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**THE ROLE OF CIVIC ENGAGEMENT IN CREATING A
SUSTAINABLE CITY**

Case City of Helsinki

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ABSTRACT

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The objective of this thesis is to examine the role of civic engagement in creating a sustainable city and determine the motives, practices and different levels of civic engagement in cities through a case study on the City of Helsinki. The process of urbanization has been a rising trend around the globe and this creates a significant role for cities to help battle the global issues like climate change. The sustainability of cities has thus been a focal point in the academic literature in the recent history. This thesis reviews the literature on sustainable cities and civic engagement and examines the previous research combining these two themes. The research questions are answered through qualitative data collection and analysis including interviews as well as secondary data. The results gained throughout the research indicate that there truly is a positive connection between civic engagement and sustainability efforts of the city. The insights derived from the case study show that city authorities are interested in engaging citizens throughout the city operations and also value the knowledge and know-how the citizens obtain. This can also be harnessed into creating more sustainable practices and developing environmental policies within the city operations. It is also shown that the citizens are concerned about the environmental issues and want to participate in order to make the cities and urban environments they live in more sustainable. Multiple different ways that the citizens can participate already exist on a city level, and new types and channels are also continuously emerging with the help of technologies. The new participatory models including tools like participatory budgeting, can provide new pathways to include even more citizens into the participatory processes. New ways for civic engagement could still be developed to engage even more citizen to the participatory processes in order to utilize the full potential of the civic capacity. Eventually leading to the development of more sustainable policies and practices in a city environment.

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Tämän työn tavoitteena on tutkia osallistamisen roolia ja vaikutuksia kestävien kaupunkien kehittämisessä ja määritellä motiiveja, tapoja ja eri osallistamisen tasoja kaupungeissa Helsingin kaupunkia koskevan tapaustutkimuksen avulla. Kaupungistuminen on ollut kasvava trendi ympäri maailmaa, joka puolestaan korostaa kaupunkien tärkeää roolia maailmanlaajisten ongelmien ratkaisemisessa kuten esimerkiksi ilmastonmuutoksen torjunnassa. Tästä syystä kaupunkien kestävyys on viime aikoina ollut myös yksi keskeisistä teemoista akateemisessa kirjallisuudessa. Tämä tutkielma käy läpi kirjallisuutta liittyen kestäviin kaupunkeihin ja osallistamiseen yleisesti ja myös tarkastelee aikaisempia tutkimuksia joissa nämä teemat yhdistyvät. Tutkimuskysymyksiin vastataan käyttämällä kvalitatiivisia tiedonkeruumenetelmiä sekä analyysejä sisältäen haastatteluja ja muita toissijaisia tietolähteitä. Tutkimuksen tulokset osoittavat, että kaupunkien kestävyyden edistämisen ja osallistamisen välillä on positiivinen yhteys ja että kaupunkien päättäjät ovat kiinnostuneita osallistamaan kaupunkilaisia läpi kaupungin toimintojen ja myös arvostavat kaupunkilaisten osaamista ja erityistaitoja. Näitä voidaan hyödyntää myös, kun luodaan kestävämpiä toimintatapoja ja kehitetään uusia toimintaperiaatteita. Kaupunkilaiset myös todistettavasti ovat huolissaan ympäristöön liittyvistä asioista ja osoittavat halukkuutta osallistua toimenpiteisiin joilla kaupunkien ja muiden urbaanien ympäristöjen kestävyyttä parannetaan. Kaupunkien tasolla on jo olemassa monia tapoja, joilla osallisuutta voidaan toteuttaa ja uusia tapoja ja kanavia kehittyy koko ajan lisää kehittyvän teknologian myötä. Uudet osallisuuden mallit ja työkalut, kuten esimerkiksi osallistava budjetointi, voivat tarjota uusia mahdollisuuksia joilla kaupunkilaisten osallisuusastetta saadaan kasvatettua entisestään. Uusia osallistamisen keinuja silti tarvitaan edelleen, jotta koko potentiaali pystytään hyödyntämään parhaalla mahdollisella tavalla.

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1 Introduction

The aim of this thesis is to examine the role of civic engagement in creating a sustainable city by determining the motives, practices and different levels of civic engagement in cities through a case study on the City of Helsinki. The study attempts to form a holistic view of the civic engagement processes regarding the sustainability issues within an urban environment. First, this introductory chapter provides some insights and background information of the importance of the research area. The first few chapters will discuss some specific areas of urban sustainability and civic engagement in general and after that the research gap and research questions will be presented. Also, the exclusion and limitations of the thesis will be discussed. Before moving to the more specific background material of the study, some definitions of the key concepts of the themes are provided below.

Sustainable development:

“Development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (“The Brundtland Report”) Sustainable Development 2015).

Sustainable city:

“A city constructed or landscaped in such a way as to minimize environmental degradation, with facilities (such as transport, waste management, etc.) which are designed so as to limit their impact on the natural environment, while providing the infrastructure needed for its inhabitants” (English Oxford Living Dictionaries 2017).

Urban development:

“Social, cultural, economic and physical development of cities, as well as the underlying causes of these processes” (University of Oslo 2017).

Sustainable community:

“A sustainable community is one that is economically, environmentally, and socially healthy and resilient. It meets challenges through integrated solutions rather than through fragmented approaches that meet one of those goals at the expense of the others. And it

takes a long-term perspective – one that's focused on both the present and future, well beyond the next budget or election cycle. (Institute for Sustainable Communities 2018.)

1.1 Background

The issue of sustainability and corporate social responsibility (CSR) has long been an important topic within the private sector companies. But now also increasingly amount of interest has been paid to the similar issues within the public sector. In recent history, the concepts of green and smart cities have become increasingly relevant when the sustainability agenda needs to be applied into all areas of life.

1.1.1 UN Agenda 21

In the year 1992 the United Nations established its plan of action to be taken globally, nationally and locally considering all the areas where there are human impacts on the environment to be taken by organizations of the United Nations System and governments all over called Agenda 21. It consists of the Rio Declaration on Environment and Development and the Statement of principles for the Sustainable Management of Forests and it was accepted by more than 178 Government at the United Nations Conference on Environment and Development held in Rio de Janeiro in June 1992. (United Nations 2018a.)

The agenda takes into account a broad variety of areas of the human life which have an effect on the sustainability factors. It examines the social and economic dimensions of sustainability and the conservation and management of resources for development, emphasizing the roles of major groups like the youth, local authorities, business and industries as well as scientific and technology communities. It also discusses the means of implementation in achieving the sustainability goals. (United Nations 1992.)

The Agenda 21 report highlights the importance of local authorities in the implementation of the sustainability agenda because many of the problems as well as their solutions have stem from the local activities and participation of local authorities and operators. They are also the governance level that is closest to the people and thus play a fundamental role in

educating and responding to the public in promoting sustainable development. The objectives set in the agenda already in 1992 considering the role of local authorities, was identified based on the following objectives: achieving a general consensus on “a local Agenda 21” among their population, initiating processes aiming at increasing cooperation between local authorities, increasing cooperation and coordination between the representatives of associations of cities and other local authorities as well as implementing and monitoring programs which ensure that also the youth and women are also represented for example in the decision making processes. The report also suggests the activities in which these objectives can be fulfilled, and it mentions the importance of the dialogue between local authorities and its citizens as well as other local organizations and private sector operators in adopting the Agenda 21 local aspects. (United Nations 1992.)

It should be remembered, that the Agenda was set already over two decades ago and things regarding sustainability have moved fast since then. Still to date, the Agenda 21 is widely mentioned and discussed in scientific articles regarding the sustainability of cities and actions taken in local level, so it can be seen as some sort of starting point which brought the local sustainability programs to even greater interest.

1.1.2 Finland’s national strategy of sustainable development

The Prime Minister’s office of Finland has published the national strategy for sustainable development over a decade ago in the year 2006 called “Towards sustainable choices – A nationally and globally sustainable Finland”. In the report the vision of the strategy is defined as following:

“Assuring wellbeing within the limits of the carrying capacity of nature nationally and globally. The objective is to create sustainable well-being in a safe and pluralistic society that promotes participation, and in which all people take responsibility for the environment.” (Prime Minister’s office 2006).

The report stated already back in 2006, that the most important challenges from the sustainable development point of view were connected to climate change, rapid global economic changes as well as demographic changes. Also, among the other global issues,

population growth was notified as one of the key challenges that would reflect to Finland as well and this of course is tightly related to the rising issue of urbanization and the fast population changes in urban areas. The report has set a timeline for the actions leading up to year 2030, so we are currently in the middle of the time frame that the actions towards more sustainable community should be implemented. The importance of both short and long-term policy actions in helping to face the challenges on national, as well as EU and global level was also emphasized. (Prime Minister's office 2006).

The targets set both on international as well as national level, obligate the countries within the EU to take actions, and in an urban environment the cities have a crucial role. The urban population growth sets challenges for these targets all over the world and the trends of the urbanization can be seen in Finland as well. These challenges are discussed in more detail in future chapters.

1.1.3 Urban population growth

According to the data of the World Health Organization (WHO), in the year 2015 already over half of the total global population was living in urban areas. Precisely the percentage of urban population in 2015 was 54 % which marked a 30 % growth since year 1950. By the year 2030 the urban population is already estimated to increase to 60 % and by the year 2050 already closer to 70 % as illustrated in figure 1. (World Health Organization 2018a.) The growth of the urban population has been steady both in high-income as well as low- and middle-income countries, but increasingly significant it has been in the low- and middle-income countries. There the urban population exceeded over 2,8 billion in 2015. WHO also estimates that the expected growth of the urban population between the years 2015 and 2020 will be 1,84 %. (World Health Organization 2018b.)

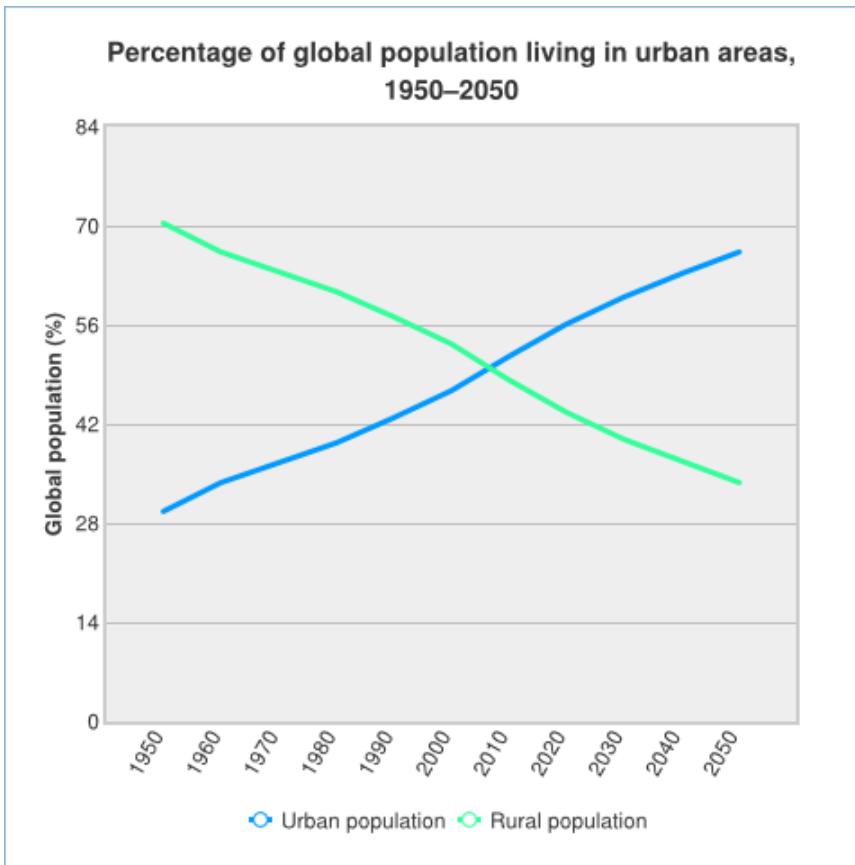


Figure 1. Urban population growth (World Health Organization 2018a)

As the estimations indicate, the urban population will be continuously increasing in the coming years in the developing as well as the developed parts of the world which put even greater demand for the sustainable lifestyle in the urban areas. Thus, the sustainability of cities plays an increasingly important role in the battle against climate change and fulfilling the sustainability targets set globally.

1.1.4 Sustainable urban life

As the urban population grows, the sustainability of the whole urban lifestyle needs to be put under a closer look. The so-called urbanization of the population reflects also to the age structure of the cities, often because of the reasons behind the whole urbanization process. If we take a look at the population structure of Europe and more precisely the EU for example, the trend has lately been that the fertility rate is going down which simultaneously causes the fast ageing of the population. On the other hand, the trend is reversed in some urban areas of EU where the population growth is rapid when especially

young people move to bigger cities or urban areas to work or study and thus represent a relatively high number of the total inhabitants of these areas. In contrary, older people are more likely to leave the big cities to retire. (Eurostat 2017.) This is why it is especially the younger demographics' responsibility to pay attention to the sustainability of their lifestyles.

One definition for sustainable living explains it as a: "*Practice of reducing your demand on natural resources by making sure that you replace what you use to the best of your ability*" (Conserve Energy Future 2017). This is becoming an increasingly important issue in the everyday life of people living in all different sized cities all over the world and it also highlights why it is important to pay attention to the sustainability needs of cities especially in the growing areas.

1.1.5 Participation or civic engagement

The term participation in the context of governance and decision-making appears in the literature in many different forms all fundamentally meaning the same thing. Sarzynski (2015, 54) has gathered some of the terms used in literature: "public participation", "citizen participation", "stakeholder engagement", "stakeholder involvement", "new public involvement", "community engagement" and "civic engagement" all collected in table 1. Despite of the evolvement of the concept and the variation in terminology, the essence of it always includes the five characteristic elements describing the structure of participation. These elements are: who participates, when participation happens, what happens, how much participation and why the actors participate. (Sarzynski 2015, 54.) This defines what participation essentially is despite the group it is applied to. In this study the terms *civic engagement* and *citizen participation* are mainly used to describe the participation process.

Table 1. Different terms for Civic Participation (Sarzynski 2015, 54)

Alternative terms for <i>Civic Participation</i> in the literature
Public participation
<i>Citizen participation</i>
Stakeholder engagement
Stakeholder involvement
New public involvement
Community engagement
<i>Civic engagement</i>

1.1.6 Importance of the topic

All the issues discussed above create challenges for the world and its nations especially in the living environments of the people. As the urbanization is accelerating, the role of urban environments and cities become increasingly important. The people living in these environments therefore create a crucial component in how these environments function and how they are utilized. This is why it is vitally important to try to motivate and engage people in taking action especially regarding the sustainability issues. There is a huge resource within the population to be utilized which is also desperately needed in order to tackle the global issues we are facing in the modern world.

1.2 Research gap and research questions

The aim of the thesis is to contribute to the research by providing an overlook on the situation of the Finnish communal sector through a case of the country's capital. The research also aims to examine what is the concrete role of civic engagement in the strategy building for more environmentally sustainable cities. The study also wants to contribute to the literature in describing the importance of citizen participation in building a sustainable community in a capital city and aims to answer the following research question:

How can civic engagement contribute to creating a sustainable city?

In order to gather empirical data to determine the role of civic engagement in creating a more sustainable city or community, the following sub-research questions were formulated:

What are the main motivations towards civic engagement? (SQ1)

What kind of operations are performed in order to engage citizens in developing sustainable practices? (SQ2)

What are the different levels and types of civic engagement? (SQ3)

All of the above research questions, research goals as well as methods and data in order to answer these questions are presented in table 2 below.

