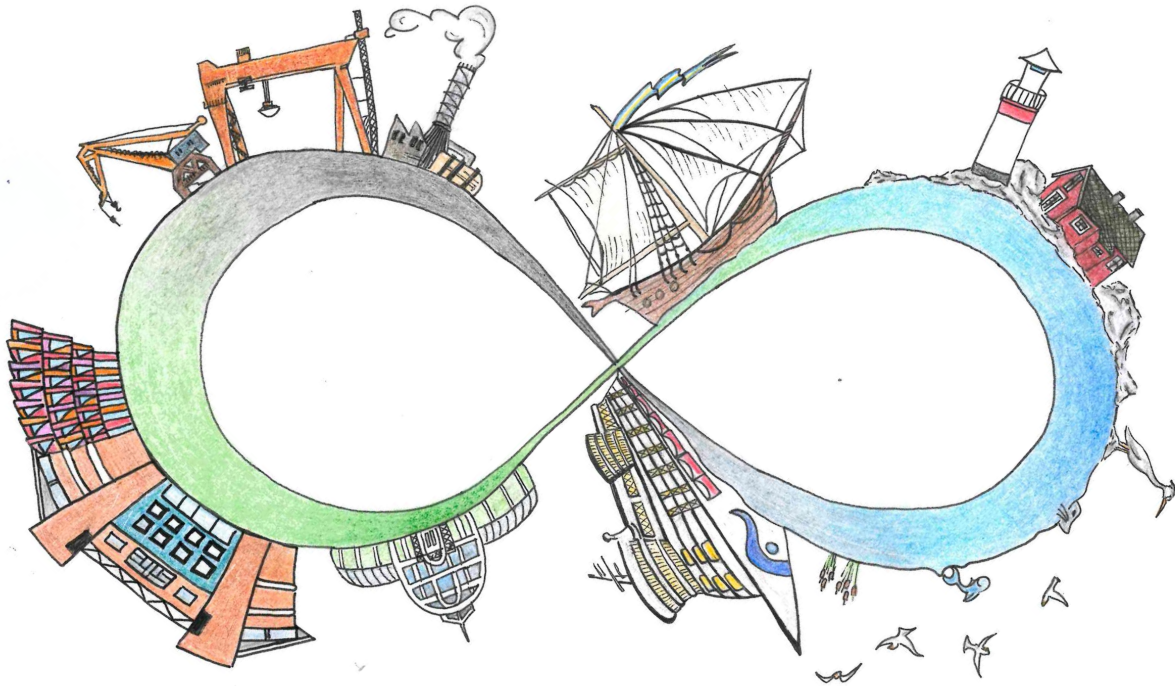




**CHALMERS**  
UNIVERSITY OF TECHNOLOGY



# Investigating Eco-Social Integration

Enhancing Integration of the Social- and Ecological Dimensions to Reach a Sustainability Transition in Gothenburg City

Master's thesis in Industrial Ecology

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**DEPARTMENT OF SPACE, EARTH AND ENVIRONMENT**

CHALMERS UNIVERSITY OF TECHNOLOGY  
Gothenburg, Sweden 2023  
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MASTER'S THESIS 2023

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Challenge Lab  
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Gothenburg, Sweden 2023

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## **Abstract**

Sustainability challenges are complex, and the sustainability dimensions are closely interconnected. Therefore, such challenges are preferably taken on by a holistic approach. Eco-social integration aims to investigate connections between the ecological- and social dimensions of sustainability, furthering the integration of these. The aim of this study was to investigate how eco-social integration can be enhanced in a municipal context, specifically Gothenburg city. Through this investigation, important aspects and challenges related to the subject, as well as areas suggested for intervention, were identified and further developed.

The investigation was carried out with a qualitative and participatory approach. The data collection consists of fifteen semi structured interviews and a workshop, both with participants from different parts of the municipality. The data from these was analysed using a coding procedure followed by organisation and clustering of data, generating themes and areas related to our research topic.

The key findings include that there is a general lack of consensus and direction in Gothenburg city regarding eco-social integration. The challenges and barriers to eco-social integration are presented as four themes, consisting of: culture and norms, organizational and structural conditions, knowledge and understanding of integration, and instruments and resources. An overarching challenge, connected to all four themes, is that fragmentation affect several aspects of the organisation. Potential areas of intervention regarding the governance and organisation for enhancing eco-social integration were found to consider leadership practices, increased exploration and structural changes to enhance cross-sectional collaboration.

The transformative potential possessed by the suggested areas of intervention was analysed by using existing frameworks and research. By this, it was found that a common understanding of and direction for eco-social integration would facilitate further work with it. Moreover, a combination of efforts in both top-down and bottom-up governance is suggested, calling for initiatives from both politicians and civil servants. Reaching this is shown to require changes in mental models, as well as structures and patterns in the city's governance. It is also suggested that to reach consensus, a common understanding and change of certain mental models could benefit from strengthening cross-sectional collaborations and learning. Hence, the conclusions from this report can contribute to furthering investigation on enhancing eco-social integration and suggest areas of intervention for practical action.

---

Keywords: Sustainability transition, Eco-social integration, Transformative potential, Municipal governance, Backcasting, Iceberg model



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Lovisa Eriksson & Rosanna Lilja, Gothenburg, June 2023





# Acronyms

To make it easier for the reader of this report to understand its content, certain abbreviations are explained in this chapter. Below is the list of acronyms that have been used throughout this thesis listed in alphabetical order:

SDGs - Sustainable Development Goals

ENI - Episodic Narrative Interviewing

Formas - Forskningsrådet för miljö, areella näringar och samhällsbyggande

RISE - Research Institute of Sweden

RQ - Research question



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# 1

## Introduction

Climate change and a broad range of other sustainability challenges, for example air pollution, biodiversity loss, energy and food security, water shortage and disease spread, are threats that humanity is now facing (Kaijser & Kronsell, 2014; Liu et al., 2015). There is also an increased prominence of these issues within the political- and research agenda (Kaijser & Kronsell, 2014). As an effect of this prominence, a number of environmental and social objectives, such as the Paris Agreement and the Sustainable Development Goals (SDGs), have been agreed upon by many countries. These require substantial societal changes to reach (Singleton et al., 2022) and most of the sustainability challenges include and affect factors from all three dimensions of sustainability. To address these complex and interconnected challenges, transitions toward sustainability are needed on global and local levels. Through collaborative learning initiatives and experiments, the transitions can be supported and the challenges tackled (Grimm et al., 2000; Luederitz et al., 2017). Additionally, the importance of the local level — such as cities and municipalities — as a setting for transformative action is especially stressed in Agenda 2030 and the SDGs (Fenton & Gustafsson, 2017).

Cities are facing challenges which are both severe and intertwined with each other and thereby create a very complex system. Although this is the case, the challenges are often studied separately today (Espinosa et al., 2008; Liu et al., 2015). According to Liu et al. (2015), addressing sustainability challenges can only be done through holistic approaches that investigate all dimensions of sustainability and the connection between them. Additionally, an investigation by Singleton et al. (2022) states that issues like climate change have different effects on people based on geographical location, socio-economical aspects and other factors, such as gender or age. An example of this is that most emissions of greenhouse gasses are caused by the unsustainable lifestyles of a rich minority while the poor and marginalized people are the most affected. These groups are also generally less represented in decision making processes regarding climate and environment (Hemmati & Röhr, 2009). It is therefore relevant to further investigate how governments and other authorities deal with the issue of climate- and environmental affect across diverse societies. These investigations are proven more successful if they are based on collaboration between scholars from a variety of fields and policy-makers (Kaijser & Kronsell, 2014).

To address this need for holistic approaches, integration of ecological- and social sustainability is vital to consider on all levels in organisations (Guerrero et al., 2018; Khan et al., 2020). According to Grimm et al. (2000), integrating existing social

science models and ecological theory can provide a starting point; but there is a need to develop a way of working with ecology that incorporate human behaviors, culture and institutions. In an article by Campbell (2016), the author discuss the connections between the sustainability dimensions and the conflicts between them. The conflict between the ecological and social dimension were found to be the most complex and important for long term sustainable development. Here, Campbell (2016) specifically described the conflicts between equity and social justice and environmental protection. Khan et al. (2020) use the term eco-social integration to explain integration of ecological sustainability and social welfare. There are other variants of how this term is used, but in this thesis it is used interchangeably with integration of social- and ecological sustainability.

Based on the significance of cities for addressing the global challenges the society is facing, this thesis studies the issue of eco-social integration in a municipal setting. Specifically, it investigates this issue in the context of the municipal organisation in Gothenburg city. In Gothenburg, Khan et al. (2020) has recently found that two main problems in society are social inclusion and ecological sustainability. Another main finding from the study states that ecological justice, equity as well as the relationship between socioeconomic factors and environmental impacts of consumption are not addressed enough in Gothenburg municipality, or hardly addressed at all. The need to work simultaneously with ecological and social issues are acknowledged by the municipality, according to the article by Khan et al. (2020). However, they further state that there is a lack of eco-social integration in work toward sustainability in Gothenburg, evident in the governing documents and in the everyday work within the city. Although, they also found that there are signs of an emergence of an integrated agenda based on Agenda 2030. The authors argue that policy integration has been proven hard to accomplish in Gothenburg, partly because of deficits in implementation of decisions and visions. This is explained to be a consequence of a lack of resources, knowledge and inertia in the organisation, as well as a sense of having different territories in the city. The authors found that this is highly related to the way public administrations are organised, where fragmentation and high specialisation in different parts of the organisation are prominent. By making a case of Gothenburg municipality, the findings discovered by Khan et al. (2020) regarding eco-social integration in governance are further investigated in this thesis.

### **Project on governance for an equal and inclusive climate transition in Gothenburg city**

In the autumn of 2022, Gothenburg municipality — henceforth also referred to as Gothenburg city — received approval on an application for subsidies from the national research council Formas, which has enabled a project to be carried out. The overarching goal for the project is to function as a gathering of forces that contribute to taking the next important step in the development of Gothenburg city's transitional capacity. Such capacity in the city favours adaptability and can enable long-term changes and changes on a deeper level. This is important because, as Abson et al. (2017) argue, shallow solutions to the complex problems discussed

seldom lead to the transitional changes needed. Therefore, organisation must face the reality of the need to target root causes of unsustainability, changing their own operation or even direction (Ibid).

The project funded by Formas (the Formas-project) will partly focus on reviewing programs for ecological sustainability and equality in the city, identifying obstacles to integration between the subjects and proposing solutions. Moreover, the project will implement contact with key actors through interviews and workshops; fostering participation and collaboration between actors from different parts of the organisation and also with academia. This investigation was conducted in parallel with the project and has included execution of several interviews and one workshop. Common goals for the thesis and project is to coordinate the data collection, as well as utilising and building upon each other's results. Hopefully, the results of the thesis can be used further by the project — which has a longer time frame — and the outcome can be meaningful for the city.

## 1.1 Aim

The aim of the thesis is to investigate how the integration of social and ecological dimensions of sustainability can be enhanced in Gothenburg city's governance, focusing on the role of leadership and organisation.

Also, there is particular focus on and interest in transformative ambitions and capacity, included in both daily work activities and projects. Certain aspects of the two sustainability dimensions have been chosen, further specifying the area of investigation to consider equal and inclusive climate- and environmental transitions. The intended outcome is proposed areas of intervention and related suggestions for addressing the current challenges and barriers in the city. Moreover, the intention is also to create space for collaboratively exploring the issues within the organisation by conducting the assignment through interaction with and between participants. Hence, in order to fulfill the stated aim, the following research questions are sought to be answered:

1. How can important aspects in eco-social integration for a sustainable transition in the municipality be understood?
2. What are some challenges and barriers for eco-social integration within the governance of the municipality?
3. What are some areas of intervention that could possess transformative potential?
4. How might the transformative potential be realised through changes in the governance?

### 1.2 Scope and delimitations

This study investigates the issues of and interventions for enhancing integration between the social- and ecological dimensions of sustainability — eco-social integration — thereby not addressing the economic dimension explicitly. Furthermore, the municipality of Gothenburg is used as a case to be studied and therefore constitute a geographical delimitation. Although, when discussing implications for the municipality, scaling what is learned from this investigation to other cities is considered. Additionally, a national or global context is considered when external influences on the municipality are discussed.

A choice was made to narrow down the scope from sustainability transitions in general, to consider equal and inclusive climate- and environmental transitions. This choice was made in part to enable the results from the thesis to be applied in the Formas-project mentioned in chapter 1, which investigates equal and inclusive climate transitions. Also, the choice was made to consider the importance of social inclusion as a main challenge facing Gothenburg city according to Khan et al. (2020), as well as equality, which Hemmati and Röhr (2009) and Singleton et al. (2022) problematise in their investigations. It was, however, decided to keep the ecological dimension broad to address both climate and other environmental issues, in order to avoid overlooking conflicts between these aspects and to have the ability to address all issues covered in the city's governing documents.

Moreover, there are limitations on the type of data sources used. In order to create a participatory process where the realities of the actors are considered, the analysis is mainly built on data from interviews held with them. Readers can find more information about the general research approach used in the data collection and analysis in chapter 3.2.

