communicating the environmental problems. Whereas, there are various priorities reflected regarding consumer engagement into sustainable behaviour related to the business such as: financial and social benefits. Accordingly, there are various influencing determinants that need to be considered in order to understand the influences that drive sustainable behaviour at workplace and in private life. Even though, there is a great range of studies that have investigated parts of sustainable consumption behaviour spill-over from workplace to private life, there is an overall lack of scientific research that is contributed to the holistic evidence. Workplace is considered as an inducing source, which can stimulate or draw-back sustainable behaviour both at workplace and in private life.
- 2. According to the analysis of scientific literature, sustainable consumption behaviour is defined as a consumption of more sustainable products and services, focusing on aspects that would incorporate social, economic and ecological concerns regarding the impact on environment. Consumer behaviour is significant contributor to the impact the society has on the environment. People consume in every step of their everyday activities which require a lot of resources in a production process, delivery and use. This underlines that consumption and production are interdependent, consuming resources in both work and private life settings. Therefore, decisions which would allow finding the best way to meet peoples' needs without affecting the planet's natural resources. As the literature review suggests, this can be done in various ways, for instance, reducing water consumption, recycling, and managing use of energy. But all these sustainability related activities should be expressed in as many social settings as possible.
- 3. In regards to the literature review, it is stated that there are various influencing determinants encouraging sustainable consumption behavior spill-over. The managerial support of employees to act in sustainable manner has a strong effect on sustainable behaviour in workplace. It is argued that two long-term driven approaches can be used to cultivate learning in order to obtain positive spill-over effect: "learning through examples", i.e. it comes from management and colleagues by their own behavioural activitities, and "learning by doing", which is related to the daily routines done by a particular employee.
- 4. After the thorough analysis of scientific literature the conceptual framework of sustainable consumption behaviour spill-over from workplace to private life is composed. It encompasses all theoretical findings and gives a detailed description of the pattern how sustainable consumption can be spilled-over from workplace social setting to private life. The most important finding is

in three main stages: workplace, spill-over, and private life. The process starts with *source behaviour* which is fostered in workplace. Further, the *source behaviour* would lead to new *attitude formation*, creating *dissonance* and conclude as *target behaviour* in private life. The spill-over process is based on dissonance. People are expected to have a strong desire to be consistent in their attitudes, beliefs, words, and behaviour, thus seeking consistency in their cognitions.

5. According to the empirical research findings to propose recommendations for companies to incorporate efficient sustainable consumption behavioural activities into the everyday activities in order to encourage sustainable consumption behaviour spill over from workplace to private life. The empirical research was carried out in the Latvian banking industry because companies from this sector are considered as socially responsible, which implies that they are involved into sustainable consumption. Two methods were applied in the empirical research: analysis of secondary data (bank websites) and in-depth interview with both managers and employees. Empirical research findings indicate that the banking sector do not relate themselves as companies causing high environmental impact, therefore, focusing on the areas they believe they can give the greatest contribution to. The study results indicate resources as the main sustainable field of expression in banks operated in Latvia, followed by utilities and mobility. A variety of sustainable consumption activities are related with resources, especially paper. It can be concluded that banks operated in Latvia only partially support sustainable consumption behaviour activities in their workplaces. In view of that, the "learning by doing" has not been supported in a way that would foster habits and induce spill-over effect.

The study results indicate that "learning through examples" is the most influential long-term strategic approach in engaging employees in sustainable consumption activities in banks operated in Latvia. There are clear indications that without exemplary behaviour of managers there will be no changes in organisation as it is considered to be the main source of motivation in acquiring new behavioural patterns. The observation of colleagues' behaviour is also a valuable source of learning to consume sustainably. However, the research results underline that peer-to-peer learning is not effective if it is not supported by the management. Accordingly, only by creating the environment where sustainability is a common objective, it will become easier for people to learn and engage in everyday sustainable behaviours.

The research results indicate that employees of banks operating in Latvia relate sustainable consumption more with household and private life activities, but not with the working environment. The most evident sustainable consumption activities discussed are regarding sorting waste and sustainable shopping patterns.