Table 2. Research questions, research goals, method and data

Research questions	Research goal	Method and data
The main research question: How can civic engagement contribute to creating a sustainable city?	To explore the relationship between sustainability and civic engagement in cities	Literature, secondary data & interview results
Research sub question 1: What are the main motivations towards civic engagement?	To find out the motives a city has to engage citizens in development	Literature & interview results
Research sub question 2: What kind of operations are performed in order to engage citizens in developing sustainable practices?	To identify what are the concrete operations that are utilized in engaging citizens	Secondary data & interview results
Research sub question 3: What are the different levels and types of civic engagement?	To identify the different levels and types of civic engagement	Literature, secondary data & interview results

1.3 Exclusions and limitations

The thesis will focus only on one case city, which is the city of Helsinki. Helsinki is the biggest city measured in inhabitants in Finland and is also the capital city of the country. It is also the center of Helsinki Metropolitan Area together with the municipalities of Espoo, Vantaa and Kauniainen. At the end of 2017, the city of Helsinki alone had a population of 644 700. The whole Helsinki Region including the Metropolitan Area as well as eight neighboring municipalities, had a population over 1,5 million residents. (City of Helsinki 2018b.) Therefore, the issues studied in the thesis are not necessarily applicable as such in smaller scale cities with less resources and smaller sustainability impacts and agendas. Nevertheless, it should be noted that the decisions made and principles agreed within Helsinki and the Metropolitan area also have an impact on a local level to the municipalities next to it. Also, as the capital city Helsinki has the responsibility to set an example which could have impacts on ideological level across the country.

The issue of sustainability in cities goes in all aspects of the city life, but this study is limited on analyzing only the environmental aspects of sustainability. Thus, for example the social side of sustainability also relevant to cities is not discussed in the thesis. Also, the thesis will mainly focus on examining the participation of citizens as one stakeholder group and not go into detail investigating other stakeholder groups that cities have.

1.4 Structure of the thesis

The thesis consists of two main parts which are the theoretical part and empirical part. These two parts further consist of six main chapters, references and appendixes. The structure is illustrated in figure 2 below.

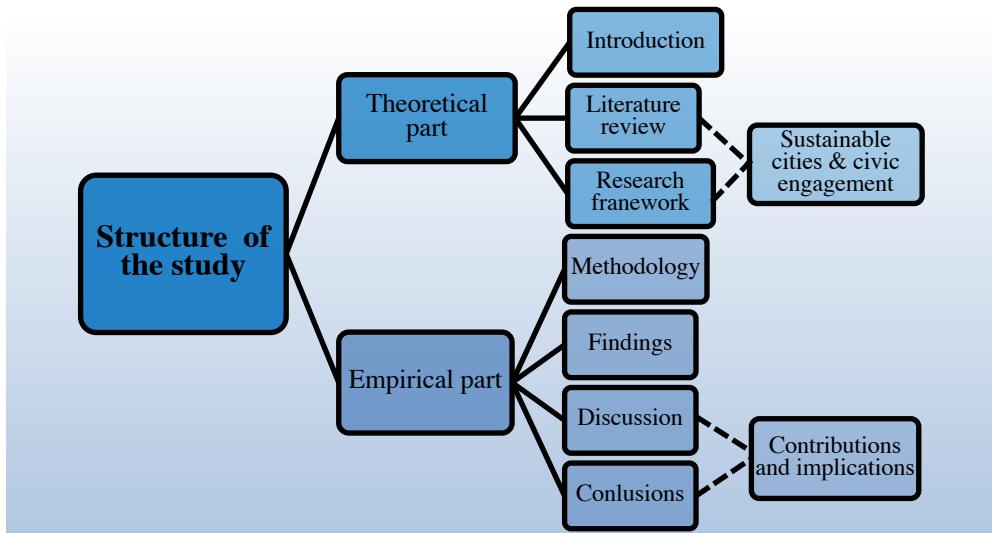


Figure 2. Structure of the thesis

The first part consists of introduction, literature review and the research framework of the study. Introductory part contains some background knowledge about the topic and the importance of it and also presents the research questions. The literature review includes an overview about the issue of sustainability of the cities also touching up about the topic of smart cities as well as the bottom-up approach in urban planning which are strongly related to the sustainability issues in cities. Another broader area discussed in the literature review is civic engagement in general. The thesis combines these two broader concepts of sustainability of the cities with civic participation, therefore the third chapter provides the research framework for the study bringing these two issues together in finding out the relationships between city sustainability and civic engagement.

The second part of the thesis consists of the research methodology, findings of the research, discussion and lastly presents the conclusions. In the research methodology chapter, firstly the case is described in more detail. Second, it is discussed how the study is conducted. In the next chapters, the findings and results of the research are presented and discussed. In the final chapter conclusions are presented including practical implications as well as limitations and suggestions for future studies.

2 Literature review

In the recent history, a lot of discussion has taken place regarding the sustainability needs of everyday life and even more so of the urban lifestyle that an increasing amount of people are practicing in the 21st century. An important factor in this is the sustainability of cities people live in worldwide. Simply the number of research and studies published about the subject during the past few years alone tells that the issue is growing in concern and that the role of the areas people live in is considered to play a significant role in the fight against climate change and global warming.

2.1 Sustainable development & The Brundtland Report

One of the key documents when it comes to the discussion about sustainable development is The Brundtland Report “Our Common Future” published in 1987. It was a product of the 1983 World Commission on Environment and Development (WCED). (Sustainable Development 2015.) The Commission was led by Gro Harlem Brundtland, who at the time was the Prime Minister of Norway and throughout her political career had been developing a worry for the globally significant issues. Consequently in 1983 the United Nations Secretary-General invited her to chair the WCED, which is known for developing the concept of sustainable development published in the report “Our Common Future” later in 1987. The Earth Summit – the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro in 1992 was also held based on the recommendations of the Commission. (United Nations 2018b.)

The Brundtland Report emphasized the three pillars of sustainable development which are environmental protection, economic growth and social equity and focused on finding strategies helping economic and social advancement without compromising the environment in the process. (Sustainable Development 2015.) This is the base for the global sustainability policies, making an impact on an everyday citizen worldwide.

2.2 Global policies and environmental government

The problem with creating global environmental policies is that they are often created far away from the context of where they need to be applied because in the end they need the domestic public support in order to be implemented in an effective manner (Bernauer & Gampfer 2010, 439). This is especially significant in the case of different kind of environmental policies because they affect the everyday life of local citizens in the cities. Many scholars have acclaimed that civil society involvement increases transparency and strengthens the representation of a marginal but widely important stakeholder group and thus provides improved decision-making capacity (Bernauer & Gampfer 2010, 440).

The civil society involvement in the global level of climate governance has been studied in a comprehensive study and the results are in favor of civil society participation. Especially in the climate policy, the civic engagement is likely to play a more important role than in other international policy areas because the climate policies have a direct impact on regular citizens and civil society as a whole. It was also found that civil society representatives are motivated to attend international policy-making events both in the role of observers as well as members of national delegations and many governments agree with and even encourage this type of participation. It has also been acclaimed that governments benefit from civil society involvement. (Bernauer & Gampfer 2010, 447-448.)

2.2.1 Globalization point of view

The term “globalization” defines and determines nowadays largely the main character that also defines contemporary urbanism. Meaning that cities are a part of increasingly growing web of economic, material or cultural and communicative relations which spread across the entire globe. This is why it is difficult to talk about cities and the changes in them without the referring to globalization. Cities especially are places where the globalization is materialized and the “global cities” are affected by the world events and changes in the first place, whereas all urban areas and centers experience the direct or indirect impact sooner or later. Thus, the concept of Global-local or “Glocal” needs to be adapted in understanding the effects of global issues worldwide. (Martinotti 1997, 5.)

2.3 Sustainable cities and urban sustainability

Before we can talk about the sustainability of cities, a definition of a city needs to be addressed so we can understand the functions and sustainability effects of it better. A dictionary defines it as follows: “*A city is an area in which a large number of people live fairly close together. Cities usually have their own separate governments and systems for maintaining and providing utilities and transportation*” (Vocabulary Dictionary 2018). As the definition displays, city is a multifunctional system which also means it has a lot of possibilities to create sustainable practices in different areas, but on the flip side it can also cause a lot of threats to it.

A lot has been written about the sustainability of cities in recent years as the significance of the topic has been established due to the rapid urbanization globally. After the introduction of the concept of sustainability and sustainable development, the research has also expanded to examine the sustainability of urban systems. A study made by Bithas and Christofakis (2006, 178) combined some of the research on the area where for example the issue was studied in the context of tracing the pathways to urban sustainability and defining policy responses (Finco & Nijkamp 2001) or envisioning a city as a sustainable combination of economic, environmental and technological elements (Camagni, Capello & Nijkamp 1998).

As already mentioned, urbanization has become one of the most important issues which define the relationship between humans and the ecosystem and the ecological footprint of cities has extended beyond the administrative boundaries. Due to the intense demand of resources and the fact that the resources are often sourced away than in where they are consumed, the consequences of the constantly growing urbanization are also felt elsewhere. (Verma & Raghubansi 2018, 282.) This makes pursuing sustainability in cities an important factor worldwide. To accelerate the process of transitioning towards sustainable cities and societies more profound holistic and integrative approaches are needed now and even more in the future (Zhang et al. 2018, 2).

Bithas and Christofakis (2006, 182) also describe the physiology of the urban system, illustrated in figure 3. In the system humans and other human built systems like means of

production, means of transportation and buildings are the key elements in cities which are combined in order to create the desired outcomes. The authors define the outcome to be human welfare which on the other hand results from the production of goods and services. The inputs in the model where the welfare is created from, are energy, materials and biological elements. The system and the functions of the city can inherently also lead to environmentally non-desirable outcomes, which are for example waste, offal and pollution. They all risk the sustainability of the city by causing harm to the environment. (Bithas & Christofakis 2006, 182.)

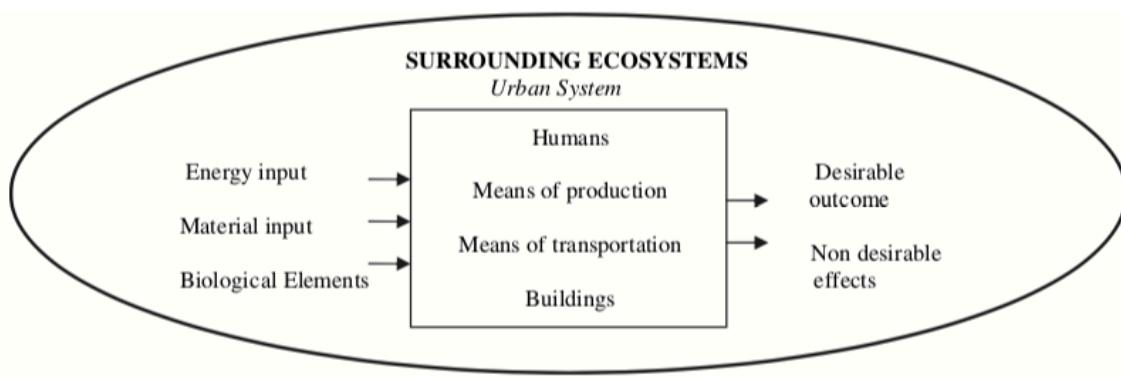


Figure 3. Physiology of the urban system (Bithas & Christofakis 2006, 182)

The essential condition in order to create environmentally sustainable economic development (ESED) of the urban system in cities, is to maintain a healthy biological functioning of the system as a whole. The most important factor being the functions that are required for the well-being and evolution of the human species that dominate the whole system and the higher concentration of the human element is also the crucial factor that distinguishes the urban systems from the rest. (Bithas & Christofakis 2006, 182-183.)

The goals of sustainable development have made it necessary for cities to shift the core practices, primary operations and central institutions of the city and the goals for urban sustainability have been influential in making these major changes. The academics as well as urban circles have also identified that they need to be aiming the focus increasingly on ICT, as it has become necessary to find more innovative solutions towards sustainable urban development. Intelligently planned and developed cities have a fundamental significance for the strategic urban development and in achieving the long-term goals.

(Bibri & Krogstie 2017, 220.) The concepts of smart cities and smart sustainable cities will be discussed in short next in the literature review.

2.3.1 Sustainable vs. smart cities

In the discussion about sustainability of the cities, the concept of smart cities also often arises. Researchers have had to differentiate the two concepts. In addition to the clear effect of the technological systems, while the urban sustainability frameworks often contain a large number of environmental sustainability indicators, the smart city frameworks often lack them as they focus more on the social and economic aspects of sustainability. (Ahvenniemi et al. 2017, 234.) In an extensive research considering different smart city indicators and frameworks, it was found that for example the environmental aspects were not taken into account enough and the smart city performance measurement systems need to be further developed. The research suggests that sustainability assessment should be a part of the smart city development and that it is important to integrate both the sustainability and smart city frameworks in order to create more holistic systems and the concept of *smart sustainable cities*. (Ahvenniemi et al. 2017, 242.) In the future, these two concepts are undoubtedly going to be even more strongly related and need to be taken into consideration when creating the setting for urban sustainability.

Yet, the concept of *smart sustainable city* has already drawn attention in the literature and the idea of combining the ICT-technologies with the pursuit of sustainability can be seen in the research field especially during the past years. For example, Bibri and Krogstie (2017, 220) discuss how the concept supports the significance of technology and ICT in enabling smart and sustainable cities to seek their potential in order to contribute towards more sustainable development and to the challenges caused by urbanization. It is discussed how ICT is already helping and making it possible for cities to remain as sustainable as possible and livable when cities are facing the pressures of urbanization, social mobility and ongoing transformation of the life in urban areas. (Bibri & Krogstie 2017, 220-221.)

The emerge of ICT to and the innovations related, indeed bring big promises to the urban transformations and has thus gained increasing attention from the research institutions,

universities, industries, policy makers and governments in having a crucial role in the transformation of environmental, physical, social and economic subsystems of cities. But at the same time, it is noted that the new technologies that bring all these opportunities, also come with challenges which need to be confronted by the city stakeholders. It should be recognized bringing environmental values to the mix with science-based technology, that ICT can also be disruptive thus making it not always completely harmless to the nature and risk-free to the city. (Bibri & Krogstie 2017, 220-221.)

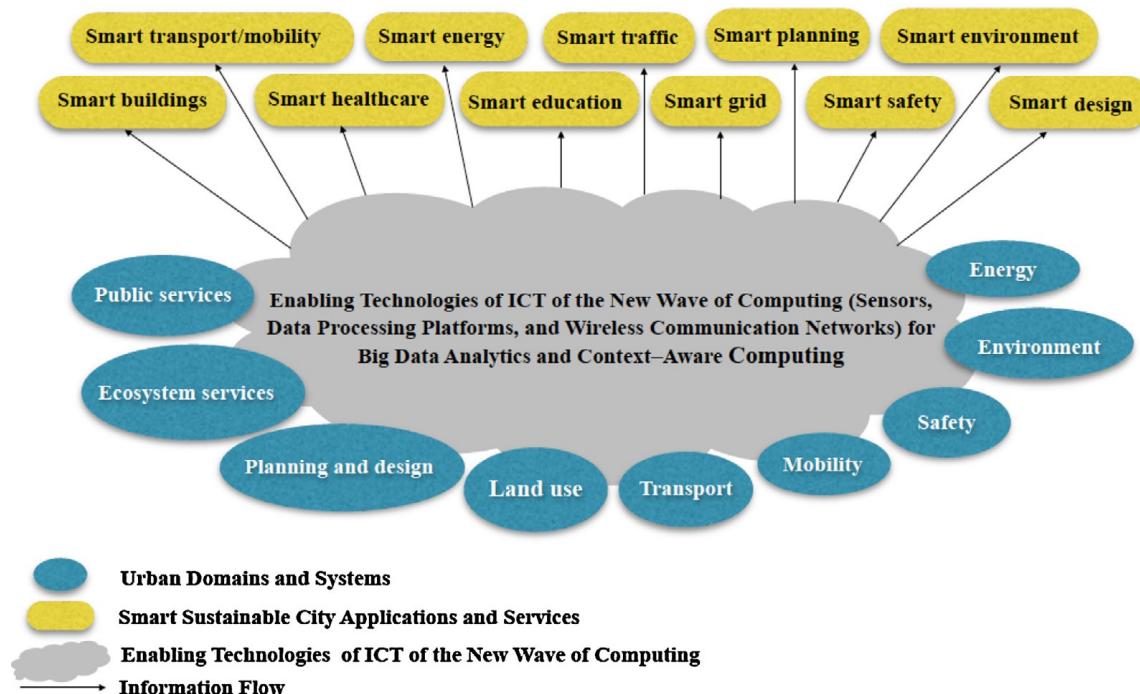


Figure 4. Using the enabling technologies of ICT to connect urban domains and systems with related applications and services in smart sustainable cities (Bibri & Krogstie 2017, 232)

Figure 4 illustrates the connections and possibilities of a smart sustainable city where the different areas of urban life and smart systems are connected through different kind of ICT systems and where for example data-analytics gives new possibilities to develop and maintain sustainability. It also demonstrates the characteristics that are most relevant when it comes to defining the areas of a city or urban life in general related to sustainability, being land use, transport, energy and environment. As the picture shows, the technology and the vast amount of data available bring opportunities in all aspects of the urban life,

but the risks related to them need to be recognized and solved before they can fully only positively contribute to the sustainable development agenda. (Bibri & Krogstie 2017.)