There is also a further geographical delimitation considering actors since a majority of people consulted work directly for the municipality or in one of the municipality owned companies. However, interviews were also held with some people not working for the municipality, for example people working in academia.

### 1.3 Thesis outline

This report is divided into eight chapters. Chapter 1 is the introduction, including general background to why the topic of the thesis is relevant, as well as aims and delimitations. Chapter 2 further describes background relevant to frame the process of answering the research questions, including ideas and frameworks referred to in the rest of the report. Chapter 3 describes the methodology and methods used in the thesis, including a description of the study setting, data collection and analysis. Chapter 4 presents the results of the investigation, which constitute all information used in answering the research questions. Chapter 5 is the discussion, where the

writers of this report reflect upon and discuss the results in connection to the background. Furthermore, the discussion includes reflections on and recommendations regarding further research. Chapter 6 is a conclusion of the most important findings. Finally chapters 7 and 8 contain two appendices with additional information about the interviews.



# 2

## Background

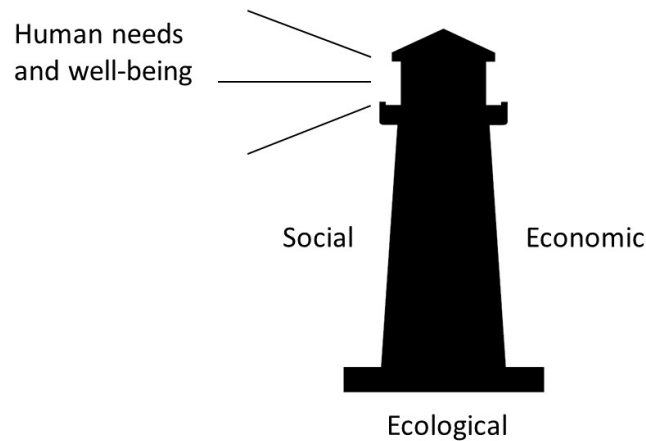
A background to the subject is given in greater detail in this chapter, where the context to the study is described and concepts, useful in order to answer the research questions, are provided.

### 2.1 Sustainability and sustainable development

Sustainability and sustainable development are widely used and debated concepts. A common explanation of sustainable development is the definition adopted in the report *Our Common Future* by the Brundtland Commission (1987) as “*meeting the needs of the present without compromising the ability of future generations to meet their own needs*” (Borowy, 2014; Khan et al., 2020). This definition popularised a holistic view on sustainability and thus made it harder to define in a simple manner (Davidson, 2010). Since the definition of sustainability by Brundtland was published, there were around 140 alternative definitions presented in the subsequent two years, some which are in contradiction to each other (Johnston et al., 2007). In this thesis, sustainable development is not limited to one single definition but is described as constituting of the ecological, economic and social dimensions, acknowledging that these dimensions are interconnected and form a complex system within our world.

The interconnection between the dimensions is emphasised by Holmberg and Larsson (2018), who propose a framework depicting the sustainability dimensions and their interdependence using the metaphor of a lighthouse, see figure 2.1 below. The authors explain that the three dimensions of sustainability can be viewed as means to an end, where the latter is argued to be human needs and well-being. By this, the end — that is, needs and well-being — function as a guide for how to approach the sustainability dimensions. Moreover, the ecological dimension is described as the foundation which the other dimensions rely on, in order for them to function as means to the end. In this thesis, a similar stance is taken as described by Holmberg and Larsson (2018) in how to understand the dimensions. Ecological sustainability is understood as related to Earth’s limited capacity for human activity. Thus, the dimension concerns issues regarding for instance manipulation of the ecosphere and emissions of extracted or produced substances. Regarding social sustainability, the authors found that this dimension mainly regards the issue of social cohesion, concerning equity and trust in both horizontal and vertical directions in society. Lastly, the economic dimension concerns management of resources to also be available for

the future (Holmberg & Larsson, 2018).



**Figure 2.1:** *The sustainability dimensions arranged to depict their interconnection by using a lighthouse as metaphor, derived from Holmberg and Larsson (2018). The aim towards human needs and well-being guides the work with the other dimensions. The social and economic dimensions rests on the ecological dimension, which functions as the basis for the other dimensions.*

Out of the three dimensions of sustainability, the social dimension has, for a long time, been the least examined (Davidson, 2010). However, from the start of the 21st century, social sustainability has been increasingly discovered as an independent concept. Even if the ecological dimension has been studied more, there is a need to understand what ecological sustainability means in practise for an organisation, which could prove harder to do (Fenwick, 2007). An approach organisations are encouraged to take on for working with the sustainability dimensions, is to utilise the United Nations' 17 sustainable development goals (SDGs) in the 2030 Agenda for Sustainable development (Agenda 2030) (United Nations, 2015). This is one of the most widely known agendas for sustainable development, formulating 17 goals which target all three dimensions. For most goals, more than one sustainability dimension can be identified in the strategies used to approach them (United Nations, 2015). The agenda is a plan of action for the people, planet and prosperity and functions as a collaborative measure between many of the worlds' countries (United Nations, 2015). Despite being a global collaboration, each government decides on their own national targets and strategies. For some targets, Colglazier (2015) explain that there is more guidance for governments because they are more specific and provide details for concrete action. Other goals are instead stated to be more general and undefined, which creates a need to analyse these more in depth and integrate them with other goals.

### 2.1.1 Sustainability in an urban setting

Khan et al. (2020) argue that since a growing share of the world's population lives in cities, it becomes important to discuss sustainability and welfare on an urban level. An important factor regarding urban sustainability is that cities are complex systems whose structures and patterns emerge from the bottom up (Batty, 2008). This implies that mental models play a crucial part, as suggested by the iceberg model (see section 2.2.1 for further description) (Davelaar, 2021).

While there is no single best-established definition in terms of sustainability in the urban scale, there is a commonly-used set of characteristics of urban sustainability, presented by Maclaren (1996). These include inter-generational equity, intra-generational equity (social, geographical, and governance equity), conservation of the natural environment, significant reduction of the use of non-renewable resources, economic vitality and diversity, autonomy in communities, citizen well-being, and gratification of fundamental human needs (Maclaren, 1996). Toli and Murtagh (2020) also study sustainability in an urban environment and consider it as sustainable if it has achieved social equity, conservation of the natural environment, conservation of natural resources, vitality of the economy, and quality of life for the citizens. Studying the links between such factors of social- and ecological sustainability has emerged as its own subject, by Khan et al. (2020) referred to as sustainable welfare. To achieve sustainability, the design and management of cities is critical (Aiberti, 1996), and one could argue that eco-social integration therefore is important to be taken into account in cities organisation and governance.

Aiberti (1996) argues that sustainability, when applied to the urban setting, needs to meet citizens needs. The author means that these needs have to be met without imposing untenable demands on resource use, globally or locally. Therefore, the author argues that it is important to consider the global resource use and environmental impacts, because a city cannot be considered sustainable if it is not sustainable on a global level; not causing unsustainable demands by importing resources or exporting waste to other parts of the world. The effect of the rapid urbanisation are felt most away from the cities, because the resources used by the urban populations do not generally originate in the same place that they are consumed. Hence, global welfare is an important factor in determining if a city is sustainable, not only on a local level (Aiberti, 1996).

## 2.2 Transformative change in a complex system

A transformation consists of radical changes to the current system, whether that system is a city, a country or a company (Quist & Vergragt, 2004; Tersine et al., 1997). Transformative change, rather than incremental change, is essential to move currently unsustainable systems toward sustainability. It shifts and phases out the current system so that it moves onto a different pathway by shifting the social reality (Holmberg & Holmén, 2020; Pelling et al., 2015). This reality includes existing

goals, paradigms and deep structures and a shift therefore affects the current way people act (Pelling et al., 2015; van Bruggen et al., 2019). Pelling et al. (2015) mean that there is a need to target these deep structures, such as social, cultural and economic relationships and power hierarchies. They further explain that taking this stance on transformative change encourages decision makers to target the root causes of issues. Also, there will be an increased pressure to justify the choices between implementing incremental or transformative agendas (Wisner et al., 2004).

According to Tersine et al. (1997), an evolving world with changing economic, social, political and technological conditions makes transformation in organisational structure necessary. Public organisations are often associated with a rigid vertical structure, coordinated in so-called silos (I. Scott & Gong, 2021). Cutter et al. (2015) argue that in order to further negate risks of fragmentation and silo-thinking, implementation of sustainable development needs to be approached in a strategic and cooperative manner. Quist and Vergragt (2004) state that since transformative change involves long term and complex processes of social change, it affects and depend on many actors. Hence, both involving a broad range of actors and including all dimensions of sustainability in the work is important. This further demonstrates the importance of the concept of eco-social integration and sustainable welfare presented by Khan et al. (2020). Quist and Vergragt (2004) further explain that this includes government, public interest groups, academia and companies, which should be included both in defining the challenges and finding solutions.

Furthermore, a holistic view of sustainability is suggested by Williams et al. (2017) as an antidote to silos in organisations. Cutter et al. (2015) mean that the concept of sustainability can be utilised to think creatively about solutions to far-reaching and complex problems, generating innovative solutions. The authors further describe some factors that are important to consider working with sustainability:

Sustainable development calls for a practical approach which maximises positive outcomes by recognising the interdependencies between the economy, the environment, and society. It is about securing long-term success in all three of these areas through working across sectors to deliver integrated solutions with multiple benefits (Cutter et al., 2015).

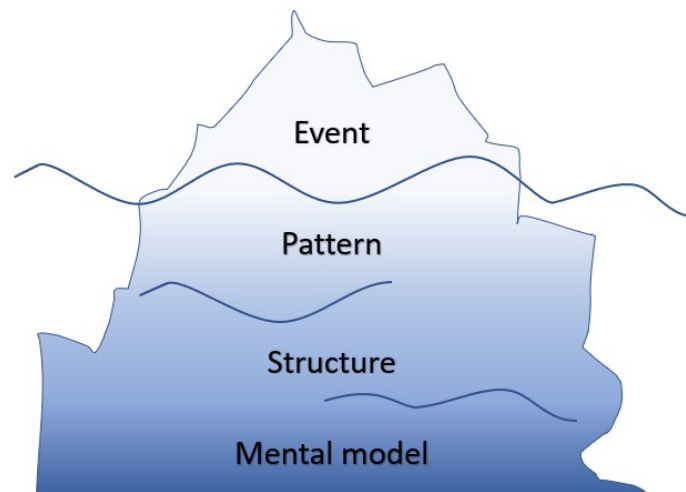
This implies that all three dimensions of sustainability need to be recognised as a part of a complex system and that they should be handled in an integrated manners across all sectors. Murphy (2012) has suggested a framework for analysing links between ecological- and social sustainability. The framework describe different ways environmental policies can be analysed regarding their integration of social factors. One example is equity, which relates to the concept of triple injustices. This concept illuminates that vulnerable groups in society contribute less to environmental problems, while they are more affected by both the impacts and the measures against them (Khan et al., 2020).

Agenda 2030 is a practical example of a vision formulation that point at the need for

transformative change in society (Holmberg & Holmén, 2020). It exemplifies that there is a need for phasing out established unsustainable systems and structures, replacing it with a more sustainable alternative. Moreover, methods such as back-casting, according to Quist and Vergragt (2004) and the cruise ship and expedition analogy, according to Holmberg and Holmén (2022), can be used for working toward such a transformative shift. These frameworks are further explained in sections 3.2 and 2.3.1 respectively.

### 2.2.1 The iceberg model

As mentioned above, there is a need to address certain factors of the current system when aiming for transformative change. Systems can be seen from multiple levels of thinking, which can help reaching a deeper understanding of the system under study (Davelaar, 2021). The iceberg model is a visualisation that can be used to identify if certain factors in a system are a result of mental models, systemic structures, patterns and events (Davelaar, 2021). An illustration of this model can be seen in figure 2.2 below.



**Figure 2.2:** *The iceberg model depicting different levels of thinking, derived from Bosch et al. (2007). These levels corresponds to if one understands the system on the level of events, patterns, structures or mental models.*

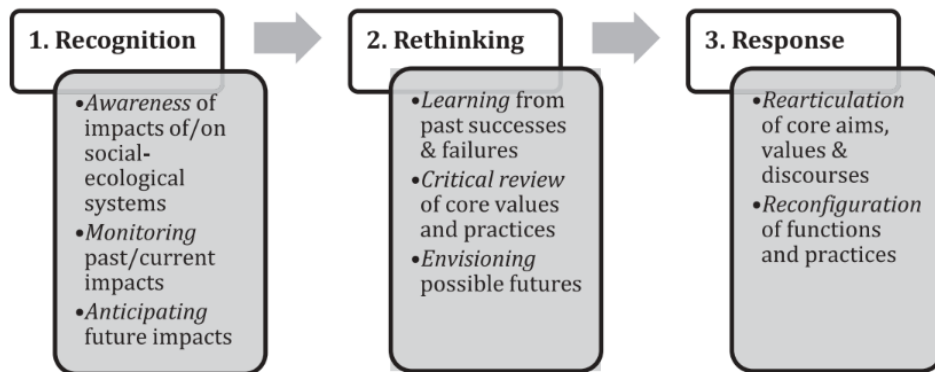
The iceberg metaphor implies that the upper levels above the surface depicts factors that are more easily identified — "the tip of the iceberg" being the easily detectable phenomenon, while the underlying factors are less obvious (Bosch et al., 2007). Davelaar (2021) explains that the deeper levels become manifested through the upper levels, making it more difficult to realise the underlying causes for events and patterns in the system. Looking at figure 2.2 and starting from the top, Bosch et al. (2007) explain that *events* corresponds to visible happenings, which people become aware of and react to. The author exemplifies the nature of these events with car

accidents or weather change; their occurrence are caused by other factors. Continuing to the next level, *patterns* are series of events, for which trends can be identified. *Systemic structures* is about how patterns are connected and what influences them, such as how systems are organized (Kim, 1999). Lastly, Bosch et al. (2007) explain that the deepest and least obvious level of thinking is about *mental models*; underlying values, beliefs and assumptions affecting the systemic structures, patterns and events. Davelaar (2021) explains that depending on which level is targeted, it affects what kind of change can be reached. By addressing the deeper levels in the iceberg, the author argues that there is potential to achieve transformative change. In other words, the leverage of the system has more potential when aiming for deeper levels in the iceberg (Davelaar, 2021). Furthermore, the type of interventions able to target mental models concerns relearning, reframing and redefining of purposes. This follows a deeper comprehension and awareness of the system of interest (Davelaar, 2021).