While analysing the spill-over effect, it is revealed that place attachment is one of the various determinants naturally supporting this spill-over process. In context of this study, the importance of *the process* attachment dimension accompanied with the following two was indicated, as it would strengthen the potential spill-over process. In the conclusion, it is suggested that people believe that banks operated in Latvia are good place for learning, practicing activities in workplace so these can be overtaken to private life. However, banks should be supporting the information regarding sustainable consumption possibilities and encouraging activities in workplace in a way that they become part of their everyday life practices. These would naturally encourage the development of greater process attachment bond and further raising the cognitive dissonance in relation to the sustainable behavioural patterns in a private life. Then, naturally building greater emotional bond in order to foster great workplace environment that will be supporting sustainable consumption activities in workplace and further in private life.

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Recommendation for the future research:

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- To research sustainable household consumption in order to gather more detailed information regarding expression of family support and cohesion.
- To research how balance between work and private life affects sustainable consumption spillover from workplace to private life.

LIST OF REFERENCES

- Abou-El-Fotouh, H. (2016). Corporate Social Responsibility: What does it Mean? *Banking & Finance, Social Impact*. Retrieved from: https://www.linkedin.com/pulse/corporate-social-responsibility-banks-what-does-mean-abou-el-fotouh
- Aronson, E. (2011). The Evolution of Cognitive Dissonance Theory: a Personal Appraisal. The Science of Social Influence. In: Pratkanis, A. R. *The science of social influence: advances and future progress* (pp.115-137). New York: Psychology Press.
- Ashforth, B. E. and Mael, F. (1989). Social Identity Theory and the Organisation. *Academy of management Review*, 17(1), 20-39. Retrieved from: https://www.researchgate.net/profile/Blake_Ashforth/publication/310438930_Social_identity_theory_and_the_organization/link s/583c91ee08ae502a85e3e966.pdf
- Barbour, R. (2008). *Introducing Qualitative Research: A Student Guide to the Craft of Doing Qualitative Research*. London: Sage Publications.
- Barr, S. and Gilg, A. (2006). Sustainable Lifestyles: Framing Environmental Action in and Around the Home. Geoforum 37, 906-920. Retrieved from: http://www.sciencedirect.com/science/article/pii/S0016718506000583
- Bhattacherjee, A. (2012). *Social Science Research: Principles, Methods, and Practices* [online]. 2nd ed. Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License. Retrieved from: http://scholarcommons.usf.edu/cgi/viewcontent.cgi?article=1002&context=oa_textbooks
- Blok, V., Wesselink, R., Studynka, O., and Kemp, R. (2014). Encouraging Sustainability in the Workplace: a Survey on the Pro-Environmental Behaviour of University Employees. *Journal of Cleaner Production*, 106, 55-67. http://dx.doi.org/10.1016/j.jclepro.2014.07.063
- Deanne, L. and Loverock, T. (2010). Employee Pro-Environmental Behaviours: Workplace Culture as a Driver for Social Change. *Master of Arts*, 1-158. Retrieved from: https://dspace.royalroads.ca/bitstream/handle/10170/399/Turnbull%20Loverock,%20Deanne.pdf?sequence=3
- DEFRA and DTI. (2003). Changing Patterns: UK Government Framework for Sustainable Consumption and Development. Retrieved from: http://collections.europarchive.org/tna/20060810193049/
 http://www.defra.gov.uk/environment/business/scp/pdf/changing-patterns.pdf
- DEFRA. (2008). *A Framework for Pro-Environmental Behaviours*. Retrieved from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69277/pb13574-behaviours-report-080110.pdf
- Dickerson, C. A. Thibodeau, R., Aronson, E. and Miller, D. (1992). Using Cognitive Dissonance to Encourage Water Conservation. *Journal of Applied Social Psychology*, 22, 11, 841-854. Retrieved

- from: http://media.cbsm.com/uploads/1/CogntiveDissonanceWaterConservation.pdf
- Egmond van, K. (2014). Sustainable Sivilizations. Basingstoke, Hampshire: Palgrave MacMillan.
- European Commission. (2011). Communication from the Commission to the European Parlament, the Council, the European Economic and Social Committee and the Committee of the Regions.:

 Increasing the impact of EU Development Policy. Retrieved from: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM%3A2011%3A0637%3AFIN%3AEN%3APDF
- European Commission. (2011a). *Corporate Social Responsibility: a New Definition, a new Agenda For Action*. Retrieved from: http://europa.eu/rapid/press-release_MEMO-11-730_en.htm
- European Commission. (2016). *Sustainable Development*. Retrieved from: http://ec.europa.eu/environment/eussd/escp_en.htm
- European Environment Agency. (2014). Environmental Indicators Report 2014: Environmental Impacts of Production-Consumption System in Europe. Luxembourg: Publications Office of European Union.
- EY. (2016). Global Sustainability Tax Primer: an Overview of Environmental and Energy Taxes, Sustainability Incentives, and Carbon Regimes. Retrieved from: http://www.ey.com/Publication/vwLUAssets/EY-global-sustainability-taxes/%24FILE/EY-global-sustainability-taxes.pdf
- Festinger, I. (1957). A Theory of Cognitive Dissonance. Stanford University Press.
- Fielding, K.S. and Hornsey, M. J. (2016). A Social Identity Analysis of Climate Change and Environmental Attitudes and Behaviour`; Insights and Opportunities. Front. Psychol. 7(121). https://doi.org/10.3389/fpsyg.2016.00121
- Gibson, C., Farbotko, C., Head, L., Waitt, G. (2013). Household Sustainability: Challenges and Dilemmas in Everyday Life. *International Journal of Sustainability in Higher Education*, 15(1), 1-256. Emerald Group Publishing Limited.
- Harmon-Jones, E. (2002). A Cognitive Dissonance: Theory Perspective on Persuasion. In: Dillard, J.P. and Pfau, M. The persuasion handbook: development in theory and practice (99-117). London: Sage Publications, Inc.
- Harris, J. M. (2000). Basic Principles of Sustainable Development. *Global Development and Environment Institute*, 1-26. Retrieved from: http://ase.tufts.edu/gdae/publications/working_papers/Sustainable%20Development.pdf
- Hertwick, E. G. (2006). Accounting for Sustainable Consumption: a Review of Studies of the Environmental Impacts of Households. In: Jackson, T. *The Earthscan Reader in Sustainable Consumption* (pp.88-109). Padstow, Cornwall: TJ International.
- Hogg, M. A., Terry, D. J. and White, K. M. (1995). A Tale of Two Theories: a Critical Comparison of Identity Theory with Social Identity Theory. Social Psychology Wuarterly, 58(4), 255-269.

- Retrieved from: http://www.communicationcache.com/uploads/1/0/8/8/10887248/a_tale_of_two theories- a critical comparison of identity theory with social identity theory.pdf
- Hohnen, P. and Potts, J. (2007). Corporate Social Responsibility: an Implementation Guide for Business. International Institute for Sustainable Development. Retrieved from: http://www.iisd.org/pdf/2007/csr_guide.pdf
- IDEO. (2017). Sustainability: a Lens for Design. Retrieved from: http://www.designersaccord.org/progress_report/images/IDEO_LCAw_DA.pdf
- IPCC (Intergovernmental Panel on Climate Change). (2014). Climate Change 2014: Synthesis Report.