2.3.2 Sustainable city programs

Guided by the national and international goals for sustainability, especially big cities today have complete sustainability agendas and strategies and they have become somewhat mandatory in the recent decades. This has led to cities building their own programs considering how they will contribute to the sustainable development and protect their citizens the best way possible. Even an increasingly larger amount of these programs, have also included civic engagement as a part of the sustainability agenda of the city (Portney 2005, 580).

It is clear that the sustainability agenda and programs differ a wide range when looking at programs in developing and developed countries. Especially in the western world where the conditions for living are already considered good, many of the sustainability programs focus on initiatives addressing specific environmental problems or a particular economic activity, or even a combination of these different sectors. They can also originate and function out of single government agencies, like for instance an environmental or planning departments, and sometimes they can incorporate many different governmental activities or even include independent operators from the government like local non-profit organizations. (Portney 2005, 580-581.)

Some examples of sustainability programs in cities are provided in table 3 below. All of the mentioned sustainability programs were awarded by the World Green Building Council's in cooperation with the United Nations Human Settlements Programme already back in 2013 in the United Nations Climate Change Conference in Warsaw. (Industry Dive 2018.) As it can be seen from the countries and cities listed in table 3, as well as from the program names, the sustainability agenda is rooted in the city strategies all over the world and the programs can come from multiple different fields. The integrative factor being sustainability and the ultimately the fight against climate change.

Table 3. Examples of rewarded sustainability programs of cities (Industry Dive 2018)

City, Country	Name of sustainability program
Vancouver, Canada	<i>Greenest City 2020 Action Plan</i>
Brighton and Hove, United Kingdom	<i>Food Growing and Development Planning Advice Note</i>
Seoul, Korea	<i>One Less Nuclear Power Plant initiative</i>
Cape Town, South Africa	<i>Municipal Energy Efficiency Buildings Program</i>
Shanghai, China	<i>Green Building and Eco-City Campaign</i>

The official sustainability programs of cities are usually initiated from the top down by the government. But different types of sustainability projects in cities can often originate from citizens who believe in the populistic power of such projects (Portney 2005, 584) giving these types of activities more bottom-up type approach.

2.4 Spheres of civic capacity

When talking about the civic participation and civic capacity, there are of course different aspects to it. Figure 6 illustrates the relationship and overlapping of the public, private and non-profit spheres of influence that also represent the three corresponding forms of governance capacity. They are institutional (public sector) capacity, private capacity and non-profit (community) capacity. The point in the middle where these three collide, represents civic capacity. (Sarzynski 2015, 53.)

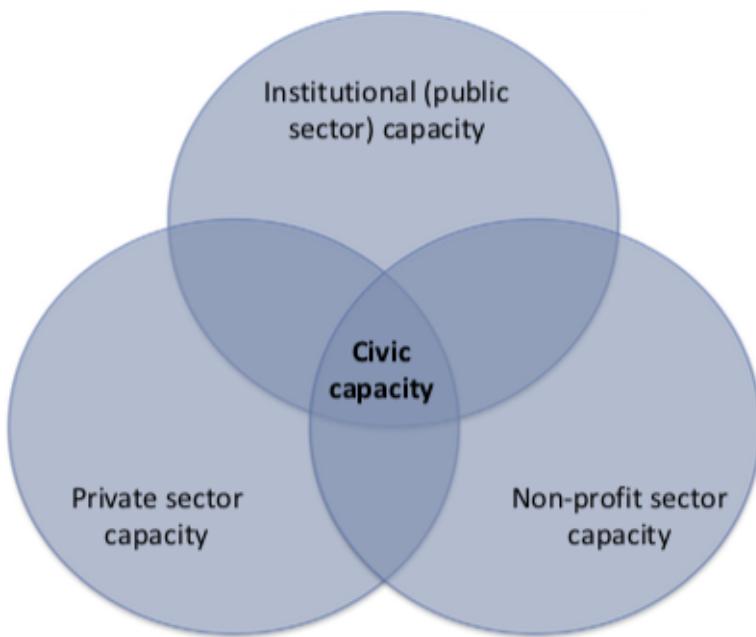


Figure 6. Spheres of influence over governance and the emerge of civic capacity (Sarzynski 2015, 54)

In theory, the civic capacity does not need to come strictly down or be governed by the public sector but can also emerge from efforts of the private or non-profit sector as well. Even in the context of sustainability issues and in situations with a lack of governance capacity from the government, the private as well as non-profit sector can both have great resources to address collective problems such urban climate adaptation for example. (Sarzynski 2015, 53). Civic capacity should not be mixed with the concept of civic or citizen participation, but it should be noted that civic capacity provides the base for citizen and other public participation.

2.5 Civic engagement and a stakeholder approach

When talking about civic engagement, we can look at the citizens of the city as one stakeholder group. Voinov and Bousquet (2010, 1268) state that stakeholder engagement, collaboration, participation, shared learning and fact-finding have achieved a somewhat a trendy status in the management-oriented areas of sciences and literature in the recent history. Also, for example the environmental assessments today usually include some sort of reference to stakeholder involvement. (Voinov & Bousquet 2010, 1268.)

The stakeholder approach for corporate strategic management was of course made famous by Freeman (1984), who developed strategic programs for different stakeholders in mind. As Freeman already stated back in 1984, only the managerial view (top-down) of a firm does not provide a cohesive way to understand the changes that will occur, meaning that both the internal as well as external stakeholder groups need to be taken into consideration. The internal stakeholder groups of a company include the owners, customers, suppliers and employees and the external groups on the other hand include for example governments, competitors, consumer advocates, special interest groups and media. Freeman also mentions as an example the environmentalists' concerns that affect industries that are involved in "exploiting" the environment such as forest products for example. (Freeman 1984, 8-22.) These principles can also be applied to outside the context of corporate management and the stakeholder view and participation is widely discussed on the context of building sustainable cities as well.

A form of cooperation and collaboration where for example ideas and views are originated from the citizens or other stakeholder groups is called the bottom-up approach (El Asmar, Ebohon & Taki 2012, 38). This approach offers a good pathway to engage stakeholders in the process when creating new policies especially in democratic societies where unpopular decisions are harder to implement. This can often be the case in a more top-to-bottom arranged decision-making processes where all the decisions come straight from the governmental institutions. Thus, the efficiency of the process engaging stakeholders in the decision-making highly depends on the social relations of the different stakeholders. For example, the communication and exchange of information and knowledge as well as the skills and methods in doing that, all have an effect on the functioning of the process as a whole. (Voinov & Bousquet 2010, 1269.)

2.5.1 Different types of stakeholder-based modelling

Even if needed, creating a generalizable participatory model is nearly impossible because of the vast variety of different social and environmental conditions that occur in different situations. Nevertheless, it is still possible to recognize some basic elements that appear in case studies in general according to Voinov and Bousquet (2010, 1272). Figure 5 portraits these different stages and also the connections and possibility to rearrange the elements

between the different stages. The main stages in most participatory modelling processes though are recognized, and they are identifying project goals, identifying and inviting stakeholders, choosing modelling tools, collecting and processing the data, building a conceptual model, running the model and discussing results, discussing and defining results, analyzing the model and discussing improvements and finally presenting results to other stakeholders and decision makers. (Voinov & Bousquet 2010, 1273.) The arrows between the different stages also represent the possibility to shuffle these different blocks at any moment and that there is no particularly set order in which these different stages are always performed. There might be a need to go back and forth between different elements of even jump over some steps. The result from Voinov's and Bousquet's (2010, 1273) research shows that even though the order of these different steps might be uncertain, the process itself seems to be quite standardized.

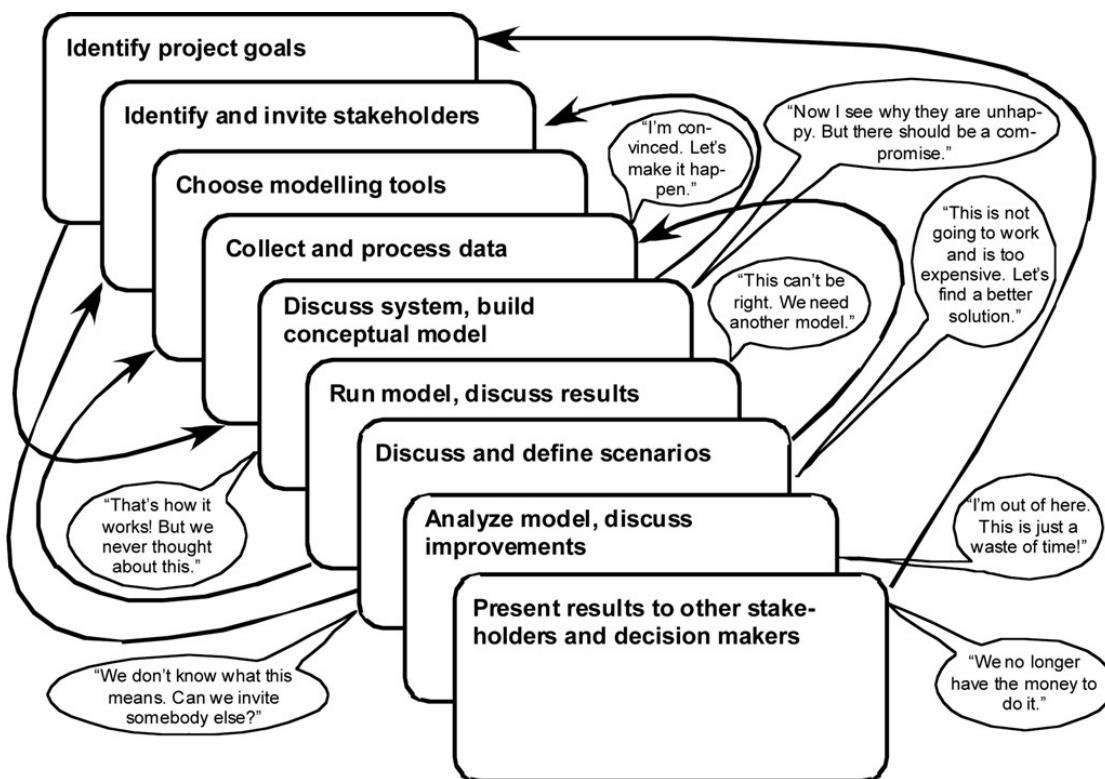


Figure 5. Different stages of stakeholder participatory modelling process (Voinov & Bousquet 2010, 1273)

In addition to the basic modelling process, there has been rapid increase in different type of stakeholder engagement models that support the decision-making processes involving citizens and other stakeholders. The different types of stakeholder engagement models

include for example: Participatory modelling (PM), Group Model Building (GMB), Mediated Modelling (MM), Companion Modelling (CM), Participatory Simulation (PS), Shared Vision Planning (SVP) and Collaborative Learning (CL). Also, other stakeholder-based processes involve for example: Social Science Experiment (SSE), Participatory Action Research (PAR) and Participatory Decision Analysis (PDA). Despite the seemingly great amount of the models, many of them are quite similar and fundamentally deal with the same things. Many of the models have just been created by different agencies in order to serve as a trademark for their work and efforts. (Voinov & Bousquet 2010, 1269-1270.) Basically, the models act in bringing together the stakeholder with the decision-making organs, often with the help of some sort of mediator for example with different types of simulations, games or other types of planning events.

The appearance of these different types of models in the recent literature comes to show that there indeed is a need to have organized and structured ways in which citizens as well as other stakeholders can engage with decision-makers when it comes to the things that have an effect on the daily lives of the citizens. To what extent the specific models are utilized, will not be discussed in this study.

2.5.2 A Ladder of Citizen Participation

One of the most famous model that describes the different levels of involvement is the ladder of citizen participation created by Sherry R. Arnstein in 1969. This model divides the different stages of participation into eight different steps which are illustrated in a ladder form in a figure 7 below. These steps are then further divided into three different sub-categories. The eight stages from the bottom-up are manipulation, therapy, informing, consultation, placation, partnership, delegated power and on top citizen control. (Arnstein 1969, 217.)

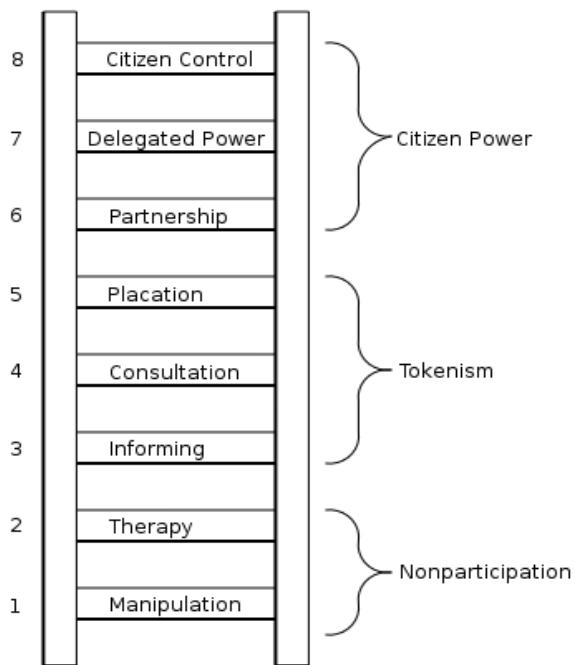


Figure 7. Ladder of citizen participation (Arnstein 1969, 217)

The bottom two steps are therapy and manipulation which represent the type of non-participation and their objective is to make the people or the citizens incompetent to contribute in planning and rather allow the “powerholders” to educate the potential participants as they will. The next three steps going upwards on the ladder are informing, consultation and placation and they represent the levels of tokenism where the citizens can “hear and be heard”. Nevertheless, they are still lacking power and assurance that the views of the citizens will be noted. (Arnstein 1969, 217.)

The top three steps on the ladder on the other hand are partnership, delegated power and citizen control and they represent the situations where citizens have power with increasing authority in decision-making. The first of the three, partnership, means the citizens and the traditional powerholders can engage in negotiations and trade-offs. Delegated power and citizen control on the other hand represent almost total or an absolute managerial power of the residents and in these situations the citizens acquire majority or all of the decision-making power over the powerholders. (Arnstein 1969, 218.)

According to Arnstein (1969, 219), all these steps have different characteristics and ways they affect the citizens. Manipulation for example, is not genuine citizen participation but more of an illusion of participation machinated by the actual powerholders. It can be masked for example as so called “neighborhood advisory groups” which in reality might not have any real power or influence. Second one of the nonparticipation ladders is therapy, where for example group therapy can be masked as citizen participation. This can be considered quite controversial meaning that in this context powerless is interpreted to be synonymous with mental illness. Arnstein (1969, 219-220) also claims that with the assumption that they are engaging in planning, the experts subject the citizens to group therapy. This form is probably no so relevant to the modern world though.

The next three steps of tokenism start with informing, which basically means that the citizens are informed of their rights, responsibilities and options and that can also be seen as the most important first step towards legitimate citizen participation. Next step from informing is consultation, and it is already a step towards more engaging role for the citizens. This can be seen as an invite for the citizens to share their opinions, but it is important to combine it with also other forms of participation. One step forward from this is placation where citizens already have some level of influence. It can be seen in for example including citizens into some public decision-making organs, but there is also a possibility for the major powerholders to outvote the citizens representatives. (Arnstein 1969, 220-221.)

According to Arnstein (1969) the top three steps on the ladder already represent the highest level of participation; citizen power. First of these is partnership between the citizens and powerholders where the power is delegated between the two by negotiations and agreeing to share planning and decision-making responsibilities. Next step up in Arnstein’s ladder is delegated power, where citizens can achieve even a dominant role in decision-making over some particular aspects or plans. The highest step on the ladder is of course full citizen control. In this state the citizens are fully governing for example a certain program or institution and are fully in charge of the policy as well as managerial aspects. (Arnstein 1969, 221-223.)