### 2.3 Reflexive governance

According to Voß and Bornemann (2011), the expanding boundaries of what we consider to be sustainability issues pose a challenge to the governance for sustainability. They continue that this has resulted in a need for organisations to have a broader focus, shift in perspectives and be aware of how governance can be a part of the problem. Reflexivity is described by Pickering (2019) as a quality which, if possessed by an entity, can increase its capacity for transformative change. The author argues for the need of reflexive governance in order to be able to change in response to crises, such as the climate crisis. Voß and Bornemann (2011) also state that the governance can no longer assume that there is one right solution, one adequate framing of the issue or one correct prognosis. Instead, the authors mean that there is a need for organisations to integrate a diversity of perspectives, expectations and strategies to understand and work with eco-social systems. Voß and Bornemann (2011), like Pickering (2019), describe this as a reflexive stance toward governance. They also argue that politics should be analyzed and reflected on to devise strategies in order to enhance reflexive forms of governance.

Thus, it might be feasible to know what features that characterises a reflexive governance. Pickering (2019) defines important components of reflexivity: *recognition*, *rethinking* and *response*. These can be observed in figure 2.3 together with an explanation of what signs should be present in a reflexive organisation.



**Figure 2.3:** *This illustration generated by Pickering (2019) show the components of reflexivity: recognition, rethinking and response. In the foreground, certain signs of occurrence for each component are listed and can be used to analyse if the components exists in an entity.*

As mentioned, there are possibilities for increased capacity of transformative change by enhancing reflexivity as a quality. Hence, taking on strategies for this might be desired for municipalities seeking to support sustainable transitions. An important general feature of such strategies are to adopt learning as an iterative process, which in turn facilitates the ability to change course of direction (Goffman, 2007). Moreover, the cruise ship and expedition analogy mentioned earlier can be of use in order to enhance reflexive components, and is described further below (Holmberg & Holmén, 2022).

### 2.3.1 The cruise ship and expedition analogy

By the cruise ship and expedition analogy, Holmberg and Holmén (2020) propose an approach for organisations to navigate their work regarding complex challenges. The organisation is compared to a cruise ship that maintain its daily activity, but has a a need to explore uncharted waters. In this metaphor, this uncharted water of transformative change is explored by an expedition sent out from the large cruise ship. Similar to a large organisation, it is difficult to radically change the course of direction for a large cruise ship as a response to external circumstances. Being mostly concerned with improving day-to-day practices and problem solving, this larger entity can instead arrange for a smaller group of people to explore a certain challenge, with space for reflection and learning. (Holmberg & Larsson, 2018) An important consideration according to Holmberg and Larsson (2018) is that the expedition activities relates to the operations of the "ordinary" organisation. By exchanging learnings with the organisation, this exploration beyond current practices and structures can in turn help navigate the path for the cruise ship (Holmberg & Holmén, 2020).

### 2.4 An overview of the formal organisation of Gothenburg City

In organisational theory, formal and informal organisation are considered two important elements of an organisation. W. R. Scott and Davis (2007) explain that formal organisation refers to the way different parts of the organisation work and relate to each other. It is made out of elements such as departments, policies and programs. Informal organisation on the other hand involves elements such as culture and social networks, which develops within an organisation and affects its work.

Gothenburg city has a similar structure to other cities in Sweden. Starting at the top decision-making level, the municipal council make the decision on the highest governing level. These decisions are then delegated to the municipal board that has responsibility for ensuring that the decisions from the council are implemented, followed up and evaluated. In the municipal council, the members are chosen through election by the citizens in the municipality and have a four-year term of office. (Göteborgs Stad, n.d.-d) The members of the municipal board are chosen by the municipal council (Göteborgs Stad, n.d.-b).

One general rule of the organisation of the city is the division into two kinds of offices: committees and administrations. The responsibility of the municipal board to execute the decisions of the municipal council is delegated to the committees, where politicians work. The representation from the political parties in the committees is proportional to the division in the municipal council, for which the percentages from different parties are decided by the general election. The party representatives are chosen by the municipal council. The committees do not only have responsibility to execute council decisions, but also prepare matters for the municipal council to decide on. An example is preparing decisions for the municipality's budget, for which the committees prepare proposals regarding their area of expertise. (Göteborgs Stad, n.d.-a)

The committees are divided into several different working areas, from education to environment and climate. The administration's role is to execute the daily work for the decisions made in the committees, municipal board and municipal council. Almost all committees are matched by an administration with the same working area, with an exception for the election committee. In total, there are 23 administrations and 25 committees. The city management office is the administration for the municipal council and board, thus coordinating, leading and follow up the work of all the city's administrations. (Göteborgs Stad, n.d.-d)

To coordinate the work on the ecological dimension of sustainability, there is a system within the city called the environmental management system. This system ensures that the city's public administrations and companies work in a coordinated and organised manner, to prevent negative environmental impacts and aiming for systematically strengthening the environmental work. The public boards and councils plan, implement and follow up the city's work according to the environmental

management system, with central support from the city management office. The thought behind the system is that the environmental work should be a part of all decisions, strategies and daily work. It also aims at ensuring cooperation within the city, strengthening the ability to reach climate and environmental targets. Furthermore, it makes it possible to follow up on and see how the environment- and climate work progresses. Since the environmental management system is not a separate system, but is integrated in the ordinary governance, it raises the focus on environment and climate issues in the daily work. (Göteborgs Stad, n.d.-c)

The environmental management system consists of five elements, or phases. These are: *creating conditions*, *planning*, *implementing*, *follow up* and *improving*. In the first phase, the management of Gothenburg city allocate resources such as money, responsibility and influence for the environmental work. In the planning phase, the organisation is mapped to assess the environmental impact and a plan is created for the environmental work. the implementation stage means that the plan is put into action, the city makes sure that governing documents are followed and that problems are handled continuously. This work is then followed up to assess how it is working and in the last phase improvement are made if needed, to the work or the plan. (Göteborgs Stad, n.d.-c)

### 2.4.1 Goals and visions for the city

Two governing documents in Gothenburg city that are important for the ecological- and social dimension of sustainability respectively are the Environment and climate program and the Equal city program. These contain vision- and goal formulations within the two dimensions. Furthermore, Agenda 2030 is of special interest since it targets all dimensions of sustainability. Therefore, this section also includes a brief summary of a report on the use of Agenda 2030 in Gothenburg city.

#### Environment and climate program

In Gothenburg city's Environment and climate program 2021-2030 (Göteborgs stads miljö- och klimatprogram 2021-2030) there are seven strategies decided on in order to reach the environmental goals and sub-goals. The vision, goals, sub-goals and strategies can be observed in figure 2.4, taken from the program. The goals are divided into three areas. The first one is *nature* and the goal is to have a high degree of biodiversity in Gothenburg. In this area, an example of a sub-goal is to increase the biodiversity in the urban environment. The second area is *climate* and the goal is for Gothenburg to have a climate footprint close to zero. One of the sub-goals for this goal is to produce energy only from renewable sources. The third area is *human* and the goal is that the citizens in Gothenburg have a healthy living environment. A sub-goal for this area is to ensure a good air quality in the city. These are all goals that aim to fulfill a vision of an ecologically sustainable city 2030. (Göteborg Stad, 2021)

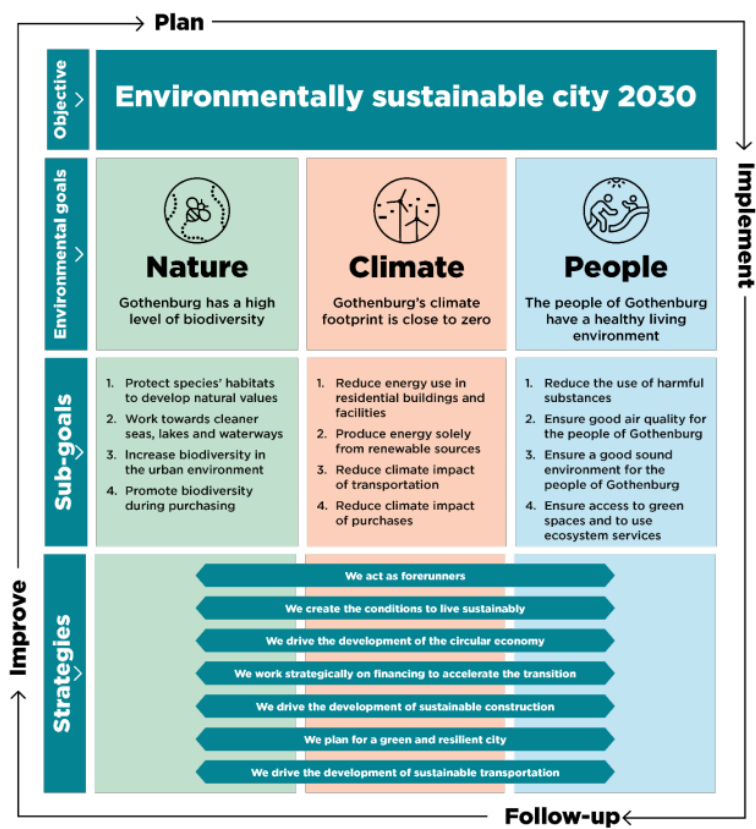


Figure 2.4: Figure from Gothenburg city's Environment and Climate Program Göteborg Stad, 2021 depicting the program's objective, goals, sub-goals and strategies.

The seven strategies are also presented in figure 2.4. As can be seen, these all cover different areas ranging from Gothenburg acting as a forerunner in this work, to planning a green and robust city in order to prepare for effects of climate change. Together, the goals, sub-goals and strategies are, according to Gothenburg city, important aspects for tackling their environment- and climate issues. Each strategy is also connected to goals in Agenda 2030 (Göteborg Stad, 2021).

The Environment and climate program is planned to be executed by inclusion in the daily work, with support from the city's environmental management system, and by cross-sectoral work with the seven strategies. In the cross-sectoral work, the goal is for the city's committees and boards to cooperate in order to create change and furthering the transition to a sustainable city. The program is connected to other programs in the city, for example Gothenburg city's innovation program and Gothenburg city's business strategic program (Göteborg Stad, 2021).

### **Equal city program**

Gothenburg city's Equal city program 2018-2026 (Göteborgs stads program för en jämlik stad 2018-2026) has one overarching goal and four focus areas. The overarching goal is that Gothenburg should be an equal city. The program depicts an equal city as one where every citizen has equivalent living conditions, independent of any of the statutory grounds of discrimination. The program further explains that in an equal city, resources and political influence is distributed according to everyone's equal rights. (Göteborg Stad, n.d.-a)

The first focus area in the program is *Create a good start in life and good conditions throughout the school years* (Göteborg Stad, n.d.-a). One of the main reasons for inequality in Gothenburg is stated in a report made by the city; which is that more than half of the people living in socio-economically vulnerable areas are at risk of living in poverty, while almost no households with children in resource-strong areas have a risk of poverty. (Göteborg Stad, n.d.-b). There are strategies for each focus area and for the first focus area, an example of a strategy is *Children and young people should have accessible and meaningful free time*. Other strategies include strengthening young people's social network and promoting language development. (Göteborg Stad, n.d.-a) The second focus area in the Equal city program is *Create preconditions for employment*. This focus area encompasses strengthening of living conditions by ensuring education and work for all citizens. One example of a strategy applied for this focus area is *Matching skills to facilitate entry into the labor market*. Other strategies include working for life long learning and developing the role of the employer.

The third focus area is *Create health-promoting and sustainable living environments and communities*. Some conditions for having an equal and sustainable living environment are: having a safe living environment, sense of belonging, a suitable and economically fitting accommodation and an environment around the accommodation that is well taken care of and functioning. An example of a strategy for this

focus area is *Reducing residential segregation*. Other strategies concern building more housing and increasing participation and influence in urban development. The fourth focus area in the program is *Create preconditions for participation, influence and trust*. An example of a strategy for this focus area is *Create an inclusive citizen dialogue* and other examples of strategies range from creating arenas for this and increasing voter turnout in the election. (Göteborg Stad, n.d.-a).