 Retrieved from: http://www.ipcc.ch/pdf/assessment-report/ar5/syr/SYR_AR5_FINAL_full_wcover.pdf
- Jackson, T. (2005). Motivating Sustainable Consumption: a Review of Evidence on Consumer Behaviour and Behavioural Change. *Sustainable Development Research Network*. Retrieved from: http://www.sustainablelifestyles.ac.uk/sites/default/files/motivating_sc_final.pdf
- Jackson, T. (2006). The Earthscan Reader in Sustainable Consumption. TJ International: Padstow, Cornwall.
- Klade, M., Mert, W., Seebacher, U. and Schultz, I. (2013). Sustainable Behaviour at Work and in Private Life: the Contribution of Enterprises. *Int. J. Innovation and Sustainable development*, 7(4), 321-332. Retrieved from: http://www.tb-klade.at/wp-content/uploads/2015/06/IJISD70401_Klade-et-al.pdf
- Kollmuss, A. an Agyeman, J. (2002). Mind the Gap: why do People Act Environmentally and what are the Barriers to Pro-Environmental Behaviour? *Environmental Education Research*, 8(3). Retrieved from: http://psychsustain.voices.wooster.edu/files/2014/01/Mind-Gap.pdf
- Krajhanzl, J. (2010). Environmental and Pro-Environmental Behaviour. *Health Education: International Experiences*,1-24. Retrieved from: http://www.ped.muni.cz/z21/knihy/2011/36/36/texty/eng/krajhanzl.pdf
- Lanzini, P. (2013). *Pro-Environmental Spillover in Consumer Behaviour: Existence and Drivers*. Retrieved from: http://dspace.unive.it/bitstream/handle/10579/3069/lanzini_955696_tesi.pdf? sequence=1
- Lapan, S.D., Quartaroli, M. and Riemer, F.J. (2012). Introduction to Qualitative Research. In Lapan, S.L., Quartartoli, M.T. and Riemer, F, J. (Eds.), *Qualitative Research*, 3-19, San Francisco: Josey-Bass.
- Loverock, D.T. and Newell, R. (2012). *Pro-Environmental Behaviours in the Workplace: Driving Social Change*. Retrieved from: https://crcresearch.org/community-research-connections/crc-case-studies/pro-environmental-behaviours-workplace-driving-socia

- Lursoft. (2015). Pētījums: Latvijas uzņēmumiem var rasties sarežģījumi dalībai starptautiskajās piegādes ķēdēs. Retrieved from: http://blog.lursoft.lv/2015/11/24/petijums-latvijas-uznemumiem-var-rasties-sarezgijumi-dalibai-starptautiskajas-piegades-kedes/
- Maltzman, R. and Shirley, D. (2011). *Green Project Management*. Boca Raton: Taylor and Francis Group, LLC.
- Manchynski, S., Siniak, N., Zrobek-Rozanska, A. and Zrobek, S. (2016). Sustainability Performance in the Baltic Sea Region. Land Use Policy, 57, 489-498. http://dx.doi.org/10.1016/j. landusepol.2016.06.003
- Manzhynski, S., Siniak, N., Zrobek-Rozanska, A., and Zrobek, S. (2016). Sustainability Performance in the Baltic Sea Region. Land Use Policy, 57, 489-498. Retrieved from: http://www.sciencedirect.com/science/article/pii/S0264837715301320
- Matz, D. C. and Wood, W. (2005). Cognitive Dissonance in Groups: the Consequences of Disagreement. *Journal of Personality and social Psychology*. 88, 1, 22-37. Retrieved from: https://pdfs.semanticscholar.org/b006/f144cdc5781951d21c17405f9695e8112719.pdf
- McKimmie, B. M. (2015). Cognitive Dissonance in Groups. *Social and Personality Psychology Compass*, 9(4), 202-212. Retrieved from: http://web.b.ebscohost.com/ehost/pdfviewer/pdfviewer? vid=4&sid=a1a18240-e767-4599-8645-309e378f04aa%40sessionmgr101&hid=124
- Merriam-Webster. (2016). *Household*. Retrieved from: http://www.merriam-webster.com/dictionary/household
- Munasinghe, M. (2010). Can Sustainable Consumers and Producers Save the Planet? Journal of Industrial Ecology.
- Muser, V. and Schrader, U. (2011). Green Work-Life Balance: a New Perspective for Green HRM. *German Journal of Human Resource Management*, 25(2), 140-156. Retrieved from: http://www.hampp-ejournals.de/hampp-verlag-services/get?file=/frei/zfp_2_2011_muster
- Muster, V. (2011). Companies Promoting Sustainable Consumption of Employees. *Consumer Policy*, 34, 161-174. http://dx.doi.org/10.1007/s10603-010-9143-4
- NCC. (2014). *Annual Report*. Retrieved from: http://viewer.zmags.com/publication/85b5c038#/85b5c038/46
- New Economics Foundation (NEF). (2005). Behavioural Economics: Seven Principles for Policy-Makers. Retrieved from: http://www.i-r-e.org/docs/a005_behavioural-economics-7-principles-for-policy-makers.pdf
- Nik Ramli, N.A.R. and Naja, M. (2011). Spill Over of Environmentally Friendly Behaviour Phenomenon: the Mediating Effect of Employee Organisational Identification. *OIDA International Journal of Sustainable Development*, 29-42. Retrieved from: http://www.oidaijsd.com/Files/2-12-3.pdf