The ladder and the steps are of course quite generalized and can vary from situation to situation. The original article by Arnstein has also been written in the end of the 1960's and thus some adjustments probably need to be made for them to fit in the modern world and society. These can nevertheless be seen as preliminary stages where more aspects can be added when increasing the level of citizen participation in the context of getting the best benefits out of the contribution that the people living in the society can offer.

The Arnstein's ladder, which was firstly developed as a concept in U.S. federal housing and poverty programs, has also been modified and widely used elsewhere as well and it can be seen as one of the starting points for citizen participation stages modelling. For example, the International Association for Public Participation (IAP2) has developed a model based on the Arnstein's ladder which is a five-level spectrum illustrating the increasing impact of community engagement. The five different levels in this range are: inform, consult, involve, collaborate and empower. Relating more to the environmental issues and sustainability, also the International Institute for Environment and Development (IIED), has developed a typology with seven different levels of participation in order to illustrate the extent to which the public is involved in the local economic development process. These seven levels are: manipulative participation, passive participation, participation by consultation, participation for material resources, functional participation, interactive participation and self-mobilization. (Sarzynski 2015, 56.)

2.6 Motives for stakeholder and citizen participation

Researches in the recent years have also examined the motives for stakeholder contributions through transition towards urban sustainability. Researchers Soma, Dijkshoorn-Dekker and Polman (2018) for example discuss the influence in public management that stakeholder groups such as citizens and firms have gained in the recent history. Agreeing with also other researchers that this together with support from scientists means that they can play an important role in future shift towards more sustainable environments. (Soma et al. 2018, 438.)

The goal of stakeholder participation in the urban environment is of course ultimately increase sustainability in one way or another. Even though the concept of sustainability can

be comprehended in multiple ways and this can also be seen as a problem, it also creates possibilities for context-based stakeholder contributions. The stakeholder participation should thus be embedded in the strategy and they can be judged by governance criteria which are legitimacy, accountability, representation, responsibility and transparency, also presented in figure 8 below. (Soma et al. 2018, 439.)



Figure 8. Core motives for enhancing stakeholder participation in urban decision-making
(Soma et al. 2018, 439)

Legitimacy in stakeholder contributions means that the process should be considered fair by the different parties who eventually support the policy decision. The fairness can also depend on the power being delegated to different stakeholders. Accountability on the other hand refers to the responsibility of the authorities to explain and justify the management and leadership, but also the distribution and acceptance responsibility for the decisions being made. Representation on the other hand refers to the group of people who have been selected and are approved to act on behalf of the whole group they are representing. In practice this means that even though for example politicians are selected to represent certain groups of people, the stakeholder processes can add a different level to this by providing joint learning experiences and present more collective, holistic and long-term thinking. Responsibility means the capacity of the social entities like state, NGOs, citizens and market actors to continuously develop and govern themselves. Finally, transparency means the handling and integrating the knowledge during the participation processes and how for example the uncertainties are taken into account. (Soma et al. 2018, 439.)

The authors also define the three different categories of participation that are relevant to urban areas to be stakeholder-based initiatives, government-based initiatives and science-based initiatives and all of these are needed in order to ensure legitimacy, accountability, representation, responsibility and transparency. The different categories nevertheless do not have an equal contribution to these governance criteria and in order to reach the highest level of governance, all of them need to be applied. As figure 9 illustrates, these different forums for stakeholder contributions need to be intertwined as joint networks in order to be utilized in urban decision making. (Soma et al. 2018, 445.)

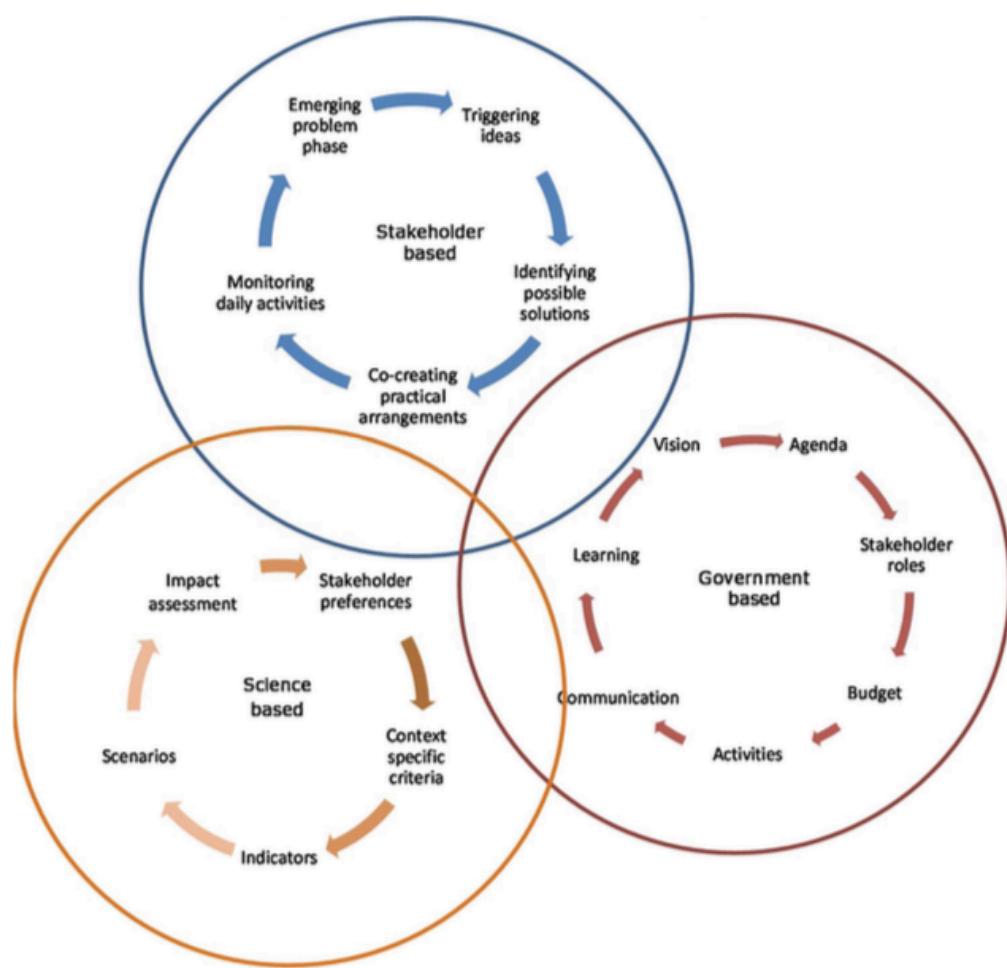


Figure 9. A transition approach to initiate urban development by means of integration of stakeholder contributions motivated by stakeholder initiative, government initiative and science initiative. (Soma et al. 2018, 446)

The authors also researched the different types of direct stakeholder-based initiatives and categorized them based on for example the following questions: “What are needs for

stakeholder motivated participation?", "How can learning among stakeholders lead to sustainable solutions?", What are motivations for stakeholder willingness to participate?" and "How to involve citizens?". They were also able to identify and classify different types of methods for direct stakeholder participation such as visioning approach, educative approach, step by step participatory process design, workshop such as citizens jury and focus group meeting, statistical approach (questionnaire survey), community action groups, online networks and innovation. (Soma et al. 2018, 441-442.) The idea of stakeholder-based initiatives related to urban sustainability is that they are truly produced by citizens and firms themselves which again is an example of a bottom-up self-governance where social innovation plays an important role and the people are able to voice their wants and needs. Social innovation can be portrayed as circular phases that are also illustrated in figure 9 in the circle of stakeholder-based initiatives. These phases are; 1) triggering ideas, 2) identifying possible solutions, 3) co-creating practical arrangements, 4) monitoring daily activities and 5) emerging problem phase. (Soma et al. 2018, 445.) This provides a bit more simplified model in comparison to the model by Voinov & Bousquet (2010) discussed earlier.

Based on the citizen participation ladder by Arnstein (1969) described earlier, Soma, Dijkshoorn-Dekker and Polman (2018) also provide a version that has been adapted to a bottom-up 'ladder of stakeholder contributions' illustrated in figure 10. The bottom two ladders are referred as 'no responsibility' and 'voting' and they are not addressed in more detail, but the top three ladders 'science based initiatives', 'government based initiatives' and lastly 'stakeholder based initiatives' describe the level of stakeholder contribution going up in the ladder. All of the different levels are of course very much depended on the context, but generally the highest level of contribution of course is when the stakeholders take full responsibility. (Soma et al. 2018, 445.)



- Stakeholder based initiatives
- Government based initiatives
- Science based initiatives
- Voting
- No responsibility

Figure 10. A bottom-up stakeholder contribution ladder for stakeholder participation.
(Soma et al. 2018, 446)

2.7 The role of civic engagement in sustainable cities

As already discussed earlier, civic engagement has started to play an increasingly important role in the sustainability efforts of cities. Firstly, the role of citizens in the decision-making process is crucial when deciding what kind of programs and policies need to be authorized or how they need to be adapted in order to promote sustainability. Another point of view is that the greater quantity of civic engagement itself makes the city be more sustainable and thus the policies promoting civil participation need to be promoted. (Portney 2005, 583.)

2.7.1 Bottom-up approach to urban sustainability

In the strategy literature there are two concepts that are often discussed in the context of strategy formation and they are *top-down* and in the contrary *bottom-up* approaches to strategy formation. When discussing for example climate change adaptation in cities and the use of citizen capacity, the bottom-up strategy can be adapted to these types of situations as well. Where the top-down process is more planned coordination of intentions and actions to achieve certain goals set by the management, bottom-up approach in nature can be more like a series of unplanned actions that may have outcomes not initially intended by the top management. (Kim, Sting & Loch 2014, 464.) Operations strategy for an organization is typically formed via a process that requires many types of complex decisions also at different levels of the organization (Kim et al. 2014, 462). In the bottom-

up approach, the management may offer some direction or board guidelines, but generally don't give any specific orders for decision-making. (Kim et al. 2014, 464).

Other researchers have also discussed the bottom-up approach in the context of sustainable environment management. Fraser et al. (2006, 115) for example have examined environmental management projects where community input has been used to identify sustainability indicators by focusing on different case studies. One of the studies examined was a case about *Coastal British Columbia* in Canada, where the top-down management had led to failure in preventing erosion on clear-cut areas in the Coast Temperate Rain Forest caused by harvesting. In order to develop a new strategy for land and resource management, a scientific panel worked with various stakeholder groups like local people, industry, government and also international environmental groups using a tool 'Ecosystem Management' (EM). The groups also needed to access information so that they could make decision considering the local environment and for this a 'Wellbeing Assessment' was utilized. Figure 10 below presents the model, which combines five different categories of social and five categories of environmental indicators into a matrix in order to provide a rating of community, regional or national wellbeing. It also balances the social and ecological factors and informs the resource planners and decision makers about the environmental implications of human needs and the impact of land-use decisions on humans and communities. (Fraser et al. 2006, 116.)

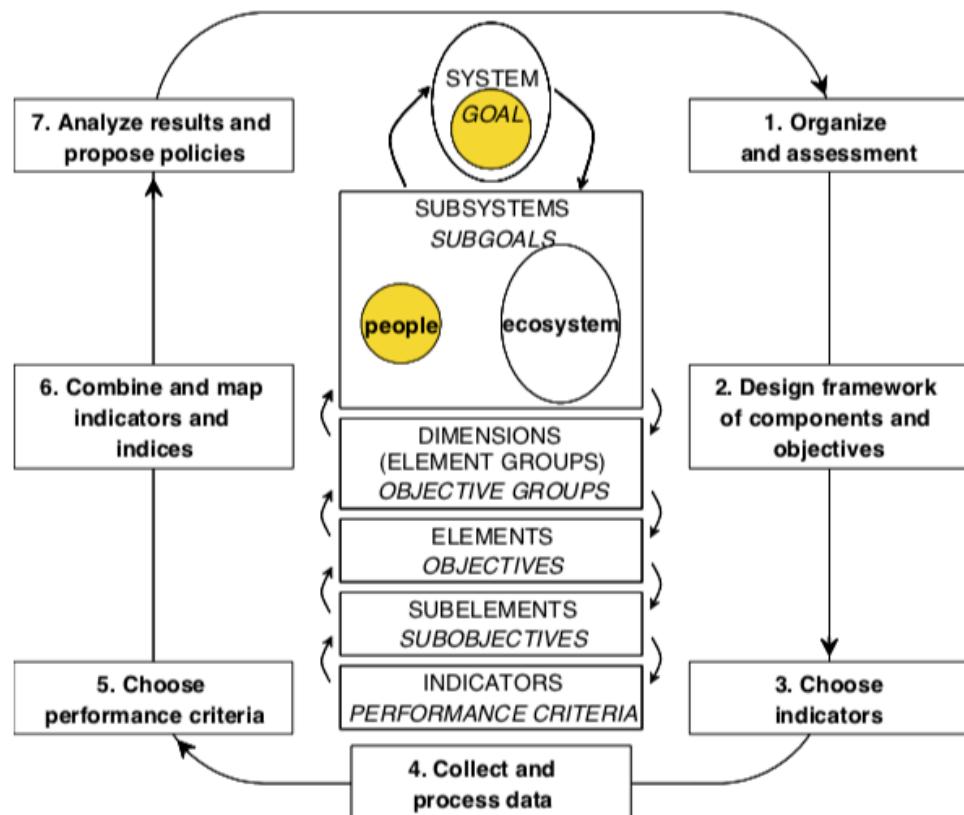


Figure 11. Wellbeing Assessment, example of a community consultation process (Fraser et al. 2006, 117)

The figure 11 above describes the process of engaging communities in forestry planning in practice. Steps from one to seven can be seen as circle of actions and they portray the steps in the community consultation process including the groups like local people and industries. The figure inside the circle on the other hand shows how the different environmental related indicators are combined into a final overall assessment. (Fraser et al. 2006, 117.)

The results of the research of the case studies by Fraser et al. (2006, 124) showed that most importantly it is crucial for the participatory processes to provide win-win solutions within political and economic constraints, in order for them to result in real environmental management changes. In the case of land management decisions for example, if the management decisions in the first place are driven by political, social, or economic interests, the participatory process aimed in increasing environmental awareness may prove ineffective. (Fraser et al. 2006, 124.) Nevertheless, it has been demonstrated that

community input can be utilized to guide planning towards sustainable development. Corresponding environmental and socio-economical boundaries will always probably provide challenges for policy-makers, but community involvement can also help recognize the major environmental guidelines and help to include them as a part of environmental planning process. (Fraser et al. 2006, 126.)

Another study about the bottom-up approach to sustainable urban development was conducted by El Asmar, Ebohon and Taki (2012) in Lebanon. They were able to identify that wider participation in urban environmental decision-making have resulted in ideal policies and the policies are also generally embraced by all stakeholder groups. This also naturally helps to enhance an effective implementation process. The bottom-up approach helps not only in effective problem identification, but also in creating the solutions which eventually leads to improving the quality of life. The authors even recommend that municipalities would change their urban policy making processes and engage and empower all different stakeholders, including the citizens, to participate in the decision-making processes. (El Asmar et al. 2012, 43.)

2.7.2 Civic environmentalism

One form of more extreme civic participation, is the concept of civic environmentalism which has rapidly developed since the early 1990s. Hokenmaier (2018) defines it as following: "*Is a type of social action where citizens come together to solve environmental problems as a means to improve their communities. The goal is to ensure a sustainable community for future generations through participation in democratic processes.*" The term was originally articulated by John DeWitt (1994) who explains it as an environmental governance model with emphasis on dealing with problems at a local level including political processes in which individuals as well as organizations work together to produce balanced and comprehensive solutions. The idea behind the agenda was that communities can do a much better work in protecting the environment even when the federal and regulatory agencies cannot act. The challenge is to integrate that approach on the day-to-day work of federal agencies. (DeWitt 1994; Portney 2005.) The concept has further developed with time to include also the mentions of participatory processes and they have determined to be even mandatory to build the social capital needed in the pursuit of

sustainability. For example in cases when communities will create their own environmental protection campaigns and actions without being forced to do so by the government, civic environmentalism can fundamentally be seen as bottom-up approach to environmental protection. (DeWitt 1994; Portney 2005.)