### **Agenda 2030 in Gothenburg city**

The latest mapping of the city's work with Agenda 2030 was done in 2021 and was presented in a report (Göteborgs Stad, 2021). In this report, it is stated that an important idea with Agenda 2030 is that it should be interpreted in a local context. Therefore, the report continues to explore the sustainability goals in a context of the municipality; where the relevance of the goals for the municipality is investigated. It is also investigated how the city works with the goals in Agenda 2030, especially how the governance functions (Göteborgs Stad, 2021)

In summary, Gothenburg city and Sweden are described to be in a good position when it comes to the Agenda 2030 sustainability goals. All sub-goals in Agenda 2030 are not judged as relevant for the city, although a majority is. According to the report, the city's mandate is limited regarding self-governing of the development within the goals. Instead, the outcome for each goal is dependent on global and national actors and events. Regarding the governance within the city, it was stated in the report that there is some form of governance for most goals relevant for the city. Although, the investigation for the report did not cover the adequacy of the governance. However, it did conclude that a more cohesive and integrated governance is desirable (Göteborgs Stad, 2021)

# 3

## Methodology and methods

In line with the aim and research questions, a number of methods have been applied. This chapter presents these, beginning with an overview of the working process, followed by assumptions made and approaches chosen for addressing the research. Thereafter, the study setting, data collection and analysis procedures are described.

### 3.1 Overview of the working process

Overall, the thesis work consisted of phases with specific focus, although with significant overlaps. The initial process of designing a preliminary thesis outline and deciding frameworks entailed reading relevant literature and having conversations with key actors about, for example, sensitising concepts to guide the work. Thereafter, a phase of planning interviews commenced. In parallel, the planning of a workshop started and this went on up until it was held in April. In February, we started meeting actors for interviews, which was the main activity for several weeks. After some interviews had been held, we began a parallel process of analysing the material from the interviews by coding and categorising pieces of data. Toward the end of this process, in April, the workshop was held using the results we had found up until then. After the workshop, the outcome from it was compiled. After that, a more intense work with further data analysis, drawing conclusions and writing of the report, commenced.

In general, an iterative approach was taken on to be able to adapt according to the circumstances and our learning process. This enabled the work to be continuously evaluated and adjusted.

### 3.2 Research paradigm

In general, the investigation was conducted with a systems thinking perspective aligning with the general description of systems by Meadows (2008). Thus, society, and specifically Gothenburg city, is viewed as dynamic, with its subsystems interconnected in multi-directional ways; acknowledging that the municipality is a part of many larger systems. The nature of the systems in focus in this investigation — ecosystems and societal systems — can be considered so-called wicked systems, according to Andersson et al. (2014). Such systems are both complicated and complex

at once. Definitions of what a complicated or complex system means vary. Although, Grabowski (2008) explain that complicated systems are build from a large number of elements with well defined and understandable functions. They continue that complex systems are even harder to describe but have certain attributes, such as a non-linearity in its characteristics and they are hard to anticipate.

For addressing problems of a complex nature where there is need for change, and which requires a long-term perspective, backcasting can be of use (Dreborg, 1996). An essential characteristic of a backcasting process is that the starting point for change lies in the image of the future, which should guide the activities done in the present to move towards the future. Therefore, the backcasting process includes envisioning the future, followed by mapping of the current system to identify barriers and challenges for reaching the envisioned future. To bridge the gap between the future and present generated by these two first steps, areas of leverage — where a small change can make an impactful change — are searched for. In the last step of the backcasting process, concrete ways to approach the areas of leverage are explored. (Holmberg, 1998) We let these steps in the backcasting methodology guide the focus and direction of our investigation.

Our theoretical approach should be explained, since it affects the meaning making of the data as well as facilitates understanding of our conclusions. In this investigation we have assumed that, based on experiences and context, people understand circumstances and phenomena differently. Thereby, when conducting research in a participatory manner, the research takes into account different lived realities. Due to the experience and knowledge the actors have regarding the system we study, we consider these claims as part of explaining the functioning of the system we try to understand. In other words, rather than claiming that all statements expressed by actors are true, we make attempts to describe their truths about the system. Depending on context, it can be possible to interpret causes of certain stances and points of view. However, in this study, our approach is to describe reality through the perspectives and experiences of the participating actors.

### **3.3 Study setting**

In this section, the setting for the research is described, accounting for aspects underlying the data collection as well as the possibility to reach the overall aims of the study.

#### **Interview setting**

In order to answer the research questions through collection of qualitative data, we chose to conduct several interviews with people working in or connected to Gothenburg city. To be able to get a broad representation of different parts of the organisation, the sampling of interviewees was primarily based on two criteria: context and individual, a strategy proposed by (Bryman, 2016). In our case, context refers to type of role and professional area. In this study, the interviewees that were chosen

had roles including local public officials and local politicians, as well as business and academic representatives. The chosen business representatives all worked for companies owned by the municipality. Regarding the criterion *professional area*, our aim was to target people working in parts of the city with varying focus on ecological and social sustainability. Mainly, we focused on interviewing employees with strategic- or leadership responsibilities. The sampling for individual was based on what type of knowledge and experience the person beholds. Also, we aimed for an equal distribution of men and women among the interview subjects. An anonymised list of the interview participants can be found in chapter 7, Appendix A. All quotes used in the report have been linked with a specific interviewee in the list and have been marked according to this.

The choice of interviewees based on these criteria were made in consultation with our advisors at the city's Environmental administration, involved in the Formas-project. They were also able to provide further knowledge about people's professional experience and perspectives of relevance, which informed the final selection. In total, we interviewed 14 people, of which eight were local public officials, two working as local politicians, four working in municipal companies and two representing academia (adding up to 16 interviewees since two of them held two positions each). In addition, we held a shorter interview with a length of approximately 20 minutes with an actor who could provide insight into the topic of collaboration. For this interview, focus questions regarding collaboration and communication in the municipality were posed.

A majority of the interviews were conducted at the interviewee's place of work, while the rest were held online via Microsoft Teams. Moreover, the interview subjects were informed about the general structure and content of the interviews via e-mail, approximately a week before the interview. Although, it was clarified that there were no intentions that they had to prepare any answers before the interviews. The interview guide used can be found in chapter 8, Appendix B. It is presented there with an English translation as well as the original Swedish version used in all interviews. The questions are numbered and referred to by their numbers in this report.

## **Workshop setting**

A part of the aim of the thesis is to create space for actors to engage in a participatory and collaborative process regarding the issue of eco-social integration. Ernits and Essunger (2020) state that workshops can be helpful for handling complex issues and in situations where shared concern and ownership for the problem and process is needed. Furthermore, it can be a suitable tool in order to create dialogues characterised by learning and co-creation. Connick and Innes (2003) explain that shared knowledge can be created in collaborative dialogues, where participants "stay" in the question at hand, discussing based on their perspectives of reality. The possession of shared knowledge has the ability to influence the participants in both

thinking and further action (Connick & Innes, 2003). These aspects were important overarching aims of the workshop, beyond the purpose of informing our research and contributing with relevant input to the Formas-project. Thus, we wanted to invite participants to a workshop with possibilities for them to meet and discuss the subject in an exploratory manner. Since a workshop also was one of the planned activities within the Formas-project, it was decided that it should be planned and carried through in cooperation with the project group.

The choice of participants for the workshop was overall based on a quadruple helix model, meaning that we aimed to include representatives from the municipality, academia, civil society organisations and corporate organisations. The selection of individuals to invite was partly based on the interview sample, since these were already identified as relevant for involving in the research, and since we wanted participants who were familiar with our investigation. However, since we also wanted information and inspiration to be brought back to as many organisations as possible, we invited several people who were not included in the interview sample. Throughout the selection process, we consulted with our advisors in the Formas-project of whom to invite. Eventually, the initial sample of participant for the workshop was modified due to some respondents not being able to participate. We also utilised snowball sampling by following the advice from some invited participant's recommendations on additional people to invite. In total, 22 people participated in the workshop, of which eleven were local public officials, four working as local politicians, two working in municipal companies, four representing academia and one person from private business. Regarding civil society organisations, none of the invited representatives were able to participate.

The workshop was held in person in a central location of Gothenburg city. All participants were gathered in the same room over the course of three hours, varying between a line-up of the full group and smaller groups of around five people per group. These smaller groups were composed prior to the workshop, striving for a mixed composition of roles, experience and gender. Also considered in the group composition was to pair people who we thought might have interesting perspectives to share with one another, based on what we had heard in the interviews. Before discussing in these groups, the participants got an introduction to our investigation. Also, we presented our most prominent findings relevant for the workshop discussions, from the interviews we had processed thitherto. These results concerned the following topics: what is meant by eco-social integration, challenges and barriers, and examples of areas of leverage. Based on these results, the workshop was divided into two parts, each focusing on a certain topic linked to the results. The first part concerned the issue of where it is relevant to work with eco-social integration, and the second part was about how the eco-social integration can come about.

## 3.4 Data collection

As explained above, the data used for the analysis was mainly collected by interviews, conducted with the sample of people described in section 3.3. Also mentioned,

a workshop was held with a variation of actors in the city in order to encourage dialogue between them regarding on findings from the interviews. This section further explains the processes of data collection in interviews and the workshop.

## Data collection by interviews

For the interviews, two different methods were merged. As a basis, the interviews were semi-structured. According to Bryman (2016), semi-structured interviews have several advantages in qualitative research. The relatively unstructured nature allows the researcher to discover how the interviewees view the world around them without forcing overly restrictive categorical answers. However, in two of the questions, we aimed for utilising a layout of episodic narrative interviews, which is further described below (Mueller, 2019).

We created an interview guide inspired by the approach suggested for semi-structured interviews by Bryman (2016). The author recommends the interviews to be based on certain topic areas of interest for the research. Since our research in general follow the backcasting logic, we let the areas of inquiry build on this logic too. These topic areas can be found in table 3.1 below.

**Table 3.1:** *The topic areas brought up to participants in the interviews, which also was sent out to the them before the interviews.*

Areas covered in the interviews
Vision - what does it look like if the city enhances the integration of social- and ecological sustainability
Mental models and attitudes within the city concerning integration of social- and ecological sustainability
Challenges and barriers to integrating social- and ecological sustainability
The role of leadership and organisation within the city
Areas of leverage and transformational potential
What does the way forward look like, how can the city succeed with enhancing integration of social- and ecological sustainability

The choice of questions were, as Bryman (2016) suggests, formulated in order to provide answers for the research questions. To achieve this, we created a draft interview guide where the purpose of each question was evaluated, in relation to our research questions. Based on this assessment, some questions were eliminated to get a suitable length of the interviews. We also aimed to make space for follow-up questions which might arise during the interviews, as well as adding specific questions to certain interviews. These specific questions were added if we knew the interviewee had specific knowledge in an area of interest, which we evaluated before every interview. Other factors suggested by Bryman (2016) which were taken into account was

to avoid leading questions and to use an easily understandable language, adapted to the recipient. Furthermore, we aimed to follow the advice by the author to vary open-ended-, intermediate- and ending questions. The interview guide we used as basis for all interviews can be found in chapter 7, Appendix A, in Swedish and English.

As mentioned, we decided to include elements from the episodic narrative interview (ENI) method in our interview guide, described by Mueller (2019). The author suggests that this method is appropriate for qualitative research that aims to describe a social phenomenon in a certain context, through personal experiences. A key aspect of episodic narrative interviews is that it follows a narrative structure, where the interviewee is asked to provide personal stories about the phenomenon of study. According to the author, this gives the interviewee space for reflection. We chose to include two questions influenced by the episodic narrative interview method. This was decided since we identified both ENI and the semi-structured layout as suitable for our investigation. Also, using only ENI was perceived to be too time consuming to be able to pose questions corresponding to all research questions. Furthermore, it would prevent us from asking more direct questions. Before the interviews, a brief explanation of our inclusion of the ENI method was provided for the interviewees, since this is a step suggested by Mueller (2019). In the questions inspired by the ENI layout, we asked the interviewee to tell a story about a certain event where our phenomenon of interest — integration of different dimensions of sustainability — was present in some way. The questions created with elements of ENI are number 5 and 12 in the interview guide presented in chapter 7, Appendix A.

The interviews and workshop were held in Swedish, since that is the working language for the municipality and all participants were fluent speakers. The interviews were recorded and transcribed using Word Online. In all interviews, one of us was mainly asking the questions from the interview guide, while the other took notes and asked follow-up questions. Sometimes, the interviewees answered questions written further on in the interview guide, before they had been asked. In these cases, the prepared questions on the topic were often asked later anyway, although acknowledging that the interviewees had provided answer. Then, we asked for elaboration on the previous answer or more examples. Sometimes, the decision was instead made to leave out questions which had already been sufficiently or partly answered, due to time restrictions and to avoid repetition.

## **Data collection by workshop**

As explained above, the complex — or wicked — nature of our research topic urged us to investigate our findings in a co-creative manner and we therefore decided to invite actors to a workshop. The reasoning behind whom we invited can be found in 3.3. Below, the outline of the workshop is described.