- Nik Ramli, N.A.R. and Naja, M. (2012). A Discussion of Underlying Theories Explaining the Spillover of Environmentally Friendly Behaviour Phenomenon. *Social and Behavioural Sciences*, 50, 1061-1072. Retrieved from: http://dx.doi.org/10.1016/j.sbspro.2012.08.106
- Nik Ramli, N.A.R. and Wahid, N. H. A. (2012). Positive Spillover of Pro-Environmental Behaviour Phenomenon: Influence of Organisational and Family Factors. Retrieved from: http://www.ipedr.com/vol56/016-ICOSH2012-F10003.pdf
- Norwegian Minister of Environment. (1994). *Oslo Rountable on Sustainable Production and Consumption*. Retrieved from: http://www.iisd.ca/consume/oslo000.html
- OECD. (2002). Towards Sustainable Household Consumption? Trends and Policies in OECD Countries. Retrieved from: https://www.oecd.org/env/consumption-innovation/1938984.pdf
- OECD. (2008). *Promoting Sustainable Consumption: Good Practices in OECD Countries*. Retrieved from: http://www.oecd.org/greengrowth/40317373.pdf
- Olsen, W. (2012). Data Collection: Key Debates and Methods in Social Research. London: SAGE Publications Ltd
- Pickens, J. (2005). Attitudes and Perceptions. In: Borkowski, N. *Organisational Behaviour in Health Care* (PP.45-76). Sudbury: Jones and Barlett Publishers.
- Salo, M., Nissinen, A., Lilja, R. Olkanen, E., O'Neill, M. Uotinen, M. (2015). Tailored Advice and Services to Enhance Sustainable Household Consumption in Finland. *Journal of Cleaner Production*. http://dx.doi.org/10.1016/j.jclepro.2016.01.092
- Scannell, L. and Gifford, R. (2010). Defining Place Attachment: a Tripartite Organizing Framework. *Journal of Environmental Psychology*, 30, .1-10. Retrieved from: http://web.uvic.ca/~esplab/sites/default/files/2010%20Tripartite%20Scannell.pdf
- Schensul, J. J. (2012). Methodology, Methods and Tools in Qualitative Research. In Lapan, S.L., Quartartoli, M.T. and Riemer, F, J. (Eds.), *Qualitative Research*, 69-107, San Francisco: Josey-Bass.
- Seebacher, U., Klade, M., and Schultz, I. (2010). Sustainable Behaviour at Work and in Private Life: Companies as a Learning Place for Sustainable Patterns of Living. *Research paper*. Retrieved from: http://www.iff.ac.at/oe/media/documents/Paper Seebacher-Klade-Schultz.pdf
- Seyfang, G. (2011). The New Economics of Sustainable Consumption: Seeds of Change. Palgrave Macmillan.
- Staddon, S. C. Cycil, C. Goulden, M. Leygue, C., and Spence, A. (2015). *Energy Research & Social Science*. 17, 30-51. http://dx.doi.org/10.1016/j.erss.2016.03.027
- Sustainable Consumption Institute. (2016). *Sustainable Consumption Institute*. Retrieved from: http://www.sci.manchester.ac.uk/home
- Thogersen, J. (2012). Pro-Environmental Spillover: Review of Research on the Different Pathways