2.8 The challenges of civic participation

In his article about Sustainable cities and civic participation, Portney (2005) discusses the "three deadly sins" that might hinder the sustainability efforts. They are the tragedy of the commons, the not-in-my-backyard (NIMBY) syndrome and the expansion of cities' ecological footprints that results from the transboundary shifting of environmental impacts. The challenging idea behind all of them is the conflict between what would be good for the society and community in comparison what the individuals think is good for themselves since usually the benefits for the individual goes before the common good. (Portney 2005, 585.)

2.8.1 Tragedy of the commons and NIMBY

The big challenges related to the civic engagement and participation, as mentioned earlier are the Tragedy of the commons and the NIMBY-syndrome. The argument about the tragedy of the commons was originally developed by biologist and ethnic nationalist Garret Hardin, who wanted society to restrict people's reproductive freedom (Patt 2017; Hardin 1968). He developed a theoretic model which involved farmers and their cows as well as the communally owned village green. According to the theory, all the farmers can have full benefits form letting an extra cow graze on the common green while simultaneously only suffering a small cost to the community as a whole meaning less grass being available to other cows. (Hardin 1968, 1244.) A problem that can arise from this situation is overgrazing and according to Hardin this is when the community needs to step in and set a limit to the number of cows by each farmer and allocate the resources to the farmers who can manage them most profitably. This was the concept that Hardin also wanted to apply to the reproduction of the people as well. (Patt 2017; Hardin 1968.)

Today the concept of the tragedy of the commons is often also referred as terms like commons problem, common pool resource problem or externalities problem. The concept of the tragedy of the commons is also applicable and used by analysts to describe other modern-day problems such as climate change. The key aspects for this being the common pool resource like the global carrying capacity, the use of that resource in, the nature of the resource in a way that it is possible to overuse it and also that there cannot be a technical solution to expand that resource. Formulated like this, the tragedy of the commons can act as a problem frame in conceptualizing a complex issue and help in finding a solution strategy. (Patt 2017, 1.)

Another one of the challenges relevant to civic engagement and climate change governance for example is the “Not-In-My-Back-Yard” often referred as the NIMBY-syndrome adapted to the rapid urbanization process in cities. The classic examples of a NIMBY-problem are the negative attitudes from the local residents towards the placation of human public service facilities such as affordable housing, homeless shelters, drug treatment facilities, or other facilities with potential environmental or health impacts such as waste processing plants. The term NIMBY, implies the negative attitudes towards local development projects that serve the community needs and narrow-minded thinking often guided by selfishness or ignorance. As an opposite for NIMBY, the term YIMBY referring to “Yes-In-My-Back-Yard” has emerged meaning people’s positive attitudes and support towards local development projects like new housing development to improve local housing conditions or green energy projects for example. (Brown & Glanz 2018, 1.)

In the context of cities and urbanization, it can be argued that the NIMBY-phenomena happens in the process of urbanization and the faster the phase of urbanization, the worse is the NIMBY-effect. This is due to the fact that often the rapid urbanization needs a lot of construction of public facilities that might have negative externalities on the neighborhoods. It can be seen that the NIMBY and especially the mitigation of the effects of it, indicate the necessity of public participation in the urban development processes and bottom-up initiatives to reduce the risks. (Zhang, Xu & Ju 2018, 559.) In the process of building a sustainable city, the challenge for the decision- and policy makers is to do them in such a way to overcome these challenges and problems like the tragedy of the commons and NIMBY.

3 Research framework

The framework for the research consists of the two main topics related to the subject studied, which are sustainable cities and civic engagement. These two main themes were drawn from the literature and combined, and they form the framework for the study of the role of civic engagement in building sustainable cities. Themes under the main topic are bottom-up approach in urban planning and motivations and challenges of civic engagement and participation. Table 4 below presents and concludes the main concepts from the literature and the authors of the main scientific articles.

Table 4. Key literature and concepts and related topics

Concept	Related topics	Literature
Sustainable cities	Physiology of the urban systems Smart sustainable cities & urban domains	Bithas & Christofakis (2006) Bibri & Krogstie (2017)
Civic engagement	Defining civic engagement Stakeholder participatory modelling Ladder of citizen participation	Sarzynski (2015) Voinov & Bousquet (2010) Arnstein (1969)
Bottom-up approach	Top-down vs. bottom-up approach Community consultation process Urban environmental decision-making & policy building	Kim et al. (2014) Fraser et al. (2006) El Asmar et al. (2012)
Participation and sustainable cities	Motivation for citizen engagement & bottom-up stakeholder contribution ladder Challenges of civic engagement	Soma et al. (2018) Portney (2005)

The study aims to answer the question: “How can civic engagement contribute to creating a sustainable city?” and build a holistic view on what type of different ways citizens can engage on making the city more sustainable. The literature shows clear evidence that the bottom-up approach is a great way to promote the sustainability agenda in cities and that it is also urgently needed. Thus, the research aims to build a consensus of the ways citizens can participate together with the policy-builders and decision-makers and reflect on which are the most effective and currently utilized ways to do that in a capital city.

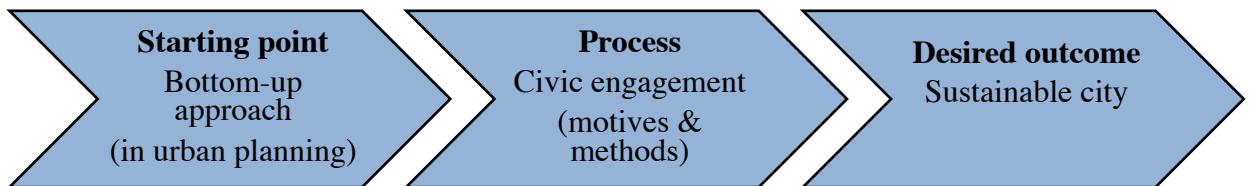


Figure 12. Research framework.

The research framework aims to identify and link those type of civic engagement practices that are relevant and most beneficial in contributing to creating sustainable cities and thus also to the whole sustainable development agenda. The importance of the role of cities has already been discussed and it can be reasoned why cities have a great responsibility to not only aim for sustainable ways to operate, but also try to utilize a great resource of knowledge which lies in the citizens who also share the responsibility of making the city as sustainable as possible. Figure 12 illustrates the framework of which will be utilized in the research of the case city of the study, the city of Helsinki.

4 Research methodology

The purpose of this chapter is to present the case and justify the selected research methodology. Firstly, it provides thorough description of the case being studied. Secondly, it explains the data collection methods in more detail as well as describes the data analysis methods. Lastly it also examines the reliability and validity of the research.

4.1 Case description

In the next chapter the case description is provided. Including also some historical aspects highlighting the importance of the topic relevant in the case city. Being the capital city of Finland, Helsinki also has the responsibility to set guidelines and function as an example for all the other cities in the country.

4.1.1 The urban population development in Helsinki

Helsinki has been the capital of Finland since independence in 1917 and since then the city has steadily grown in inhabitants as well as a geographical area. In the 1960s Helsinki started a shift towards more rapidly urbanizing metropolitan area and the city exceeded the number of half a million inhabitants already in the year 1965. The 1970s and 1980s were time for extensive building of the urban areas and the new construction focused especially on the suburban parts. The next couple of decades meant the shift in the structure of population between the suburban and more central areas of the city. While still in the 1970s mainly the elderly people lived in the city center and the younger people and families in the suburbs, in the 1990s the whole capital city area was faced with a strong wave of migration to the area and that created a new trend and demand to live in the center of the city. Through-out time Helsinki has allure young people to study and work in the area, which has also inherently had an effect to the whole population structure of the capital region, making it a somewhat different compared to the other urban areas of Finland. (Helsingin kaupunki 2018a.)

In the turn of the year 2017-2018, the city of Helsinki had 643 272 permanent inhabitants. During the year 2017 it grew by 8 091 citizens. The number of inhabitants has been

fluctuating during the past decades, the lowest being 482 833 in the beginning of the 1980s to the current number which is the highest it has yet been. The biggest reason to the variation in population has been due to the migration and the movement of people. Especially the population growth has mostly been a result of people moving in from outside the Uusimaa region, the metropolitan area and abroad. (Mäki & Vuori 2018, 1-3.)

The age structure of Helsinki is younger compared to the country as a whole. Also the population growth in 2017 highly concentrated to Helsinki and the metropolitan area. The population of the whole country grew by 9 833, but the growth in Helsinki area was 18 476 which therefore meant the decline the population outside the metropolitan area. The reason behind the population growth is, in addition to the surplus in moving in to the area, also the relatively young age structure. This also correlates to higher birth-rates than elsewhere in the country. (Mäki & Vuori 2018, 5.) The relatively young age structure makes Helsinki a favorable environment to also implement some new strategical aspects that benefit the sustainability purposes. It is important to understand the development of the urban population in order to put sustainability agenda and its development into context.

4.1.2 The organizational structure of City of Helsinki

The Helsinki City organization was reformed in the spring of 2017 and it now consist of Central Administration, Education Division, Urban Environment Division, Culture and Leisure Division and Social Services and Health Care Division. Above these different divisions are the City Council which is the highest decision-making organ of the city which also elects the Mayor and four Deputy Mayors. The Mayor works as the chair of the City Board and the Deputy Mayors chair the sector committees and they are all full-time official elected by the Council for the period of the Council term. The Central Administration has its own City Executive Office and a City Manager as the other Divisions have their own corresponding Committees led by the Deputy Mayors. The whole organizational structure is displayed in figure 13. (City of Helsinki 2018a.)

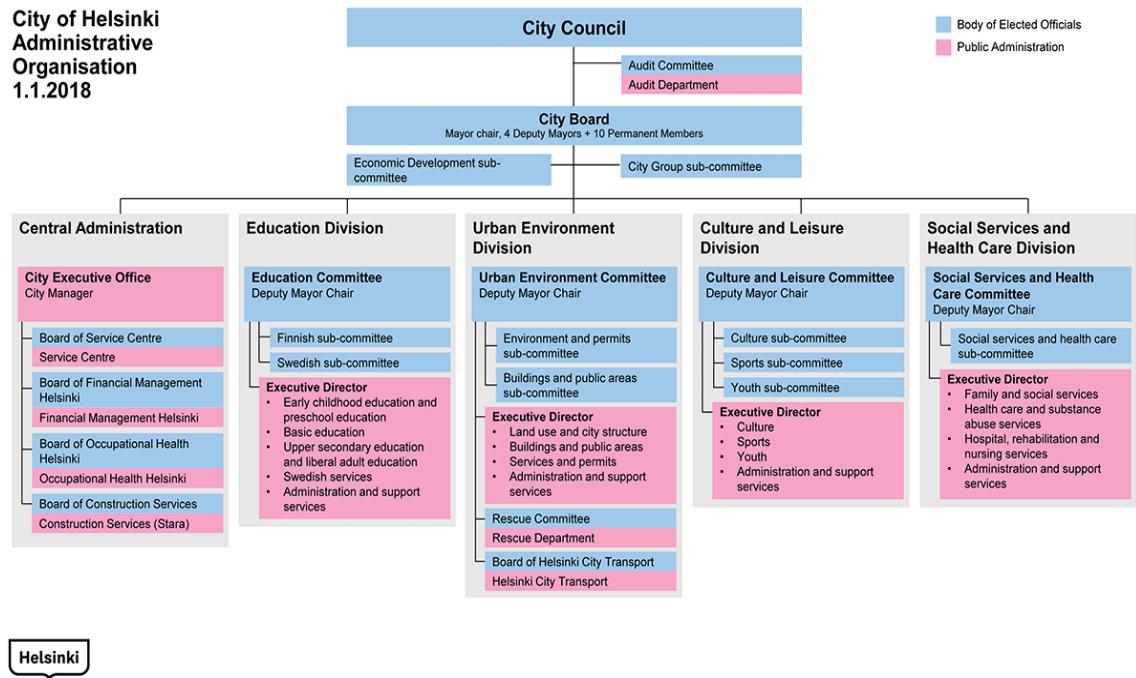


Figure 13. The organizational structure of City of Helsinki (City of Helsinki 2018a)

The Central administration consists of Service Center, Financial Management Helsinki, Occupational Health Helsinki and Construction Services (Stara). Another important sector when it comes to the environmental sustainability and the development of the urban areas is the Urban Environment Division which consists of three different subdivisions being land use and city structure, buildings and public areas as well as services and permits. (City of Helsinki 2018a.)

The highest decision-making organ, the City Council is responsible of for example defining the city strategies as well as other important key objectives. It also selects other city bodies and the highest city officers as well as being in charge of the financial management in terms of setting the city budget and municipal tax rate. (City of Helsinki 2018a.) Thus, the City Council is in a key role when defining and deciding the city's focal points when it comes to sustainability as well as participation strategies.

4.2 Research design and methods

The study was conducted as a case study using qualitative research methods. The data was collected with mixed methods using interviews to collect primary data, but also secondary data from various sources was collected and utilized.

A case study approach can be used when the research empirically investigates of an actual contemporary phenomenon in a real-life context using various sources. The case study strategy can be utilized especially when you want to answer questions “why?”, “what?” and “how?”. (Saunders, Lewis & Thornhill 2007, 139.) A single-case study can be utilized in several circumstances and it can be justified in a same manner than a single experiment because the same conditions also apply to a single-case study (Yin 2003, 39). Also according to Yin (2003, 39-40) there are several rationales in which type of situations a single-case study is a valid approach to research. One example is to use it to test a formulated theory if the case is for example a so-called *critical case*. Another rationale for single-case study is if it represents an *extreme* or a *unique* case. In contrary to this, one justification to single-case study is if the case is *representative* or *typical* case. (Yin 2003, 40-41.) Two more different circumstances according to Yin (2003, 42) are when the case is considered to be a *revelatory* case or a *longitudinal* case. In addition to these, the single-case study approach can be utilized in many other situations as well, but it should be noted that there is always a possibility for vulnerability when using it. For example, the case could later turn out not to be the case it was visioned to be in the beginning. Therefore, this research design requires careful investigation to minimize the changes of misrepresentation and maximize the access to collect the data needed. (Yin 2003, 42.)

In this case study, the inductive approach to data analysis is applied with aspects of deductive approach as well, since they can also be combined and applied together. Inductive approach starts by gathering the data and then exploring it to see which issues come up and should be focused on. It usually means the collection of qualitative data. Inductive approach seeks to gain understanding about the meaning of human attachment to different events. In this approach, the relationships between data are identified and questions and propositions are based on these. In deductive approach to data analysis on the other hand, an existing theory is used to formulate the research objectives. It is usually

utilized in research with quantitative data and has a more structured approach. (Saunders et al. 2007, 117-121.) In this study a theoretical background is used to link the research and findings to the existing knowledge around the subject area.

This study also represents the single-case study design and out of the possible rationale examples provided above, the case mostly represents the representative or a typical case because the findings can be applied to a similar type of situation in another case as well. The *typical* case provides evidence that is assumed to be informative about the experience of the average person or institution (Yin 2003, 41). In the case of cities, of course there are different characteristics depending on for example the location and the country, but many aspects discussed and results can also at least partly be applied to a similar size and structured city elsewhere as well.

4.3 Case selection

The thesis has a case study approach, the case city being the capital of Finland; the city of Helsinki. As the capital city, Helsinki has the opportunity as well as obligation to set example to the other communities in the country. It can be acknowledged, that the sustainability aspects should at least be well thought-out and incorporated into the city's strategies and operations.

In its strategy, Helsinki states that it wants to be "The most functional City in the World". It wants to strengthen its position as a pioneer globally in the field of citizen participation and transparency. Another one of the most important goals for the city is also to achieve and assure comprehensive economic, social and ecological sustainability. (City of Helsinki 2017.) Although these themes have been present in the city strategy already in the past as well, in the recent history they have become increasingly important strategical aspects as well as operational focal points. This makes Helsinki a relevant target for the case study in the Finnish scale.

4.4 Data collection method and interview selection

Data for the study was collected with mixed methods using interviews as well as secondary data mostly on online sources. Interviewees were selected so that they would represent all the areas of the research both from the strategy and sustainability point-of-view as well as the citizen participation agenda which is also strongly embedded to the new city strategy.

The interview method chosen for the primary data collection was a semi-structured interview. In semi-structured interview method, the interviewer can have a set of themes and questions that they want to be answered or handled during the interview and they can also vary between different interviews. This means that the structure is not always the same and some questions can be skipped or altered in comparison to the context of the interview and relation to the research topic. Order of the questions can also vary, and the flow of the conversation is the defining factor. Some questions can also be added if needed based on the organizational context or expertise of the interviewee for example. Because of the nature of the conversation and the fact that structure can vary between different interviews, audio-recording the semi-structured interview or at least note taking is needed. (Saunders et al. 2007, 312.)