As described in 3.3, we prepared the workshop to have two focus areas regarding

eco-social integration. During the first part, the participants were asked to discuss based on the question: "Within which areas do you regard it as particularly important that integration of ecological and social sustainability integration occur?", for which we gave examples of public health, climate transition, segregation, procurement, etc. For this discussion in the smaller groups, each group were asked to appoint someone to take notes of important discussions and conclusions the group had. After the session, which lasted approximately half an hour, these notes were collected. Moreover, the each group got to share one or a few main ideas to the whole group. During this, we attempted to collect the overarching thought from each group on a flipchart to get a shared overview.

In the second part of the workshop, the approach was similar; they were asked to take notes, and the smaller groups — now with a different composition — afterwards shared main points they had discussed with the large group. During the first part of this session, each group were given a handout listing the challenges and barriers which had emerged from our analysis of the interview material (see description of approach below in 3.5) together with the prompt: "Highlight three challenges you think are central for eco-social integration to be enhanced in Gothenburg city. Discuss potential and feasibility". On this basis, the groups were invited to talk about the list, with the possibility to add challenges or edit parts of the list they did not agree with. After approximately 20 minutes, a follow-up question was presented regarding their chosen challenges: "What becomes important to consider when working with these challenges? For example, which organisations and people becomes important to involve in order to succeed with integrating ecological and social sustainability, given the challenges?". During both sessions, we moved between the groups to listen to the discussions, and took further notes on the discussions. The notes from each group, the notes we took together in a whole group setting and our notes we took while listening to the groups were later on gone through and compiled.

## 3.5 Analysis procedure

To be able to identify the results of interest to our research topic from the interviews, each of the interviews were analysed using a coding procedure. In general, we based our analysis methods on the guidelines for coding by Skjott Linneberg and Korsgaard (2019) and framework for thematic analysis by Braun and Clarke (2006). This resulted in the approach depicted in the sections below by which we were able to categorise the content and identify emerging patterns, which are presented as themes in the result section 4 below. However, to be able to conduct the analysis, the interviews had to be transcribed. In this section, the transcription and coding procedure are explained in further detail.

## Transcription and coding

The audio recordings from the interviews were transcribed automatically using Word Online. The transcripts were uploaded to the software Nvivo 20, used for editing and coding, alternately. First, the transcript was revised by listening to the audio recording and comparing it to the automatically transcribed interview. Edits were made to the transcript because the automatic transcription was not always correct and there were many minor errors that needed to be manually fixed. After editing a piece of transcript, the same part was read through to identify substance of interest for our research topic. This initiated the procedure called descriptive coding, where labels were created to depict what the interviewee was talking about in a sentence, a couple of sentences or a paragraph (Skjott Linneberg & Korsgaard, 2019). A few examples of labels we used are: *time and resources*, *synergies*, *what should be integrated* and *cooperation, networks and forums*.

Every part of the interview was coded into these labels, with a few exceptions of completely off-topic remarks or other things deemed as irrelevant to the topic of study that had been recorded. Some pieces of the transcription were also put into two or more different labels since they referred to more than one topic. After the first two interviews were coded, one each by the thesis writers, the labels were compared to ensure that they were approximately at same level and of similar type. After approximately half of the interviews were coded, the labels were transferred to an online whiteboard using the software Miro. Each of our set of labels were placed separately on the whiteboard, to have the opportunity to easily track the content of each label by looking into our separate Nvivo projects. Moreover, so-called sub-labels to the previously described labels were created. This was done since the labels in many cases turned out to be too broad and because it was necessary to be able to identify themes in an inductive manner. That is, the sub-labels enabled the data to be described in more detail. The level and types of sub-labels were also initially compared and discussed between us, to ensure we worked in a similar manner. A few examples of sub-labels are: *lack of long-term thinking in governance* as sub-label to the label *governing system*, *preconditions to cooperation to cooperation* and *too many goals to vision and goals*.

## Categorisation

When six interviews had been coded and the labels put into the Miro-board, the procedure of categorisation commenced. When all categorisation was done, this resulted in themes identified from the material. Within the scope of this thesis, the categories searched for were on an explicit, or semantic, level (Braun & Clarke, 2006). Thus, the resulting themes should, in this case, not be based on interpretation of underlying assumptions of the data.

For the categorisation procedure, space for each research question was created on the Miro-board. Then, sub-labels relating to the research questions were copied, from our separate areas mentioned earlier, to these common areas for the separate

research questions. To enable tracking of content to the Nvivo projects, each label and its corresponding sub-labels were marked by a unique code. We used letters to be able to keep the connection between sub-labels and their "parent label" when moving them, and numbers were used to separate our labels and sub-labels from each others. One of us started to sort their sub-labels related to a research question, according to what the sub-labels were about. This was done spatially, where sub-labels describing similar type of data were placed relatively closer to each other, whereas sub-labels not as related to each other were placed further away from each other. This ended up in the formation of clusters of sub-labels from which categories emerged, describing the overarching topics of the sub-label clusters. For research question 1 (RQ1), we identified sub-labels relating to important aspects of eco-social integration and added them to a specific area of the Miro board. Specifically, we added sub-labels related to labels which were about what should be integrated; both practically and which aspects of sustainability dimensions that would be important. Also, content regarding in what areas integration should occur was added to this area of the board. From this, categories developed on what should be integrated and in what areas it should happen, which became two of three themes related to this research question presented in section 4.1. We also looked into each of our labels regarding the interview participants' vision formulations to get an overview of their vision of a future municipality with enhanced eco-social integration.

In the case of RQ2, the categorisation was commenced after a few interviews. From this, an initial set of categories emerged, consisting of different types of overarching barriers and challenges. Both of us then sorted our sub-labels using these categories as a basis. Coding of the remaining interviews created further sub-labels (and some labels), which were continuously added into the categorisation. Eventually, the sorting created a draft of 13 categories for RQ2: *attitudes, external conditions, fragmented/silo silo-structured organisation, goal conflicts and inequality, governing documents not coordinated, lack of clear governance and leadership, lack of strategy and coordination, lack of knowledge and competence, lacking initiatives, relations, working conditions, limiting structure, limited resources, and lack of cooperation*. In order to avoid overlap between categories and to get categories on a similar level of description which could be more easily discussed during the workshop, the categories were further re-worked, which is also suggested by Braun and Clarke (2006). To find suitable denominations and level for the final categories, inspiration was by drawn from Engeström's framework for activity theory, based on the elements: subject, object, rules, instruments, community, division of labor, and result (Engeström, 1978). Also, we utilised the type of aspects described as important in socio-technical systems in Holmberg and Larsson (2018): Knowledge, culture and norms, behavior, legislation, policy, technology, infrastructure, and market. This resulted in four categories: *organisational and cultural preconditions, culture and norms, knowledge and understanding of integration and instruments and resources*.

Regarding the categorisation for RQ3, the working process was slightly different since the result, for a start, was based on the workshop outcome. As described in section 3.4, the workshop participants were asked to select the three most impor-

tant challenges from our prepared list and also having the opportunity to add or edit. When compiled, the three challenges chosen by most groups were used as a basis to identify areas of leverage. Also, the groups' reasoning regarding what would be important to consider when addressing the challenges were taken into account. For this, we used both the groups notes and our own. Eventually, certain aspects emerged from the material which were used as basis to formulate areas of leverage, adding in related perspectives from the interviews. Then, the identified areas are further motivated based on the rich material from the interviews describing the current state.

In addition to the labeling and categorisation, a summary of the impression of all the interviews were written by the person who coded the interview. These summaries included what topics were most prominent in the interview and if there were any relevant observations about how they delivered their opinions, for example if they showed frustration or other emotions. Also, we could add interesting perspectives which were not directly related to the research questions, but could be interesting for the topic.

## **Triangulation**

Triangulation is a method utilised in qualitative, or social, research. In its inception, the method was used to validate obtained results. It has later shifted toward being used for completing the data and epistemological potential of the chosen method. (Flick, 2014) The method entails cross-checking of different sources, to reveal possible inaccuracies and flaws which strengthens the quality of the research (Frambach et al., 2013). Flick (2014) states that there are four types of triangulation: data triangulation, investigator triangulation, methodological triangulation and theory triangulation. The main type of triangulation used in this thesis is data triangulation.

This means that the data gathered was compared to earlier research and was also validated by key actors through conversations about it. Specifically, we focused on utilising the article by Khan et al. (2020) to triangulate the results because of the similar geographical context and similar topic as this investigation. This gave us the ability to contrast our results with the results of other similar research, finding and discussing similarities and differences.

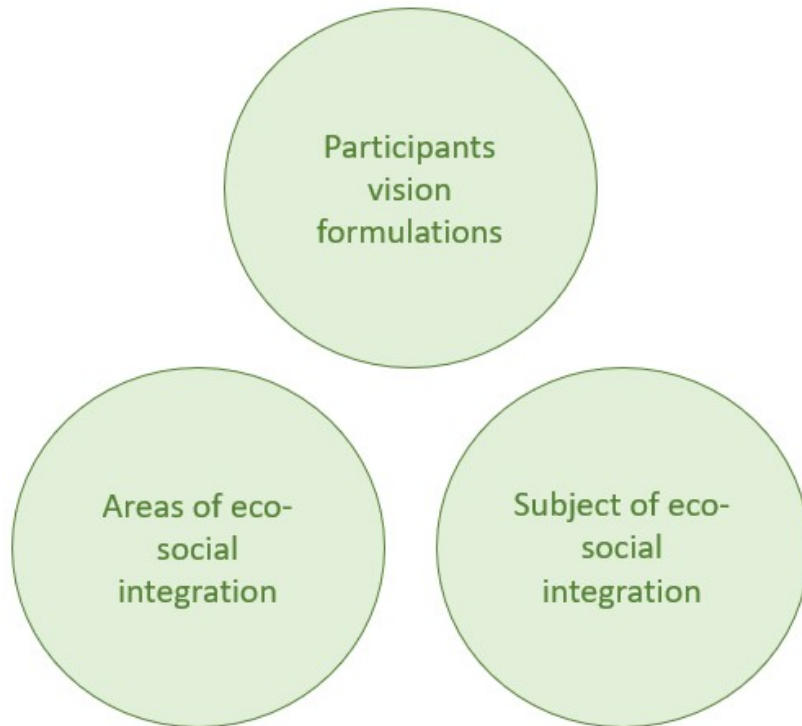
# 4

## Results

In this chapter, we present the result from the participatory methods by which we have conducted the study, as described in the chapter above. The findings are based on a rich material, from which certain main topics related to each research question have emerged. These are accounted for in the sections below. Occasionally, there are examples presented in form of quotes from the interviews, which are numbered according to a list of interviewees that can be found in table 7.1 in Appendix B.

### 4.1 Important aspects of eco-social integration

Here, we present the results related to our first research question (RQ1), regarding what aspects that are considered important when it comes to eco-social integration according to interview and workshop participants. For this research question, the result is mainly based on the material from the interviews, with some input from the workshop. From these, three topics related to RQ1 emerged, which can be observed in figure 4.1: the interviewees' view of what the future would look like if eco-social integration succeeded, what should be subject for integration and areas where integration should happen in the organisation. These topics were the most ones talked about when interviewees were posed question 4 and 11 in Appendix A, about the future vision of eco-social integration in the city and important aspects for enhancing eco-social integration, respectively. This also shows that all interviewees did not interpret the questions in the same way, but instead gave answers on different levels but that all pertain to what is important when it comes to having a future with eco-social integration.



**Figure 4.1:** *Overview of the three most prominent areas describing important aspects of eco-social integration, which are further covered in the section.*

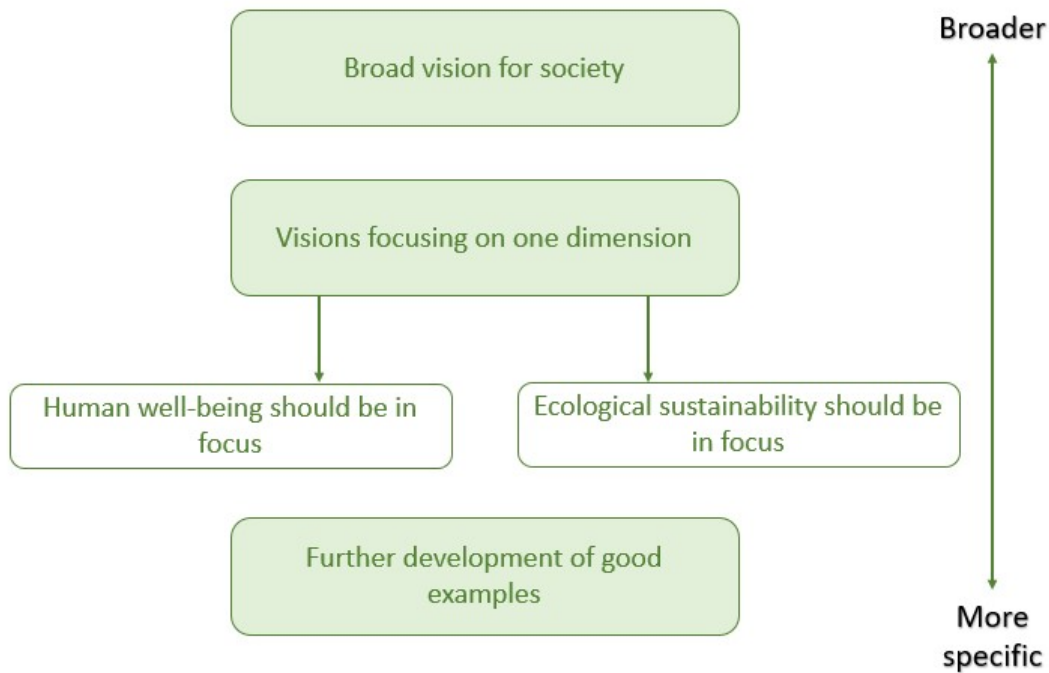
Beside the results from these topics, which are further presented below, an overarching result related to this research question is that the comprehension of the concept "integration of ecological and social sustainability" varies within the city. This is based both on what the interviewees have responded regarding if they believe there is a common understanding of the concept in the city, and evident from the diverse types of aspects brought up by the interviewees. Also, the difference in focus and conclusions among different actors became apparent during the workshop, particularly in the discussion about important areas to work with eco-social integration. In addition to the varying comprehension, the understanding of the concept was said to be lacking in general the city. Moreover, the perceived importance of and need for eco-social integration varied between the interviewees, although most thought it was an important issue and that it is critical to enhance in the city. Some interviewees were doubtful about if people within the city view it as important or impactful, or straight out said that people do not regard it as important. However, many participants expressed that most people have a will to work with it or view enhancement of it as something positive.