- through which Performing one Pro-Environmental Behaviour can Influence the Likelihood of Performing Another. Retrieved from: http://www.behaviourworksaustralia.org/V2/wp-content/uploads/2015/10/Review-of-spillover-researchJohn-Thøgersen.pdf
- Thogersen, J. and Olander, F. (2003). Spillover of Environment-Friendly Consumer Behaviour. *Journal of Environmental Phycology*, 23(3), 225-236. http://dx.doi.org/10.1016/S0272-4944(03)00018-5
- Tudor, T. Barr, S. and Gilg, A. (2007). A Tale of Two Locational Settings: is there a Link Between Pro-Environmental Behaviour at Work and at Home? *Local Environment*, 12(4), 409-421. Retrieved from: http://web.b.ebscohost.com/ehost/pdfviewer/pdfviewer?vid=4&sid=1c60d6a4-8145-4b01-92a9-42b3fc2ccf96%40sessionmgr103&hid=124
- UNESCO. (2005). *UN Decade of Education for Sustainable Development 2005-2014: the DESD at a glance*. Retrieved from: http://unesdoc.unesco.org/images/0014/001416/141629e.pdf
- United Nations Development Programme. (1998). Consumption from a Human Development Perspective. Human Development Report, Oxford University Press. In: Jackson, T. 2006. *The Earthscan reader in sustainable consumption* (pp.27-39). TJ International: Padstow, Cornwall.
- United Nations Environment Programme (UNEP). (2012). The Business Case for the Green Economy: Sustainable Return Investment. Retrieved from: http://www.unep.fr/shared/publications/pdf/DTIx1553xPA-BusinessCaseforGreenEconomy.pdf
- United Nations Environment Programme. (2015). Sustainable Consumption and Production: a Handbook for Policy Makers. Retrieved from: https://sustainabledevelopment.un.org/content/documents/1951Sustainable%20Consumption.pdf
- United Nations. (2012). *Sustainable Development in the 21st century*. Retrieved from: https://sustainabledevelopment.un.org/resources/sd21
- United Nations. (2015). *Resolution Adopted by the General Assembly on 25 September 2015*. Retrieved from: http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E
- United Nations. (2015). *Sustainable Development Goals*. Retrieved from: https://sustainabledevelopment.un.org/?menu=1300
- Wang, R. (2012). How to Engage your Customers and Employees. *Harvard Business Review*. Retrieved from: https://hbr.org/2012/05/how-to-engage-your-customers-a
- WBCSD. (2008). *Sustainable Consumption Facts and Trends: from a Business Perspective*. Retrieved from:http://wbcsdservers.org/wbcsdpublications/cd_files/datas/business-solutions/consumption/pdf/ AVisionForSustainableConsumption.pdf
- WCED. (The World Commission on Environment and Development). (1987). Report of the World Commission on Environment and Development: Our Common Future. Retrieved from: http://www.un-documents.net/ocf-02.htm#I

- WDCSD. (2011). A Vision for Sustainable Consumption: Innovation, Collaboration, and the Management Choice. Retrieved from: http://www.colorado.edu/AmStudies/lewis/sustain/visionconsumption.pdf
- White, S. E. (2012). Sustainability: the Rising Global Interest in Sustainability and Corporate Social Responsibility Reporting. Retrieved from: http://sustainability.thomsonreuters.com/2012/10/05/the-rising-global-interest-in-sustainability-and-corporate-social-responsibility-reporting/
- Wicklund, R. A. and Brehm, J, W. (1976). Perspectives on Cognitive Dissonance. Taylor and Francis.
- Wolf, K.L., S. Krueger, and K. Flora. (2014). Place Attachment and Meaning A Literature Review. In: Green Cities: Good Health. College of the Environment, University of Washington. https://depts.washington.edu/hhwb/Thm_Place.html
- Woodside, A. (2010). Case Study Research: Theory, Methods, and Practice. Emerald Group Publishing Ltd.
- World economic Forum. (2009). *Driving Sustainable Consumption: Consumer Engagement*. Retrieved from: http://www3.weforum.org/docs/WEF_CI_DrivingSustainableConsumption_Consumer Engagement_OverviewBreifing_2009.pdf
- Yin, R. K. (2014). Case Study Research: Design and Methods. London: SAGE Publications Ltd.