The interviews in this study were conducted in Finnish because the interviewees were all Finnish-speaking. Therefore, the primary data was handled and transcribed in Finnish and the equivalent concepts were coded in the original language. The most relevant segments that wanted to be utilized in the results, were then later translated into English. Thus, the quotes used in the result section are not direct quotes since they not presented in their original language, but direct translations made by the researcher. There were four interviews in total and they were all conducted in-person at the interviewees work-place and recorded with a dictation machine application on a mobile phone.

As mentioned already before, the interviews were semi-structured theme interviews so that the questions were sorted into three different categories and the conversation was carried on based on the themes of the questions. The interviews had a different emphasis of the themes based on the expertise of the interviewee, but all of the themes were discussed with all of the interviewees. The summary of the interviews can be seen in table 5 below where

the interviewees are individualized based on the chronological order of the interview. Also the field of work as in the area of expertise and the interview method is displayed. The preliminary list of the interview questions in both Finnish and English can be found in appendix 1.

Table 5. Interview summary

Interview number	ID	Field of work	Interview method
1	R1	Strategy & development	In-person
2	R2	Development & environmental management	In-person
3	R3	Public participation	In-person
4	R4	Public participation	In-person

The aim of the interviews was to gather additional and more in-depth information about the topic. The strategies, reports and other research made about the attitudes of the citizens for example only provide the base for how the issues are presented and should be handled, but the practical implementation is the most important part. Thus, the interviews were made in order to gain more insight to the issues touched.

Secondary data was collected thorough open sources mainly from the internet and it consists of the latest strategy of City of Helsinki, environmental reports of the City of Helsinki, the environmental policy of the City of Helsinki as well as other research conducted for example about the citizens attitudes towards environmental issues. Also other publicly available relevant data was utilized. Through the interviews, access to also additional secondary data was received.

The secondary data combined with the literature provided a basis for the primary data collection and the interviews. The secondary data focused mainly on the newest available information and thus the research does not include a chronological perspective to the issues but mainly focuses on deepening the most recent and current information.

4.5 Data analysis methods

According to Taylor and Bogdan (1998, 150) “In qualitative research, coding is a way of developing and refining interpretations of the data”. When the data is transcribed, the open coding can be utilized with qualitative data in order to identify the main themes arising from the raw data which collection has been guided by the original theoretical framework. Coding is essentially the process of conceptualizing and categorizing the empirical data of the study. (Bryant & Charmaz, 275.) In open coding the data is divided into conceptual units with a label and the same label is given to all similar units of data (Saunders et al. 2009, 509), in this case the data was handled with coding to see what types of aspects related to the research questions arise from that. Coding and sorting the data enables the analyzation of the data relevant to the theme, concept or proposition and comparing them to refine and tighten the ideas in order to move to a higher level of conceptualization (Taylor & Bogdan 1998, 156). In the end both the primary as well as secondary data and the results from the coding were combined and analyzed in order to search answers to the research questions.

The primary data from the interviews were transcribed and coding was utilized in order to conduct the analyses. The primary data was collected in Finnish, so first the equivalent terminologies had to be determined in order to be able to translate the results into English. The secondary data was collected whenever possible straight in English language so that there would be as little translation compromises as possible. The secondary data as in reports and other research was also coded using the same terminology as in the primary data. The information drawn both from the primary as well as from the secondary data was combined in order to perform the analysis and collect the information necessary to answer the research questions. The initial terms used in coding based on the research framework (in English) were 1) *Sustainability* and 2) *Participation*. These two main terms also include the corresponding other terms used related to the two themes like 1)

sustainable development, ecological etc. or 2) *inclusion, citizen engagement* etc. or any other term related that goes under those two themes. After the initial coding for the primary data, it was further categorized based on the themes in the sub research questions, which were 1) *Motivations for participation*, 2) *Participation efforts towards sustainability* and 3) *Participation types and channels*, to find and analyze the data necessary to answer the research questions.

4.6 Reliability and validity

Reliability and validity are vital for the credibility of the research findings and reducing the possibility of getting the answers wrong. Reliability measures how consistent are the findings produced by the data collection methods and analysis. Validity on the other hand deals with the findings in the context of whether they really are what they appear to be about and whether the relationship between two variables is really a causal relationship. (Saunders et al. 2007, 149-150.)

Reliability of the research measures repeatability of the study as in if another researcher would repeat the same study and follow the same procedures as the earlier researcher, the later research would come to the same findings and conclusions as the previous research (Yin 2003, 37). Yin (2003, 37) also defines “the goal of reliability is to minimize the errors and biases in the study.” In this case study context, this means that the study should be conducted in a way that also another examiner could repeat the processes and also arrive to same results (Yin 2003, 37).

Validity of the research can be tested in multiple ways with three different tests while testing the construct validity, internal validity and external validity. Construct validity means establishing correct operational measures for the concepts being studied. Internal validity on the other hand is relevant for explanatory or causal case studies and it establishes the causal relationships where some specific conditions are shown to lead to other conditions. External validity establishes the field to which the research findings can be generalized. (Yin 2003, 34.)

The validity measures relevant to this case study are the construct validity and external validity. Construct validity can be assured especially in the data collection phase by choosing and collecting evidence from multiple sources. The external validity in this context on the other hand applies to knowing if the research results of the specific case study are generalizable in other situations as well. The replicability of the theory in different contexts should provide the same results in order to be valid. (Yin 2003, 37.)

The reliability and internal as well construct and external validity ultimately test quality of the research design. In case study design different kind of tactics can be utilized in different stages of the research in order to assure the reliability and validity or at least try to make them as good as possible. The different tactics and things to keep in mind in order to achieve reliability and validity can be concluded as follows. Construct validity can be assured for example using multiple sources of evidence and establishing chain of evidence in the data collection phase. Internal validity can be built and tested for example with using logic models and doing pattern-matching in the data analysis phase. External validity on the other hand can be tested using theory in single-case studies and replication logic regarding multiple-case studies in designing the research. Reliability in the data collection phase on the other hand can be helped with using a case study protocol or developing a case study database for example. (Yin 2003, 34-39.)

As the research's reliability is defined so that it should be conducted in a way that if another researcher would conduct the same study using the same methods, they would come to the same results, it can be stated that the reliability of this research is relatively good. Compromises to the reliability of the study are caused by the methods chosen, so that for example another more experienced researcher could have utilized them in another and a more insightful manner.

Validity on the other hand is defined and measured in this case study with the help of construct and external validity which are determined by the correct operational measures for the study and the generalizability of the results. In this research, at least the construct validity can be seen to be quite okay, since multiple sources of evidence were used in the data collection phase. Also, the external validity is relatively okay since the results can be applicable to a similar type of case also in another context.

5 Findings

The purpose of this chapter is to present the research findings both from the primary data in form of the interviews as well as from the secondary data including reports and other previously conducted research. Firstly, the overall sustainability efforts of the city are presented and examined. Secondly, the findings regarding the civic participatory processes and their relations to the sustainability efforts are presented. Finally, the chapter also presents the most important findings from the interview data.

5.1 The Helsinki City Strategy

The Helsinki City Strategy 2017-2021 is titled “*The Most Functional City in the World*” which also states the vision of the city. This of course is saying a lot, but also describes the ambitious strategical goals the city has in all aspects of its operations which is to do everything better, ultimately of course leading to the wellbeing of the citizens and other stakeholder groups of the city. In practice this functionality means different things like that children feel safe walking to school, services for the elderly people are easily accessed and that for example the road construction work is conducted in a way that it causes as little disturbance to the residents as possible. The city also wants to offer a well-organized, reliable operational environment for companies and experts. The strategy also emphasizes the role that Helsinki and cities in general have in finding solutions to the global challenges. (City of Helsinki 2017, 3.)

Also, the terms *sustainable* or *sustainability* and *civic participation* or *participation* are mentioned in the strategy multiple times and they form a basis in many aspects to the city operations. In addition, themes that can be related to these terms are also mentioned or discussed over 20 times, including for example securing sustainable growth. (City of Helsinki 2017.)

The participation aspects are identified in the strategy for instance by following statements:

- “The city strives to maintain the trust of residents and companies, to strengthen their real influence and to improve equality, service standards and mutual understanding

between population groups through modern models of inclusion.” (City of Helsinki 2017, 5.)

- “The city contributes to dialogue and encourages those in a weaker position into civic engagement. The customer is always a stakeholder in his or her own public services.” (City of Helsinki 2017, 5.)
- “Emission reductions and circular economy projects will be carried out in Helsinki in tandem with the business community and residents.” (City of Helsinki 2017, 12.)

Especially the last quote is also tightly related to the environmental sustainability as well.

Other statements in the strategy related to that topic include for example:

- “Ensuring comprehensive economic, social and ecological sustainability is one of the growing city’s key goals.” (City of Helsinki 2017, 6.)
- “In whatever it does, Helsinki underlines ecological values and, consequently, strives to join the C40 climate network of the leading cities of the world.” (City of Helsinki 2017, 12.)
- “Helsinki will strengthen its international activities with a special focus on digitalization and on combating climate change – two factors that are among the strongest global change factors and that unite all leading cities today, and thus make for good profiling areas in international relations.” (City of Helsinki 2017, 14.)

As the last quote states, in addition to the themes of participation and sustainability, also the topic of digitalization and smart solutions are highly visible in the strategy and in the future scenarios. Helsinki aims to invest on the implementation of the accessible e-services as well as the full utilization of digitalization, artificial intelligence and robotization. (City of Helsinki 2017, 9.) These technologies can be utilized in many sectors of the city operations.

5.2 Environmental policy in Helsinki

The City of Helsinki environmental policy was accepted by the city council in 2012 and it contains the targets set on the long term, mainly until year 2050 and also in the medium term, reaching mainly until year 2020. The targets are divided into eight different categories related to the environmental protection. The categories are climate protection, air protection, noise control, protection of the sea and water bodies, nature and soil conservation, procurement, waste and material efficiency, environmental awareness and responsibility and finally environmental management and partnerships. (Helsingin kaupunki 2012.)

For example the long term goals in the climate protection category are that Helsinki aims for a carbon neutral future by the year 2050 and also wants to be in the frontline when it comes to energy efficiency as well as climate change control and adaptation both nationally and internationally. The medium term and more concrete goals include for example that the greenhouse gas emissions have reduced minimum 20 %, the share of renewable energy is at least 20 % and the energy efficiency has also improved at least 20 % by the year 2020. Also, the climate change adaptation has to be integrated to the operations of all subdivisions of the municipal government and that the climate change effects and means to prepare for that are communicated to the businesses as well as citizens. (Helsingin kaupunki 2012.)

Another example of the targets related to the environmental awareness and responsibility are that in the long term, Helsinki aims for the environmental awareness of the city employees as well as citizens to be among top three in Europe. Another long-term target also is that the citizens as well as city employees are committed to the targets of the environmental policy. The medium-term targets related to environmental awareness and responsibility are for example that Helsinki aims to be a pioneer in environmental education, all work communities have a trained support person related to environmental and ecological issues, the city employees are aware of the sustainable working methods and take them into consideration while working, and also that the decision makers are well educated in the matter so that they can make responsible and sustainable decisions. (Helsingin kaupunki 2012.)

Some targets related to environmental management and partnerships on the medium term on the other hand include for example that the public utilities all have a certified environmental management system at use and that the environmental management becomes a part of all the rewarding systems across the city's operations. Related to partnerships, Helsinki also wants to seek partnerships and networks with businesses and other stakeholder groups in order to achieve the goals and targets set in the environmental policy. (Helsingin kaupunki 2012.)

5.3 The environmental management and decision-making in Helsinki

In the city of Helsinki, organs that guide and control that the environmental issues are taken into account are city strategy, environmental policy and the budget guidelines which are all established by the City Council. The Environmental management model for City of Helsinki is presented in figure 14 and it shows that the City Council, City Board and the different sectors of the city, municipal enterprises as well as the subsidiary communities should be in a constant cycle of development and cooperate with each other in order to achieve the goals set in the strategy. In addition to that the different sectors, municipal enterprises and subsidiary communities of the city have a number of different programs in the field of environmental protection that all contribute to the environmental management goals. These programs include for example ISO 14001, EcoCompass, Green office and Certificate from Green Flag or Okka-foundation. (City of Helsinki 2018b, 10.)

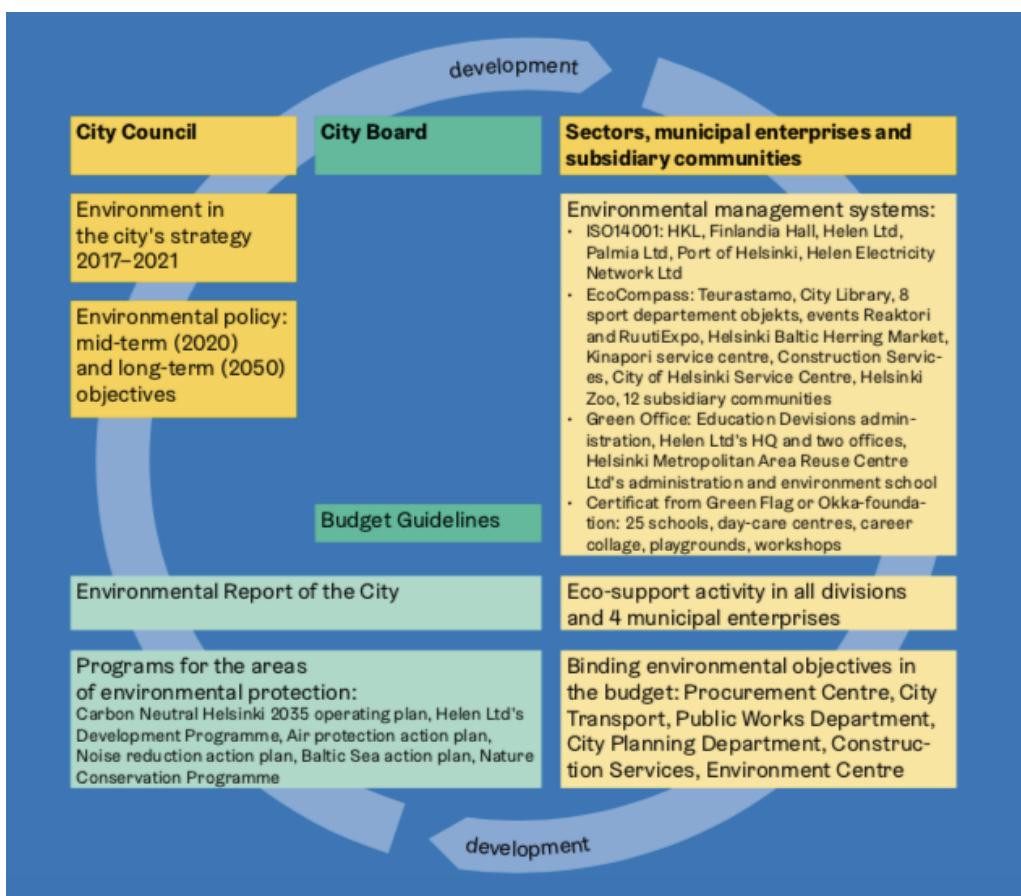


Figure 14. Environmental management model for City of Helsinki (City of Helsinki 2018b, 10)

For example, the also internationally renowned ISO 14000 environmental management system provides the criteria for environmental management while also providing certification regardless of the organizations activity or sector. Ultimately setting up a framework that is easy to follow and monitor by the guidelines provided by the ISO 14000 -organization and it can ultimately provide assurance both internally for the employees and management as well as externally to the stakeholders that the environmental impact is being measured and improved. (ISO 2018.)

Also the Finnish EcoCompass-certificate expresses the commitment to operate according the criteria of the program and continuous improvement. The EcoCompass provides concrete tools to focus on operations that need to be made and also a personal adviser to help launch the program. The Eco-Compass also originates from a city-level and in the background, there is a joint project between the cities of the Helsinki Metropolitan area being Helsinki, Vantaa and Espoo. (Ekokompassi 2018.)