### 4.1.1 Participants' vision formulations

Having a common vision of where Gothenburg should be in the future when it comes to sustainability and integrating sustainability dimensions was expressed by several

interviewees as an important aspect to guide their and the city's work with eco-social integration. This was expressed as a fundamental factor for other solutions to be effective in enhancing eco-social integration. Likewise, according to the backcasting methodology, an important aspect when working with complex issues is to have an idea of a desired future to provide purpose and direction. When asking for the interviewees' thoughts on what implications there would be from successfully integrating ecologic and social sustainability, different types of answers were received, as mentioned above. Many responses, however, directly concerned the interviewees view of what implications eco-social integration would have on the future, and what such a future would look like. A few examples are provided in this section to display the varying reasoning.

The overall summary of the types of answers that were formulated as vision formulations or other remarks about what a future with eco-social integration would imply can be observed in figure 4.2. Here, it can be seen that there are three main "levels" in which most of the vision formulations or illustrations of the future can be placed. The figure describes that the broadest explanations that were commonly made are more general vision formulations of what society should look like. This includes all formulations that talked more about the whole society rather than specific issues or focus areas, such as governance or organisation. Another type of formulation was a vision or future illustration where the focus lies on either human well-being or ecological sustainability. This often reflected which area the interviewee saw as important for having a sustainable society; which also constitute a broader "level" of the formulation, but still more specific in its focus. A third type of formulation is those of a type where actors talked about a more specific example that could be implemented or further developed in the city. These areas are further exemplified in the order they are presented in figure 4.2.



**Figure 4.2:** Overview of the most common types of vision formulations and illustrations of the future from interview and workshop participants, where the broadness or specificity is also visualised.

Some participants had responses that described a more general vision for society and all citizens of Gothenburg. For example, one respondent working as a politician described a future where people have more time to act in a more sustainable way, facilitated by political incentives:

Well, it could be that we work less, for example. [...] according to me, I think it's rather four working days per week, which has been a hot topic in media lately, that you have time instead...you can clearly see that when we are stressed, we consume more, since you don't have time, and there are these 'kicks', you know. But that you find other ways to assess, and that it should pay off to live like that. Why don't you get like, longer vacation if you travel by train? I mean, these types of [...] political incentives, to be able to lead a different way of life. [I6]

Additionally, the interviewee stated that such changes should not result in a lack of social standard. Rather, there should be possibilities to live more sustainably, supported by politics. These types of answers were expressed by some actors, where the general focus was not put on governance or organisation of the municipality. Although, they still provide implications of what is important to focus on within eco-social integration.

Another type of description about the future that was common among interview and workshop participants is where the vision has a focus on either the social- or ecological dimension. Although, most participants upheld that a human-centric view in a future vision is important; where well being should not be compromised but ecological sustainability should still be enhanced. For example, one civil servant expressed that *"those living and working in the city should experience a significant improvement of their living conditions"* [I5], explaining further that improvements in the ecological sustainability should not dramatically impair the prerequisites for social sustainability. Furthermore, a politician focused on the type of mindset which would be characteristic in a future where eco-social integration is successful:

It's a lot about people feeling that they are co-creators of the ecological transition, or the climate transition. That it's not something like "oh no, do we have to do this?", but rather, that you see yourself as a part of it: "perhaps, it's my job to be a part of it". [I8]

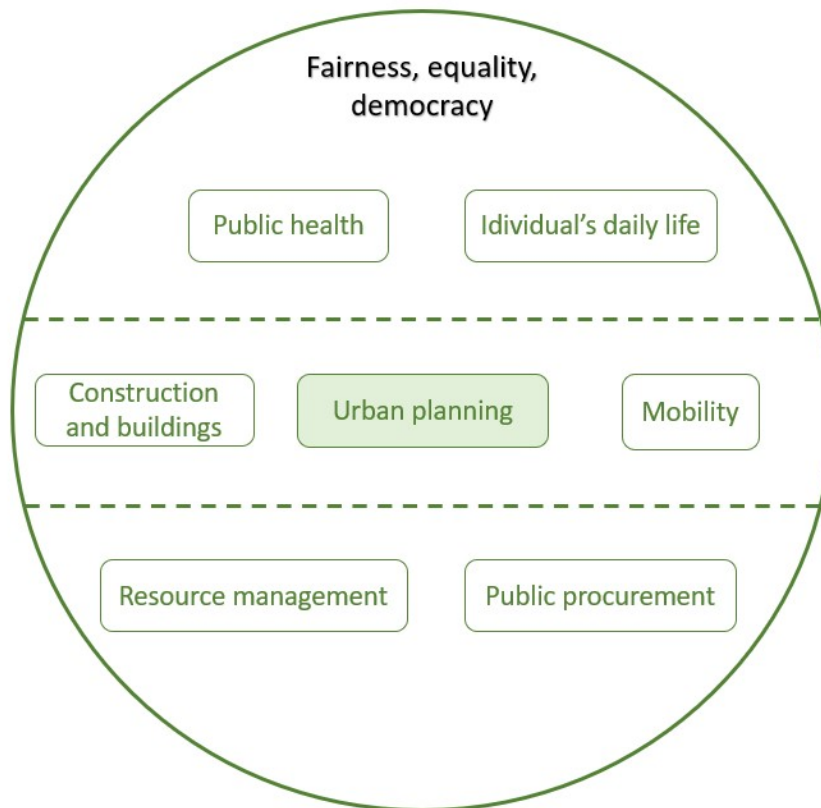
Altogether, even though the descriptions varies and different specific aspects are brought up in these examples, an apparent result is that there is a general focus on well-being, living conditions and participation in the interviewees' future visions. However, there were actors who upheld an opinion that the ecological dimension needs to set the frames in a future vision, in order to also reach human well-being. One employee in a municipal company focused in a statement on the importance of the ecological dimension and said *"To approach a society that makes decisions that do not impair its ecological foundations"* [I2] is something to strive towards.

A third way among participant of the interviews and workshop of formulating a future vision is as a further development of some example, either from Gothenburg, other parts of Sweden or even the world. These descriptions could be, for example, that the participants gave an example of some initiative that integrated the sustainability dimensions. Then, they sometimes continued to express how this could be developed at a larger scale or in Gothenburg, if it was an example from somewhere else. An example is from an interview with a civil servant, who explained the future where eco-social integration had succeeded as an "up-scaled version" of an earlier project in the city, in which the work was focused on social issues, using methods that also resulted in positive ecological effects. The person described the mindset guiding that work accordingly: *"The way of thinking that exists in New European Bauhaus, which you can read about, that is about considering social and aesthetic criteria, art, and so on. In a certain location, what makes life human?"* [I3]. Other examples, differing in content, were brought up by interview participants but overall, the types of visions were mainly those showed in 4.2.

### 4.1.2 Areas of integration

From the interviews and workshop, there were certain areas within the city's responsibility in which eco-social integration is regarded as important to occur. These areas can be observed in figure 4.3, where they have been divided into three clusters de-

pending on which areas that are more closely connected. Many different areas have been brought up in the interviews and workshop and in figure 4.3, the most prominent areas, according to the interview and workshop participants, are presented. For example, the construction sector, urban planning, public health and planning for mobility were brought up as potential or key areas for integration of ecologic and social sustainability by several participants. During the workshop, important areas for eco-social integration were discussed in particular. There, one group identified similar areas as previously exemplified, but also made a distinction between areas where the city has a great impact and where it can be resourceful. For these areas, they exemplified with city planning and public procurement, respectively. Another group put forward "important areas for sustainable living", where the broader areas living, working and recreation were mentioned. These areas have been represented in figure 4.3 under the title "individuals' daily life". Moreover, one group agreed on city planning as an important area, and added circular economy and management of resources as well. Since several groups during the workshop, as well as many interviewees, mentioned city- or urban planning as an important area it has been highlighted in figure 4.3.



**Figure 4.3:** *Overview of the prominent areas of importance for eco-social integration brought up in the workshop and interviews. They have been divided into three clusters, separated by dotted lines, with aspects that are more connected to each other than others. Urban planning has been marked as a specifically prominent area in light green.*

In general, consideration of equality and fairness in work with reducing environmental impact was identified as an important aspect to address. A particular example where this consideration is needed was given by one of the interviewees working in administration:

It is evident that much of the road transport takes place by people with higher income, while those with lower income many times are dependent on public transport and biking to a greater extent. And [...] if you manage to make appropriate efforts there, then you can achieve both reduced climate impact and increased accessibility for those groups without access to a car, since this is a more expensive mode of transport in general. [19]

Furthermore, democracy was an aspect of social sustainability which was brought up by several interviewees as important when working with eco-social integration, where there was specific focus on inclusion of citizens. On this topic, one interviewee

wee working as civil servant mentioned that it is important to consider inclusion in decisions made by the municipal committees, for example in planning of buildings such as schools. Since many actors highlighted the importance of fairness, equality and democracy when addressing other areas, it has also been highlighted in figure 4.3. These factors should, according to interviewees and workshop participants, be present and thought about in most or all work with eco-social integration. However, it was also expressed that it might not be possible to include citizens in all processes.

As can be seen in 4.3, several areas were brought up by the participants. However, some interviewees argued that eco-social integration should not occur "everywhere", primarily due to limited capability of the organisation to take on the work. Rather, it can be reasonable to focus on certain areas such as urban development and public health. This reasoning was also voiced during the workshop, where it also was suggested that it could be valuable to focus on some areas which could serve as forerunners and inspiration for further work with eco-social integration in the city. Specifically, they mentioned the municipal work with parks and nature (included within the heading "Urban planning" in figure 4.3). However, the opinion that eco-social integration is important to include in all of the city's areas of operation was expressed by one group during the workshop. Likewise, it was suggested that all sustainability dimensions should be considered in the proposals put forward by the administrations.

### 4.1.3 Subjects of integration

Regarding the issue of what practically should be subject for integration, various instances were mentioned by the interviewees and some in particular raised a concern regarding the meaning of the concept. This aspect was mostly indirectly addressed during the interviews as part of the general conversation, with examples as: integrating governing documents, goals, perspectives, parts of the organisation, or follow-up procedures. Out of these, it can be noted that the goals and governing documents were most commonly mentioned as subject for integration. One interviewee mentioned specifically that the perspectives on sustainability in Agenda 2030 are increasingly integrated into regulations and owner directives. However, a couple of interviewees directly raised the question of what is meant by eco-social integration and what should be integrated. A researcher phrased it as follows:

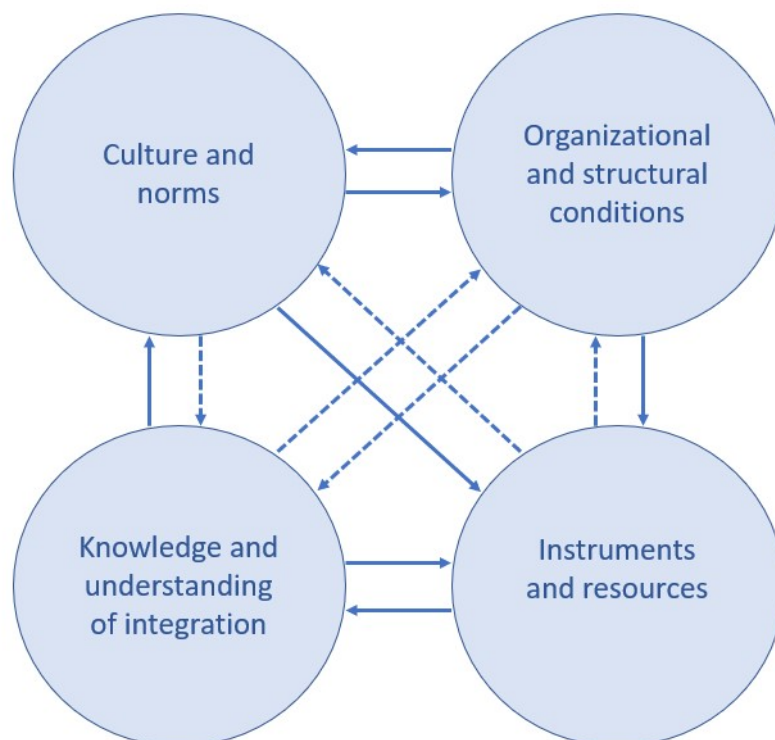
We have a word called "integration", but what is it we mean, what is it we refer to with this integration? Is it the ambitions? Or that we have similar organisation set-ups; that we should learn from each other? Is it various functions and functionalities we want to pay attention to and integrate? Thus, it is a bit tricky, this "to integrate". What do we mean by it? [I11]

Besides highlighting the ambiguity of the concept, this quote serves additional examples of what could be considered subject for integration. Also, further examples were

provided through the workshop, for instance that knowledge could be integrated, and that integration should occur already in the assignments appointed from politicians to the administration.