ANNEXES

ANNEX 1: The interview plan

ANNEX 2: Information sheet for participants

ANNEX 3: Interview questions

The interview participants from international banks operated in Latvia were contacted by phone or email found on the official bank websites.

The in-depth interview plan steps:

- 1. The in-depth interview starts with the introductory part, introducing the researcher and explaining the research aim and research context.
- 2. The interviewee receives the Information Sheet for Participants which explains important aspects regarding the research study and participation.
- 3. The interview participants are reminded that the company's and personal data are anonymous as it is indicated in the Information Sheet for Participants.
- 4. The researcher makes sure that the interviewee still wants to participate and is informed about the ability to withdraw at any stage of research without giving a reason.
- 5. First questions are general, getting to know the interviewees.
- 6. Further questions were asked according to pre-determined set of questions either for management or employees.
- 7. The follow-up questions are asked if needed.
- 8. The researcher informs about the end of interview, inviting interviewee to ask questions.
- 9. Discussing interviewee questions and finalising the discussion.
- 10. The researcher thanks interviewee for taking part in the study.

ANNEX 2: INFORMATION SHEET FOR PARTICIPANTS

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Information Sheet for Participants

My name is Arta Grase and I am Master's student from The School of Economics and Business at Kaunas University of Technology in Kaunas. As part of my degree course, I am undertaking a research project for my Master's thesis. This study is looking into the sustainable consumption.

I am looking for volunteers to participate in the project. I would like to interview a company's manager and employees. Each interview will contain around 10 questions. You will be free to withdraw from answering any question at any stage and you would not have to give a reason.

Personal data will be anonymised and you will not be identifiable. The company and your name will not be mentioned at any point of the research, and it will not be possible for you to be identified in any reporting of the data gathered.

If you would like to contact my supervisor on this Master's thesis, you are welcome to contact assoc. prof. dr. **Agnė Gadeikienė.** Her contact details are given below.

If you have read and understood this information sheet, any questions you had have been answered, and you would like to be a participant in the study, please indicate that to the researcher.

Contact details of the researcher

Name of researcher: Arta Grase

Address: Master's Student, The School of Economics and Business

Kaunas University of Technology

K. Donelaičio g. 73

Kaunas, Lithuania

Email: arta.grase@ktu.edu

Contact details of the independent adviser

Name of adviser: Assoc. prof. dr. Agnė Gadeikienė

Address: The School of Economics and Business

Kaunas University of Technology

K. Donelaičio g. 73

Kaunas, Lithuania

Email: agne.gadeikiene@ktu.lt

The interview questions were translated in Latvian language in order to gather the more detailed information.

General questions:

Household size: How many people you have in your household including you?

Income level: What is the total monthly household income after taxes?

Place: Where do you live / what region?

Questions to management:

What does sustainable consumption mean for you as a manager in socially responsible company?

Tell about your daily routine activities related with sustainable consumption both at workplace.

Tell about your daily routine activities related with sustainable consumption in private life.

Who and what supports your sustainable consumption at workplace?

Who and what supports your sustainable consumption in private life?

What do you think is a role of manager in encouraging sustainable consumption of all employees at workplace?

How sustainable consumption at workplace is reflected in sustainable consumption in private life? Could you say that you are more environmentally aware since you have started working here?

Questions to employees:

What does sustainable consumption mean for you as an employee in socially responsible company?

Tell about your daily routine activities related with sustainable consumption both at workplace.

Tell about your daily routine activities related with sustainable consumption in private life.

Who and what supports your sustainable consumption at workplace?

Who and what supports your sustainable consumption in private life?

What do you think is a role of manager in encouraging sustainable consumption of all employees at workplace? Do you see his/ her behaviour as an exemplary?

How sustainable consumption at workplace is reflected in sustainable consumption in private life?

Could you say that you are more environmentally aware since you have started working here?