5.4 Citizens attitudes towards environmental issues

A study made about the environmental attitudes and the urban development in Helsinki and Vantaa was also published this year and it shows how concerned the citizens of the two big cities in the Helsinki Metropolitan area are about environmental issues. In total 1 560 respondents aged 18-74 took part to a survey which mapped out the attitudes for example in the areas of energy savings and consumer choices, views on environmental problems, concerns about the environmental problems as well as opinions on urbanization and the means of environmental protection. (Hirvonen & Vanhatalo, 2018.)

One of the questions asked in the survey was if the respondents would we willing to pay for environmental protection in the form of taxes. As presented in figure 17, the results show that clear majority would be willing to pay higher taxes or fees, if the money was directed to nature protection, water protection, combating climate change or improving air quality. With noise reduction on the other hand, the willingness to pay was not as significant. (City of Helsinki 2018b, 10.)

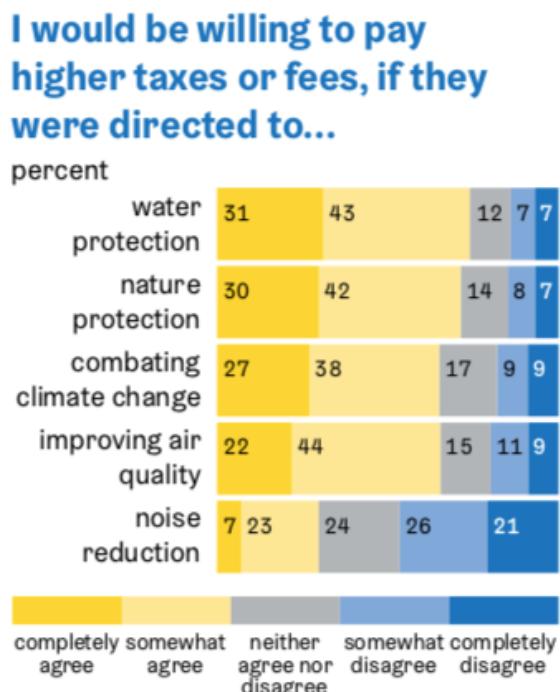


Figure 17. Willingness to pay higher taxes for environmental protection (City of Helsinki 2018b, 11)

Another significant finding from the survey about the environmental attitudes in general was that there was a clear consensus on many environmental issues. For example nearly 80 % of the respondents agreed at least partially, that the environment should be prioritized even if the economic growth would suffer from it. The results also show that 42-47 % of the respondents are very and 33-38 % quite concerned about the climate change, the world's forests being destroyed and the extinction of some plant and animal species. Also another result worth mentioning was the survey showing that the climate policies of the cities are not very well known by the citizens in Helsinki and Vantaa. Only 16 % of the citizens in Helsinki and 9 % in Vantaa stated that they are well aware of the city climate policy and the clear majority couldn't say if the climate policy in the city is responsible or not. (Hirvonen & Vanhatalo, 2018.) This means that Helsinki still has some work to do in order to achieve its goals set in its environmental policy.

5.5 Participation in Helsinki

In general, Helsinki offers the citizens multiple ways to participate. Most common and traditional way of course is to vote in the municipal elections which are held in every four years. Another more traditional way to participate is to take part in the resident meetings held by the Mayor in different neighborhoods of the city four times a year. In these meetings, there are always also city experts from different fields and the themes vary according to the neighborhood. Also different types of city planning resident events are organized where the current city plans are presented and discussed. (City of Helsinki, 2018c.)

In addition to these more traditional ways to participate, there are also numerous online platforms where Helsinki citizens can voice their opinions, participate and make initiatives to the city authorities. Some of the official online channels maintained by the city include for example Kerro kartalla (tell it to us on the map) -service, which is a participation page where the citizens can leave ideas and observations literally on an interactive map. Another service similar to this is Kerro Kantasi (tell your opinion) -service where the citizens can voice their opinions for example around issues that are about to prepared or are already handled. In addition to these, also other participation and discussion platforms exists, which are more in line with a certain theme. For example, current topics in city planning

can be discussed in an open info and exhibition space in the city center of Helsinki. Also the younger people have their own online participatory platform Ruuti, where they can participate in city planning. The citizens can also keep track on the decision-making of the City Council and Board online. (Helsingin kaupunki 2018b.)

In addition to the discussion and participation channels maintained by the city, also numerous other discussion platforms and channels can be found for example through social media. In Facebook alone, there are numerous groups discussing the current urban development issues, but also other topics related to the urban life in Helsinki. One example of these types of groups is Public discussion group Lisää kaupunkia Helsinkiin, which has over 17 600 members. An occasional visit to the group during a 6-month period in summer-autumn 2018 shows that the discussion in the group is very lively and the topics vary from urban planning and construction to transportation and climate change. (Facebook 2018.)

Another way to participate and make an influence online is the Citizen initiatives which is in accordance with the Local Government Act. This means that Helsinki residents can take initiatives related to the operations of the City of Helsinki. The City Council is informed about the citizen initiatives that are related to the Council's scope of responsibilities at least once a year. The number of initiatives around a specific issue also determine how fast it should be dealt with. The taker of the initiative is also informed of the actions caused by the initiative. (City of Helsinki 2018d.)

5.5.1 Participation and Interaction model in Helsinki

One very visible part of also the strategy of Helsinki is the Participation and Interaction model, which was initiated as a part of the reformation of the management system in Helsinki. It is based on the communal laws of participation regulations and it aims to better the participatory processes and operations to be more citizen initiated by engaging citizens themselves, organizations, businesses and other stakeholder groups to interact and participate. (Helsingin kaupunki 2018c.) The Helsinki City Board decided about the Participation model in the end of 2017 to be implemented in years 2018-2021 (Helsingin

Kaupunginhallitus 2017). Thus, the practical implementation of the model is relatively new thing in Helsinki.

The model defines the main principles for the participation in Helsinki to be:

1. Utilization of the know-how and expertise of individuals and communities

2. Enabling of spontaneous activities

3. Creation of equal opportunities for participation

(Helsingin kaupunki 2018c).

As already mentioned and demonstrated earlier, the civic engagement agenda is also profoundly rooted in the city strategy. In practice the new model brings even more means of participation in addition to the ones that already existed earlier. According to the model, different participation channels include for example feedback and initiatives, different citizen group councils like the council of the elderly people or equality committees, frameworks for volunteer work, possibility to use the public spaces, open data policy and digital participation channels like feedback forms or even mobile phone applications. (Helsingin kaupunki 2018c.)

Some new distinctive features in the participation model are regional participation and participatory budget-planning. The regional participation in practice means that each of the city districts or a housing area has a local worker in the form of a “city coach” assigned to the area, whose main field of work is to help the citizens to promote initiatives and development proposals. They also promote the cooperation between the citizens and other communities in the areas. Another main field of work for the city coaches is to help the citizens with the participatory budget-planning, where the citizens in Helsinki can vote the use of around 4,4 million euros from the city budget based on citizens proposals. The money has been divided to be used in whole city-wide projects but also regionally based on the population in each area. (Helsingin kaupunki 2018c.)

Another innovative participation aspect included in the model is the Participation Game, a board game aimed mainly to the city employees to help them plan and discuss the operations and services and how they could be planned and executed in an even better co-operation with the citizens. Another point of the game is to help to introduce the

participation model in more detail to the employees to help them also understand what it means in the everyday work and how it is currently executed. This also helps to build a solid participation plan together with the whole personnel for the future. (Helsingin kaupunki 2018c.)

5.6 Interview results

The results from the interviews strengthen the view that Helsinki invests to the environmental sustainability efforts as well as participation also in practice. These two can also be combined and citizens efforts can be utilized in creating sustainable practices.

The interviewees mostly mentioned the same environmental sustainability concerns and efforts that are also stated in the strategy. Themes that were mostly discussed were:

- The use of biofuels and transportation issues (R1, R4)
- Local nature and environment (R2, R3)
- Climate change control and adaptation (R2, R3, R4)
- Eco-support and environmental management systems within the city organization (R1, R4)

Especially the climate change adaptation and local nature and environment issues where the ones that stood out concerning citizens the most according to the interviewees.

Motivations for civic engagement

The participation and interaction model creates the framework for all citizen engagement efforts in all fields of work in the city of Helsinki. In addition to that, the interviewees also determined the following factors as why it is important to engage citizens or other stakeholder groups for that matter. Motivations towards civic engagement mentioned by the interviewees:

- Image factors (R1)
- Citizens know what type of services they want (R1, R3)

- The utilization of citizens know-how and expertise (R2)
- To create solutions that truly serve the citizens (R2)
- To create local solutions to local problems (R2)
- To include the “everyday-wisdom” of citizens into the planning (R2)
- Citizens feel that they have solutions to problems (R3)
- People want more sense of community (R3)
- To make the city organization more approachable (R3)
- The targets set by the city in many aspects simply cannot be reached without citizens efforts (R4)

The discussions emphasized especially the utilization of the citizens knowledge and know-how and that citizens know what type of services they want so that they can truly serve and help them in everyday life. For example R2 pointed out that: *“Around complex questions and difficult problems, many type of expertise and know-how is needed. And of course, that the solutions are such that the citizens can commit to them and are in the process of making the plans, so that the solutions also truly serve the citizens.”* (R2)

Operations in order to engage citizens

The efforts towards engaging citizens in both performing as well as developing sustainable practices were also discussed in relation to the participation model as well as other characteristics of civic engagement. The interviewees mentioned the following actions:

- Communication and interaction
- Online services and guidance
- Campaigns (climate change adaptation, sustainable transportation, renewable energy)
- Presence in different events
- Information sharing about the possibilities to participate
- Encouraging to think environmental issues regarding the participatory budgeting

The focus in the discussions with the interviewees was more on the practices that the citizens are encouraged to do in order to be more environmentally sustainable in their

everyday life, but there was willingness to help the citizens also to participate in the processes where more sustainable practices, policies or strategies are developed. It was mentioned that experiences have shown, that citizens can indeed have valuable know-how as well as motivation towards environmental issues. And this truly is something that the city authorities can utilize in the development of sustainable or environmental practices. For example, R3 mentioned: “*While playing the Oma Stadi -game with the kids, which helps to formulate the proposals for the participatory budgeting, there has been ideas like “trash strikes”, and the climate change creates anxiety and worries and is seen as a threat and people want to do things in order help tackle that.*” (R3) R2 also told regarding the participatory budgeting planning events that: “*We had a proposition about Environment weeks, a marketing campaign emphasizing the environmental issues a bringing awareness to ecological related matters that would also engage different operators within the city to act in a larger scale.*” (R2)

Different participation approaches

The different approaches for all types of participation were discussed during the interviews and the means of participation mentioned by the respondents were categorized as in table 6 below. Also, some additional example of participation channels were added based on the findings from the secondary data as well.

All of the respondents mentioned giving feedback as one of the most common and also low threshold ways to voice opinions and participate. R2 stated that: “*Giving feedback really is a pretty handy way to bring local knowledge for the officials and planners. Not just positive or negative feedback, but also development proposals and ideas.*” (R2)

In addition to the more traditional participation approaches like asking and receiving feedback as well as information and interaction events, the city of Helsinki has also engaged in new and more innovative approaches based on the new participation model. Especially the city coaches and participatory budgeting are improved ways to bring the participatory possibilities even closer to the citizens and create encouragement from the city side. The civic engagement approach has always been embedded to the working procedures in the city, but it has been more in relation to single projects in for example the

planning processes. R3 explained the differences between these two approaches: “*Interaction events where the citizens are told how things are going, is not necessary the most participatory way, they are more like info-events. Of course, there is possibilities to ask questions and, in some level, also have an influence, but the goals in them is not necessarily as strongly participatory as the things we are doing now even stronger than before.*” (R3) R2 also pointed out that: “*In order to make the right decisions, we need the people who want to participate, and there truly is enthusiasm, some people are very enthusiastic and motivated that they are taken along to the processes.*” (R2)

Table 6. Participation examples

Participation type	Means & examples
Feedback channels <i>(traditional)</i>	Customer-service systems Direct contacts (phone, e-mail) Discussions “in the field” (in construction work for example) Social media Surveys
Project work and movements <i>(traditional)</i>	“Puistokummi” -activity (“godparents” for parks) Possibilities for volunteering (environmental protection projects for example) “Kansallinen kaupunkipuisto Helsinkiin” -movement (National city park for Helsinki)
Information and interaction events <i>(traditional)</i>	Mayor resident nights Discussion events Seminars engaging different stakeholder groups
City coaches <i>(new)</i>	Regional participation Linking the city and the citizens Providing information Help with initiatives and proposals
Participatory budgeting <i>(new)</i>	Citizens budget proposals Games to help formulate the proposals (kids & youth) Planning and ideation events

Additional findings

The sphere of civic capacity also includes other stakeholder groups than just citizens. The interviewees mentioned the most important groups in the cooperation networks related to environmental sustainability efforts. They were:

- Other divisions and organizations within the city and the employees themselves (internal stakeholder groups)
- Educational institutes, suppliers, different environmental organizations and local businesses (external stakeholder groups)

For example, the importance of the city employees themselves acting accordingly was emphasized. For example, the eco-support system within the city organization was seen as an important tool to engage the employees in acting to reach the sustainability targets set by the city. R4 explained the idea and the outcomes of the activity: “*The idea is that individuals that can provide eco-support are trained inside the city's organizations and in addition to their job, they are responsible for looking after the practical environmental related issues like sorting waste, energy efficiency, sustainable transportation and that these issues are displayed and actualized in the everyday life within the workplaces. It has turned out to be that there are a lot of people who want to make an influence and it has activated many operations in the city workplaces and the procedure has also spread to other big cities in Finland.*” (R4) Actions like this also help to fulfill for example the sustainability related strategies within the city organization, so that they are also executed and “*not just on the level of stating them on paper like environmental programs can easily be*” as R4 also stated. (R4)

Also the role of the Climate partners -network between the city and local businesses as well as research institutes was mentioned. R4 mentioned: “*The idea is that Helsinki has set its own climate targets and the climate partners have signed a contract with the mayor in which they tell their own targets. There are no set conditions rather the idea is the commitment to the climate work together and there are 60-70 companies or big organizations that have joined the network. Besides commitment there is networking,*

seminars and workshops organized and the projects are planned and conducted together.”
(R4)

One thing that was also emphasized during the interviews that there is initiatives and concerns coming from the citizens regarding environmental issues and sustainability in general. R2 mentioned that: “*If you think about the phenomenon that get people talking, sustainability and the many themes related to that like recycling, circular economy, local nature and nature protection are themes that motivate voluntary activities and to organize different kinds of movements. Sustainable development is a phenomenon that mobilizes people across neighborhood boundaries and it clearly is something that people talk about.*” (R2)

The challenges of the use of civic engagement regarding the sustainability efforts in general were also briefly touched with some of the interviewees. The issues that came up were mainly related to the transfer of knowledge to the right authorities for example through the different feedback channels. The ways that the data is collected and interpreted would still need some improvements for it to be as efficient as possible and like R1 pointed out about the feedback coming through social media channels: “*Yes they are handled, and we also pursue to take actions, but analyzing and action taking still probably needs to be developed.*” (R1)

R4 also provided an overview on the emergence of new technologies through different types of smart city concepts and how Helsinki is currently engaging in many different projects both nationally and internationally. Examples of these are *My Smart Life* -project developing smart energy and transportation solutions and also the circular economy project called *Circular cities* where for example the construction solutions are thought out. All of them are already strongly related to the sustainability effort of the city, but they could also provide new platforms and ways for the civic engagement to be utilized.

6 Discussion

This chapter summarizes the main findings from the primary data as well secondary data which were discussed in the previous parts and portrays answers to the research questions. When applicable the results are also analyzed and adapted against the theoretical background set on the literature review.

The main objective of the study made for the thesis, was to explore the relationship between civic engagement and sustainability in the urban setting of a city. Using a case study method applied to the capital of Finland the city of Helsinki, the thesis searched answers to the main research question:

How can civic engagement contribute to creating a sustainable city? (RQ)

The sub research questions formulated to help study the main research question were:

- *What are the main motivations towards civic engagement?* (SQ1) To find out the motives a city has to engage citizens in development.
- *What kind of operations are performed in order to engage citizens in developing the sustainable practices?* (SQ2) To identify what are the operations utilized in engaging citizens for the development of sustainable practices.
- *What are the different levels and types of civic engagement?* (SQ3) To identify the different levels and types of civic engagement.