## 4.2 Challenges and barriers

In this section, research question 2 is approached by presenting results regarding challenges and barriers for eco-social integration that interview and workshop participants see. These challenges and barriers have been sorted into four main themes, which are: *Culture and norms*, *Organizational and structural conditions*, *Knowledge and understanding of integration* and *Instruments and resources*. The themes can be observed in figure 4.4, where the arrows represent that the theme an arrow points at is dependent on the theme where the same arrow starts. The solid arrows represent a direct dependence and the dotted represent an indirect dependence. For example, culture and norms and organizational and structural conditions both directly affect one another; while, for example, culture and norms are indirectly affected by instruments and resources.



**Figure 4.4:** Overview of the four themes for challenges and barriers, with solid arrows representing a direct dependence and dotted arrows representing an indirect dependence.

As explained in section 3.4, the workshop groups were asked to choose three challenges and barriers each, which they regarded as the most important to address, considering potential and feasibility. The challenges and barriers chosen by most groups were: *Established habits regarding certain work practices and norms* \*, *Lacking governance in eco-social integration*, and *Limited resources to work beyond core assignments*. These barriers, together with the most prominent barriers from the interviews are described below.

### 4.2.1 Culture and norms

A prevalent result from the interviews was that culture and norms constitute a theme that has had a long standing and deep effect on eco-social integration. It establishes a foundation for the other types of challenges facing the city as it lies in the deepest level of the Iceberg model, mental models (Davelaar, 2021). Within culture and norms, several areas that affect eco-social integration were mentioned by the participants. One prominent area is traditions and attitudes toward working with sustainability, eco-social integration and toward colleagues in the city. Issues regarding attitude can also be tied to another area mentioned by the participants: relationships. In the interviews, this area referred mainly to issues with trust and culture of silence. Another area within culture and norms is the lack of initiatives and regarding this area, actors brought up things like ambition level, working conditions and degree of difficulty. One last area brought up in the interviews was conflicting goals between the sustainability dimensions and how that affect the reality of and attitudes regarding eco-social integration. First, challenges regarding general attitudes toward working with eco-social integration are presented.

The four areas that constitute the main challenges within the theme culture and norms are shown in figure 4.5. It can also be observed which areas are interdependent. Noticeably, established attitudes and traditions in the city affect all other challenging areas, making it a fundamental challenge. Meanwhile, the notion of existing goal conflicts between dimensions does not directly affect any other areas. However, it could be seen as indirectly affecting the relationships and initiatives in the city.

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\*This barrier was re-formulated and is mostly related to *Established attitudes and traditions*.



**Figure 4.5:** Overview of the four challenging areas regarding culture and norms, with solid arrows representing a direct dependence and dotted arrows representing an indirect dependence.

#### 4.2.1.1 Established attitudes and traditions

A topic mentioned by several interviewees was that Gothenburg city has traditions and norms that were established long ago but still live on today, creating a difficulty for changing the organisation. One actor who works as a civil servant in one of the city's administrations said the following during an interview:

I think that a lot lies in the history of how we work. Often it has been that administrations and companies take care of ourselves. [...] And we have worked like this for so long in Gothenburg city, where each administration decides for itself. Now there is more and more coordination, but if you look historically. [I1]

This was expressed by several actors and there was an agreement that historically, the city has worked with areas of sustainability very separately which lingers today, where there are attitudes which preserve this fragmentation of the organisation. Examples of these attitudes mentioned in the interviews are that people have expectations that one should only work with one's core assignment and that others should handle other topics. The same civil servant as quoted above mentioned that *"Because each administration works with its core assignments, you only see what is in front of you and you don't look at the overall picture"* [I1]. Another actor, who works at a municipal company, said during their interview that *"Sometimes people think that 'that's our core assignment, so you shouldn't work with that'"* [I7]. So, participants expressed that this attitude risks that people working with sustainabil-

ity issues do not integrate different topics and see the whole complex picture. A civil servant expressed this as *"You only see what is in front of you and you don't look at the overall picture"* [I1].

Another prevalent challenge to eco-social integration regarding attitudes told by participants is that people working in the city expect others in leadership positions, such as politicians or the city management office, to take initiative with integration. They explained that there is a sense that one either has or want to wait until someone in a higher position gives them an assignment. This was seen both for assignments to collaborate with others and to execute specific tasks. For example, when asked about challenges to eco-social integration, one civil servant working in the environmental administration said

After all, we have to prioritise what is requested by the management. We can't say "yes, but we worked on this issue with social sustainability because we thought it was important". It doesn't work that way, we have to deliver on what we have been clearly told to do. [I1]

Although, this civil servant also further explained that the committee giving directions to the administration does so on a more overarching level, not by micro managing what they do. Some interview participants saw this as a permanent limitation, while some challenged it and stated that civil servants can and need to take initiative for change. For example, several interviewees said that since the knowledge often lies within the administrations, they should lift more ideas and initiatives to the politicians. A civil servant with a leadership position working in the city management office expressed that *"We shouldn't govern in that way, but we could probably have more initiatives from our side, because it is after all within the administrations that the expert knowledge is usually found"* [I4]. This quote also exemplifies a general idea from some interviewees that those with knowledge should be the ones taking initiative. The municipality's companies provides a good example of having less issues with the attitude that politicians need to take initiative. An employee working with sustainability at one of the municipality's companies said during their interview:

So a part of what appears to be politicians setting detailed goals for the company, but the goals are actually created among the civil servants. But they have passed through the politicians who say 'This sounds wise' and then they make a decision about it. [I2]

By this, it seems like companies have a stronger sense of mandate.

Another attitude worth mentioning is that the work with sustainability in the city always have to conform to the economic dimension. This was brought up in several interviews as a reality and a barrier for eco-social integration. Some actors questioned this as a reality and explained that we should not see the economical dimension as neither the limiting factor or a barrier for transformative change within

the ecological- or social dimension.

#### 4.2.1.2 Challenging relationships in the city

Connected to attitudes about responsibility and mandate mentioned in the last section are issues regarding relationships between people working in Gothenburg city. As mentioned above, there are expectations from civil servants that politicians should take initiative and give assignments to the administrations requesting work with eco-social integration. According to some interviewees, this is connected to some problematic aspects of relationships within the city, colored by a history of a culture of silence and a lack of trust between politicians and civil servants. One interviewee working close to municipal companies said

We can talk about a culture of silence and that you have a lot of "pressured culture" [...] Historically, it has been that you should not make mistakes and then you only do what you are told to do; then you don't dare to be innovative. [I7]

This demonstrates a notion that was brought up in several interviews, from both civil servants and politicians; that there is still a lingering fear of making mistakes and stepping outside of your mandated area of assignments, which is a barrier for innovation and transformation. However, one interview participant questioned the apparent lack of mandate for civil servants, stating that there might be more possibilities for civil servants now than before, that it is slowly shifting. As one politician working in the city council and in one of the committees said, "*Some municipal administrations and companies are very bold and dare to disagree, in others there is a culture of not raising uncomfortable questions with politicians*" [I8]. This politician also raised the importance of having a positive attitude toward initiatives from the civil servants, making sure to listen and take onboard ideas presented to the politicians.

A politician working in another committee and with experience from a social administration in the city presented a similar view in their interview. They said that

There is a great deal of competence within the city and I think that many more people would like to have space to do more and get that mandate, not just wait for an assignment from above and be afraid of getting slapped on the fingers. [I6]

This demonstrates that a challenge to more initiatives from civil servants could be a fear to be reprimanded. The other politician we interviewed, working in the city council, gave examples of situations where civil servants in leadership positions had been treated badly by politicians using master suppression techniques such as belittling. They also mentioned that the way politicians treat each other affects other parts of the city. Although, there are results from the interviews emphasising that there is a spread within the city regarding how people in leadership positions are viewed. A civil servant working in a strategic position in the city management office

stated that

It's varied in the city how you view the city management office. Some people traditionally see it as more hierarchical, that "they're here to control us", which makes it difficult to create a trusting relationship.

They, however, mentioned that they did not think many people feel like this today. Aside from this, civil servants did not express a lot regarding problems in relationships between civil servants and the city management office or politicians. It was mainly the two politicians interviewed that brought this up.

### 4.2.1.3 Lack of initiatives

A lack of initiatives is reportedly dependent on the attitude mentioned above, that civil servants feel like they should wait for directives from leaders. Beyond that, the interviews painted a picture of a city where there is a lot of passion about sustainability and will to integrate sustainability dimensions. However, a lack of initiative in practise was brought up by many interviewees. There were three main causes of this — except the before mentioned attitude — brought up in the interviews; namely organisational causes, tough working conditions and the level of difficulty facing the issues of eco-social integration. Regarding the organizational causes, an example mentioned is that strategy and work with eco-social integration does not have a clear residence within the organisation. A civil servant working at the city management office expressed when talking about companies who wants to take initiative, that *"The problem is that they often have a hard time finding the door to knock on. Where do you enter and start the dialogue?"* [I5]. Another example of an organisational cause of a lack of initiatives is a fragmented organisation where the general civil servant does not feel like it lies within their assignments to be questioning and try new things regarding eco-social integration. A politician working in one of the city's committees said in their interview that *"I don't think people feel it's their job to think about both dimensions. Again, it's the silo-thinking"* [I6].

Tough working conditions caused by lack of time and resources have also been brought up as an organisational cause to a lack of initiatives, in particular innovative initiatives. This is mentioned in the interviews on both a general level where everyone has a lack of time of resources but some interviewees put extra emphasis on a lack of these for people in leadership and strategic positions. For example, one actor working with companies in the city said *"Often, each director is responsible for very broad areas and that is a lot of work"* [I7]. On a more general civil servant-level, an example was mentioned by a civil servant in the city management office, explaining that there is often a high level of staff turnover in the administrations and that inexperienced employees can be faced with a tough working environment, especially in the social administrations. They said that

In these times of threats, hate, disinformation campaigns and high staff turnover, very young social workers are sent out on the most difficult issues. We have almost managed to non-organise. [...] And that's when

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I think our support structures and systems... it can't be up to individual employees or managers in the organisation. [I4]

Another barrier is the feeling that the sustainability challenges facing Gothenburg city are too hard to handle. Participants argued that this can result in less initiative because people do not know where to start and do not feel like any solution is enough. One interviewee working in academia provided insight into this and said *"What is good enough in this kind of transformative work? [...] It's clear that we have to aim for the stars, but then we also have to be satisfied if we reach the treetops"* [I11]. They further talk about the importance of working toward certain solutions; that the city can not put in extensive work on all fronts at the same time. Further, an actor working with sustainability at a municipal company questioned if the general inhabitant in Gothenburg is prepared to change. They said *"are the citizens of Gothenburg prepared to take these risks to ensure their common future? History says not yet"* [I2]. Although, this challenge was seemingly the least prominent within the area of lacking initiative because only two interviewees brought it up.