The answers to the questions were search by an empirical study using the case study method that included both the use of primary as well as secondary data. The data was collected by conducting interviews as well as using various online sources and coding and categorizing methods were applied in order to conduct the analysis. The questions were originally formulated against the frames discussed in the literature review. In order to answer the main research question, the concepts and background for sustainable cities in general as well as civic engagement were reviewed in the literature and also explained in the context of the selected case city. After this a view of the civic engagements role in the development of sustainable cities was formulated.

Overall, the findings from the literature as well as the empirical data show that cities really recognize the potential role of civic capacity in their sustainability efforts. The data collected also implies the concerns that the citizens have about the state of the environment and it is a subject some feel very passionate about and are willing to act in order to protect it. As stated already in the beginning of the study, the impacts of cities to sustainability are significant and they also have a crucial role in harnessing the civic capacity and knowledge in favor of the common good of the urban environments and the world as a whole.

Motivations (SQ1)

The key motivations for engaging citizens in developing new practices are especially that the citizens have the knowledge of what type of services they want, and the city wishes to of course create solutions that truly serve the citizens and other operators within the city in their everyday life. Citizens can also often have know-how and knowledge in different fields that for example the city organization is lacking or is in other ways need for. The local point-of-view was also something that came up and that the people living in certain areas know the best ways to tackle the issues within the local neighborhoods. In more relations also to the environmental and sustainability issues, one key motivation for civic engagement is also the fact that the targets set are so ambitious, that they simply cannot be reached without the participation form all the components in the city, one of the biggest of course being the citizens.

Operations and practices (SQ2)

The main finding related to the concrete operations that are utilized in order to really engage the citizen towards more sustainable practices is that the role of communication was emphasized. Both about the ways to participate, but also about the environmental issues in general. It was pointed out that it is often that the citizens don't have enough knowledge of the ways they can have an influence. Thus, the key is to increase the knowledge and also provide low threshold ways for the people to start participating.

Levels of engagement (SQ3)

There are of course multiple ways to engage the citizens and participate especially in an urban setting but ultimately some are more efficient than others. When the findings of the study are applied to the Arnstein's (1969) Ladder of citizen participation, the relevant levels regarding the case can be identified. (Figure 18.)

On the lower spectrum of the ladder is *informing* which also directly refers for example to the Information and interaction events held by the city. These merely provide the citizens and place to receive information and ask questions, but there is no mechanism at all that would ensure the transfer or application of the information.

The next step up the staircase is *consultation* where the citizens can voice and share their opinions, and this is actualized in the forms of giving feedback and making the initiatives. The feedback was also mentioned during the interviews as one of the easiest and also important ways to participate. Yet it is still not assured that any of these means will lead to concrete operations.

One step ahead in the participation level is *partnership* between the city authorities and the citizens. This comes to display for example in the forms of the City coaches and different participatory projects, where there is a mutual agreement form the decision-makers and the citizens side that the responsibilities as wells as decision-making power is shared to some extent.

Finally, the last step applicable at least in this case study is the *delegated power*. That is clearly evident in the new participatory model in Helsinki in the form of participatory budgeting for example. There the citizens have full control on the decision-making, how that one part of the city budget is used. Thus, it was also mentioned that the participatory budgeting process provides different roles for different levels of participation so that everyone can find a suitable way to participate.

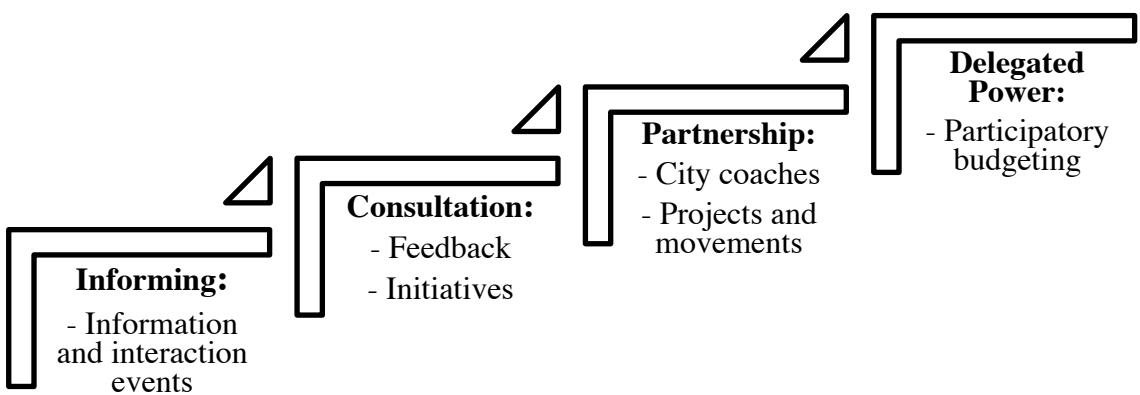


Figure 18. Participation levels and types applied to the Ladder of citizen participation by Arnstein (1969)

The many levels and aspects of civic engagement of course serve different types of citizens and participatory approaches and also different strategical or operational goals. The key is to find the ones that are suitable to each situation.

The role of civic engagement in creating a sustainable city (RQ)

The literature showed the importance of citizen engagement in policy building. In Helsinki the focus is more on practical concrete operations in creating everyday solutions. The citizens can still also make the initiatives that in some cases may also lead to true policies and eventually be embedded to the strategy. And like it was also stated by Portney (2005) that the greater quantity of civic engagement itself makes the city more sustainable, which is why the participation in general should be promoted and the civic engagement practices be applied in all fields of the city operations.

Figure 19 provides a conclusion of civic engagements role in building a more sustainable city. Motivations for civic engagement in general by the city authorities are the utilization of citizens knowledge and know-how, the need for commitment for the city targets, local point of view in problems solving and being able to serve the citizens the best way possible. Communication is the key way to inform citizens about the different participatory methods and engage them into utilizing them. The different types of engagement in practice that the city of Helsinki is utilizing can be sorted under different categories by the level of engagement that they represent. Generalized these levels are informing in the

forms of different types of information events, consultation in the form of feedback or initiatives, partnership in the form of different types of cooperation projects and the highest level being delegated power which can be executed in the form of participatory budgeting for example. These can operate as tools for the citizens to act on their concerns about the environmental and sustainability issues. Another significant factor and pathway is the citizens own voluntary initiative or even civic environmentalism that can also work as a route in developing more sustainable practices in an urban environment like a city.

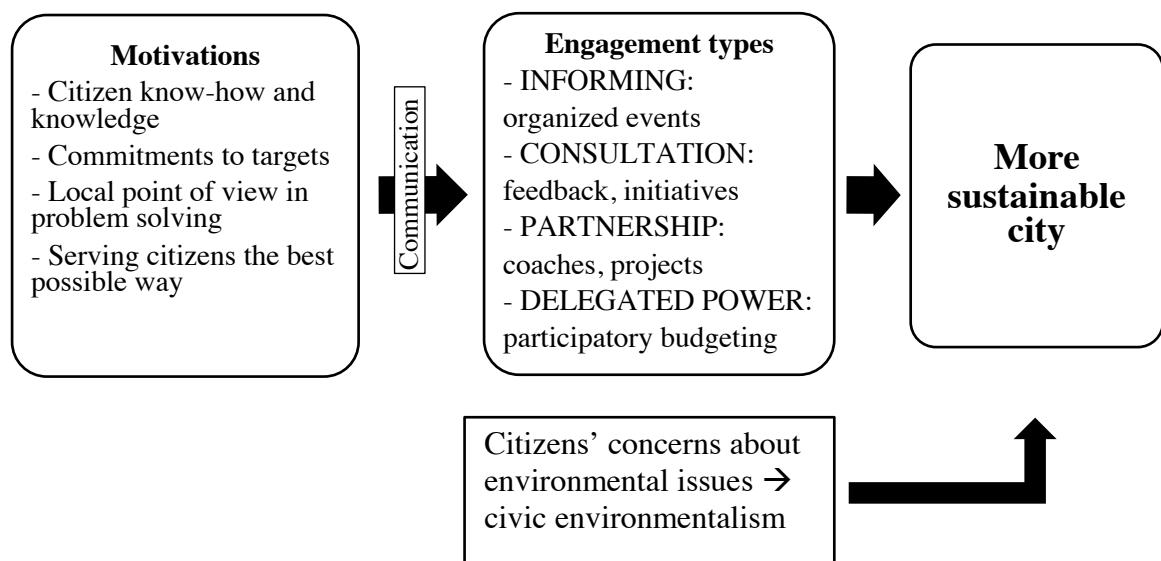


Figure 19. Civic engagement in building a sustainable city

As Soma et al. (2018) also emphasized, the importance of including the participation processes into the strategy is vital for it to work in favor of the targets set for the sustainability operations. Also, the bottom-up approach as presented by for example El Asmar et al. (2018) supports the use of participatory processes in the urban policy making procedures. The interview results also support this view by showing that there is indeed motivation and self-imposed initiatives from the citizens towards sustainable practices. The results also implicate, that the citizens are at least somewhat interested and concerned about the environmental issues. Based on these alone, it could be said that the civic engagement indeed has a positive impact and is a relevant tool in creating more sustainable cities. There are of course also challenges to it, but they were not further discussed in the context of the case city and are thus not handled in this study.

7 Conclusions

Public participation has already a long time been connected to environmental management and building environmental policies in urban environments. This has been strongly linked to the developing world, but it can also play a crucial role in the developed countries especially because of the high level of developed technology. People are becoming more aware of the environmental impacts caused by their urban lifestyle and consequently want to contribute to making the cities a better place for all the people living in them.

Based on the research done in literature as well as the primary and secondary data collected for the study, it can be stated that civic engagement and participation truly can have a significant effect on creating a more environmentally sustainable city. The global challenges we face in the modern world are so significant, that efforts in all stages of life are needed in order to create solutions. One of the biggest of course, is the fight against climate change and the adaptation to the effects of it.

In the case of city of Helsinki, both the environmental sustainability efforts as well as participation are embedded in the strategy in an implementation level as well. New forms of participation have been taken into action recently, but it is yet to be seen how well they can be utilized in terms of the environmental sustainability issues and targets set by the city. The possibilities for them to have significant positive effects at least exist.

More than taking the citizens and other stakeholder groups to the consultation process in decision and policy making, it seems that the proactivity coming from the citizens is also a relevant and efficient way to promote sustainable practices at least in the case of city of Helsinki. Thus, to some extent, the civic environmentalism is also an important channel to promote sustainability in cities. The research shows that citizens of Helsinki and the Metropolitan area are in general interested in environmental issues and have willingness to act, for example in the fight against climate change. There are individuals as well as groups of people who want to take action independently. The challenge is to find the right ways for the people to participate in a way that contributes to the ambitious targets of the city and thus the society as a whole.

7.1 Practical implications

From the practical point of view, this study shows the importance of civic engagement and its significance in combatting the challenges faced by the continuously growing urban areas. Cities play a significant role in this and the decision makers need to take that into account by creating policies to acknowledge these possibilities in a city level. In any city or urban setting, the concern as well as knowledge and interests of the citizens should be harnessed in favor of the common good. If this potential is properly utilized, it creates a great additional resource for the city authorities to act for change.

The key is to find the right channels for participation so that it creates opportunities at a low threshold and also motivates the citizens to act up, usually meaning that it also has positive impacts on their own lives. Creating opportunities based on the topics that the citizens are most concerned or the most passionate about, could also work as a pathway to help citizens and other stakeholder groups to engage and to solve more complex issues. Clear action plans and frameworks are needed in order to get the most benefits out of these types of processes so that they are not done just for the sake of fulfilling the strategy or other operational goals. The key for addressing the sustainability issues in the cities is that the citizens are sincerely interested in these matters and want to act for the common good. Also informing about the possibilities to interact and participate is key, because the processes cannot create any valuable outcomes if people do not know how to take part.

Concrete operations and models are indeed needed for the participatory processes to fulfill their purpose and this is where also the new developed technologies come in favor. New participatory policy models emphasizing sustainability issues need to be properly implemented in order to gain the full benefits from the know-how of the citizens around that area. Building and developing participatory models further could also provide a new way to include even more citizens in the decision-making processes. In this the possibilities offered by digitalization come to play a key role. The developing smart city practices provide new possibilities for example for data collection, thus it might be easier to collect and analyze data from the everyday life of the citizens. For example, developing more games like the ones used in the participatory budget planning in Helsinki, and creating new interesting ways for people to participate.

7.2 Limitations and future directions

This case study focused only on the city of Helsinki, thus the results are not as such applicable to another city or urban environment. As the capital city of Finland, Helsinki might have different type of responsibilities, but also resources to act on them. Helsinki is also the biggest city in Finland in terms of population size, so the human capital is also larger than in other cities in Finland. The results can nevertheless be adapted to another similar setting somewhere else.

Also, the data collected was not comprehensive enough to be able to formulate a full model or framework to help cities guide their participatory processes towards more sustainable efforts for example. The sampling regarding the interviews was small and not versatile enough to give reliable and sufficient results that cover all the aspects of the city functions. Nevertheless, the results show that the possibilities are there and that the participatory processes can be utilized towards making sustainable decisions and building new policies, because the environmental issues are often something that people feel strongly about and show passion towards.

The results of this study offer avenues for future research. Future studies could aim for example to study more in depth the smart city technologies and their relation to sustainability in an urban setting in Finland. Although already proven to be efficient in reaching certain sustainability efforts and goals, further studies could focus on their relations to increasing the citizen participation rate, especially regarding the environmental issues and for example climate change adaptation. Another theme worth researching for would be the participatory budgeting process or the likes of it alone in more detail when it has been implemented for a longer period of time. It would be interesting to analyze the themes that the citizens find to be the most important ones based on the funds they have the power to decide over and what it's the share of sustainability related issues in that specific process.

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Appendices

Appendix 1.

Interview guide

- Introductory questions
 - Experience in the field?
 - Could you tell about the city of Helsinki sustainability strategy and goals?
 - What are the main drivers for including sustainability into the strategy?
 - What is the role of civic engagement in the strategy?
- Citizens role in building a sustainable city
 - What are the main motivations towards engaging citizens?
 - What are the most important aspects where civic participation is utilized?
 - What is the impact of the citizen participation to the development of the sustainability strategy of the city?
 - What are the main benefits of citizen participation?
- Civic participation in practice
 - In what type of ways is civic engagement performed in the city of Helsinki?
 - What type of feedback or ideas do you wish to get from citizens?
 - Besides the citizens what are other most important stakeholder groups?
 - What is the role of social media and is the conversation created by citizens themselves followed?
 - What other type of communication methods are used in order to gain information and feedback from the citizens?
 - How are the results of these interactions analyzed and utilized in practice?

Appendix 2.

Haastattelurunko suomeksi

- Aihetta kartoittavat kysymykset
 - Kokemus aihealueesta?
 - Mitä voit kertoa Helsingin kaupungin kestävän kehityksen strategiasta ja tavoitteista?
 - Mitkä ovat tärkeimmät syyt kestävän kehityksen arvojen sisällyttämiseen kaupungin toimintastrategiaan?
 - Mikä on kaupunkilaisten osallistamisen rooli?
- Kaupunkilaisten rooli kestävän kaupungin kehittämisessä
 - Mikä on tärkein motivaatio kaupunkilaisten osallistamiseen?
 - Missä osa-alueilla osallistamista hyödynnetään eniten?
 - Millainen vaikutus kaupunkilaisten osallistamisella on koko kaupungin kestävän kehityksen strategian kehittämiseen?
 - Mitkä ovat suurimmat hyödyt joita osallistaminen tarjoaa?
- Kuinka kaupunkilaisten osallistamista käytännössä harjoitetaan
 - Millaisilla eri tavoilla kaupunkilaisten osallistamista käytännössä toteutetaan?
 - Minkälaisia palautetta kaupunkilaisilta eniten kaivataan ja toivotaan?
 - Mitkä ovat kaupungin asukkaiden lisäksi muita tärkeimpää sidosryhmiä?
 - Mikä on sosiaalisen median rooli ja kuinka aktiivisesti asukkaiden keskustelua seurataan?
 - Minkälaisia muita kommunikaation keinoja hyödynnetään palautteen ja tiedon keräämiseen kaupunkilaisilta?
 - Kuinka vuorovaikutuksen tuloksia analysoidaan ja hyödynnetään?