#### 4.2.1.4 Goal conflicts between dimensions

Another barrier for eco-social integration that depend on norms and attitudes is the fear among people that making changes to one dimension can worsen factors within the other dimension. Most talked about in the interviews was the worry that investments into the ecological dimension can enhance inequality. This worry is confirmed to be realistic by Khan et al. (2020) since a part of triple injustices is that poor and marginalized people are at risk to be more affected by the measures against climate change. In several interviews, the issue also referred to in section 2.4.1 regarding that Gothenburg has a problem with inequality was brought up. For example, segregation and a large gap between the poorest and richest groups were mentioned. One actor in academia, researching how municipalities can tackle complex issues, stated that *"The ecological- and social sustainability are often pitted against each other. [...] And there are conflicts between them"* [I13]. Hence, this can make goal conflicts between ecological and social sustainability more apparent. Other interviewees brought up resistance to changes which incur higher expenses. A politician working in the city council and a committee said

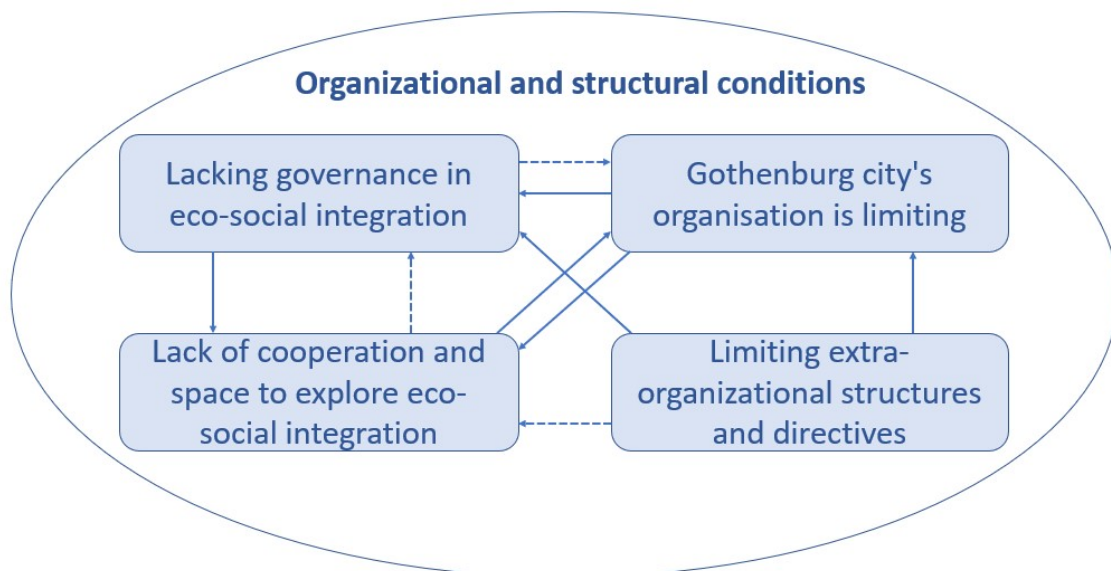
One thing that can cause a conflict in these particular issues is whether it will be expensive to live sustainably. Not everyone can afford expensive solutions. That is a kind of a classic conflict, that not everyone can afford to buy an electric car, for example. [I8]

During other interviews, the fact that people might protest changes that make things more expensive was brought up. One actor talked about the riots against the rising petrol prices in France in 2018. Another interview participant said that refurbishments in apartments to put in more sustainable appliances make the rent higher, which is opposed by people living there. Interviewees also felt like people in the city fail to see how the two dimensions can work in synergy with each other and that causes them to prioritise one dimension over the other.

### 4.2.2 Organisational and structural conditions

Organisational and structural conditions in Gothenburg city that constitute challenges for eco-social integration were raised and exemplified to an extent in all interviews. While some challenges were mentioned by a majority of the interviewees, there was a broad range of different topics brought up. One prominent challenge, mentioned by many participants in the interviews and the workshop, is a lack of clear governance in working toward eco-social integration. Another challenge that was prominent in the interviews is that the organisation of Gothenburg city is limiting. A third area, that is affected by organisational and structural conditions as well as culture and norms, is lacking cooperation and space to explore within the municipality. A fourth area is that extra-organisational factors, such as national structures and directives, can act as a barrier for flexibility. These areas of challenges regarding organisational and structural conditions are presented in order, starting with the lack of clear governance in the work with eco-social integration.

In figure 4.6, the four main challenges within the theme organisational and structural conditions is presented. Seemingly, the only area that has an effect on every other area is limiting extra-organisational structures and directives. Although, it was only found to have an indirect effect on the lack of cooperation and space to explore and does not seem to be directly or indirectly affected by the challenges within the city. Also noticeable is that there seems to be a strong connection between the limiting organisation of the city and the lack of cooperation and space to explore.



**Figure 4.6:** Overview of the four challenging areas regarding organizational and structural conditions, with solid arrows representing a direct dependence and dotted arrows representing an indirect dependence.

#### 4.2.2.1 Lacking governance in eco-social integration

The interview participants were posed questions specifically regarding leadership and organisation around eco-social integration and in one question they were asked if they see a clear governance. An overwhelming majority of the interviewees answered that they do not see any or very little governance; especially lacking are directives to work with eco-social and leadership in this work. This aligns with the apprehension that there is almost no coordination for eco-social integration in the municipality. A civil servant working at the environment administration stated that

We do not work systematically with social- and ecological sustainability in an integrated manner, instead it is somewhat dependent on managers, individuals like myself and employees. When you find interesting collaborations between administrations and between other actors then it can arise. But there is nothing systematic, that is what is lacking. [I3]

Although, the interviewee also clarified that they think that there is systematic work in some areas and gave the planning of green areas and parks as an example of an area where one can see how issues of social sustainability, public health and environmental issues are integrated to a larger extent in the planning process. A lack of coordination and support from leaders for working with eco-social integration were raised specifically as challenges to integration as well as an explanation to why there is a lack of it in the city. A civil servant working at the environmental administration said that *"In practice I would say that, many times, there is a lack of both leadership and actual organisation to work with both perspectives"* [I9]. Another civil servant at the environmental administration explained that the only designated governance for eco-social integration that exist in the city is Agenda 2030 and the documents that adopt the goals in Agenda 2030.

Two instances that were highlighted specifically in the interviews as important for governance regarding eco-social integration are the city management office and politicians in the city council and committees. One interview participant working with municipality companies talked about politicians as a barrier for eco-social integration and said *"If they were united and very clear about what they wanted with the city of Gothenburg, I think it would be good. Because there is so much will among civil servants"* [I7]. Furthermore, many interviewees talked about the need for directives and governance coming from politicians. According to some participants, this is connected both to the structures and relationships in the city, which do not give civil servants enough mandate to pursue and lead the work with eco-social integration. One civil servant working at the city management office exemplified that a challenge is that the politicians do not put forward enough demands for administrations to work with eco-social integration. They said

I've rarely seen a case being re-referred or seen the politicians saying: "you know what, we're not going to approve this because the perspectives haven't actually been investigated", "I don't understand what this means for the social perspective", or "it's not clear enough what this

means from the ecological perspective." [I14]

Beyond politicians, the city management office was also pointed out by several interviewees as a critical entity in the city for governance regarding eco-social integration. One actor working with municipal companies explained that there is a lack of directives from the politicians to the city management office that gives them an assignment to work with eco-social integration. They said that "*Ultimately, it is the politicians that must give the city management office the task of organising and structuring it*" [I7]. A civil servant working in a coordinating position in the city management office reflected on the need of coordination from them when it comes to eco-social integration, especially in the governing documents. They stated that coordination around eco-social integration is lacking and that more coordination from the city management office is needed.

### 4.2.2.2 Gothenburg city's organisation is limiting

Two of the prominent challenges mentioned regarding a limiting organisation is that the organisation is fragmented and that Gothenburg is a large city, resulting in longer communication- and collaboration pathways. Regarding Gothenburg being a big city, one actor working at the city management office said that

There is no requirement that we have to coordinate, but rather there is a desire that we should coordinate. And that's the only governance we have in Gothenburg. Because this is a giant organisation and then it becomes more difficult for, for example, our city manager to coordinate everywhere. [I4]

Other interviewees also suggested that a larger organisation makes coordination between all parts of the city harder. A politician in the city council and a committee reflected on the size of the city and how it makes it more important to have a clear assignment to work with eco-social integration. They explained that because the city has 55 000 employees, committees and administrations can not prioritise everything. They continued, about administrations and committees, that "*their mission, i.e., what is in their regulations, becomes very governing for what they do and how they justify what they invest time and effort in.*" [I8]. Other interviewees compared Gothenburg city to smaller municipalities; explaining that communication and cooperation is easier there because people from different parts of the city have more natural forums to meet. A civil servant at the city management office explained this as

In smaller municipalities, it is often much closer between the political- and the civil service organization. There, you often have a closer dialogue with each other, perhaps even on a daily basis. [...] We don't do that in Gothenburg, we don't have this daily dialogue around issues. [I4]

They further explain that the organisation is more formal in Gothenburg, where administrations put forward suggestions to politicians through formal channels with-

out conversations between civil servants and politicians. Instead, the administrations get an official answer from the politicians where they either approve, deny or ask the civil servants to change the suggestion. This was considered by the interviewees to be ineffective and an annoyance for the civil servants.

Because of the size of the city and because of its organisation, the city was described as operating in a silo-structure, where the committees and administrations work primarily with their core assignments. Often, it was said the core assignments are connected to mainly one sustainability dimension. One interview participant working at the environmental administration explained that

It is extremely difficult for all committees to work with sustainability, because they have very different relationships to it and it may be because they all have different core assignments. But there is no one who tells them how to work with it and there isn't contact between administrations. [I1]

The fragmented structure of the city was presented by many interviewees as a direct barrier to eco-social integration; because integration is impeded by separate working areas and a lack of communication between people working with those areas. A participant working as a politician talked about this and said

In fact, we run the different issues separately. And sometimes we see the possibilities. But I think it is very rare that a joint strategy or objective has been developed where both dimensions are highlighted. It is still the case that we work in three parallel tracks. [I6]

The same actor continued by explaining that the city is bad at integrating different areas in general; rather, it is up to individual civil servants to see and make connections. This is mirrored in other interviews where participants expressed that integration depends too much on the individual, their knowledge, competence and ambition. This means that, in practice, integration does not happen at a high enough level, but rather as isolated projects. Another factor in the fragmentation is that every administration has its own budget, which is decided by their corresponding committee. A civil servant at the environmental administration said the following about this fragmentation of economical assets: *"When it comes to this long-term transformation of society, it is a problem. It's a big challenge. How do we integrate the whole picture?"* [I3].

#### **4.2.2.3 Lack of collaboration and space to explore eco-social integration**

Lack of cooperation between different parts of the city was mentioned by many interviewees as a general challenge for eco-social integration. A more specific challenge, that is grounded in the lack of collaboration, is that there are few forums where people can meet and explore complex topics — such as eco-social integration — together. Starting with the general lack of collaboration, there are two main problematic areas brought up in the interviews. These are that there is a lack

of collaboration between politicians and civil servants and that there are too few forums for collaboration in general. Regarding collaboration between civil servants and politicians, a civil servant working at the environmental administration said that

In the discussion about what should be included in the budget and which issues should be prioritised, there is very little exchange between the people implementing it and the politicians, the decision makers. And that's a shame I think. Especially when it comes to issues like this where you need to have a high understanding of where you want to go and what you want to achieve. [I9]

This exemplifies how a lack of collaboration and communication between decision makers and those implementing the decisions result in disorganisation and a lacking strategy in eco-social integration. Another civil servant, working at the city management office, talked about cooperation in the city and said

This is again about the matter of coordination and cooperation in the city. That we have four social committees that have exactly the same tasks in their regulations, but still they interpret them in different ways. And that is difficult to coordinate. [I5]

So, because of the large and fragmented organisation, participants have argued that a lack of collaboration and a common understanding of issues can become a problem.

There seem to be a general lack of collaboration and lack of space to explore the issue of eco-social integration in a collaborative manner, which both have been linked together by participants; indicating that they feed in to each other. A civil servant at the environmental administration said the following about spaces to collaborate: *"There aren't that many such collaboration spaces where you can discuss these issues and find consensus. There just isn't that coordination"* [I1]. Other participants also agreed that there is a general lack of collaborative forums and therefore of innovation. A participant working at RISE talked about how there is little prioritisation of innovative work. For example, they said that *"Innovative work must adapt to the continuous daily work that always rolls on"* [I13]. They also continued explaining the importance of supporting transformative processes and having cooperation between people with different competences and roles. Participants mentioned that a lack of these spaces of collaboration can result in a lack of common understanding because people are stuck in their perspectives. When talking about the city management offices coordination of the forthcoming budget a civil servant working there said that *"Here I think that the city management office to a greater extent can work with integration of perspectives"* [I14]. This further exemplifies that there is not enough coordination in the city regarding integrating perspectives. Also, a lack of spaces to cooperate has been indicated by interviewees to be a reason for lacking common perspectives.

#### 4.2.2.4 Limiting extra-organizational structures and directives

It is not only internal structures in the city that are said to create barriers for eco-social integration. According to interviewed actors, national structures and directives can also be limiting. An interviewee working as a researcher at RISE explained that *"there are challenges we get from legislation, which are of course good but which create silos. 'What can a social administration do?', 'What can the urban development administration do?' It is also partially regulated in legislation"* [I13]. Although, there were no explicit examples of how national legislation can create silos for the city's work with eco-social integration. However, many interviewees emphasised that Swedish municipalities in general are square and not very flexible; which can both affect how and explain why Gothenburg municipality's organisation is non-flexible. For example, a politician said *"Sometimes one feels that the municipality is very stiff and square"* and *"Municipalities being a bit slow can be seen as a problem. This issue needs to have a bit of curiosity, creativity and daring to try new things."* [I8].

It was also expressed by other interviewees that national structures and a lack of directives from national leaders to work with eco-social integration creates limits for municipalities. One civil servant working at the city management office expressed that

I think that it is also a national issue. [...] It is also governance from the state which is very fragmented. Both in how tax funds are distributed and collected, and there are really no strong incentives for municipalities to reallocate their strengths. Many do it anyway, because you realise you have to, but I think it would be good with stronger governance. [I4]

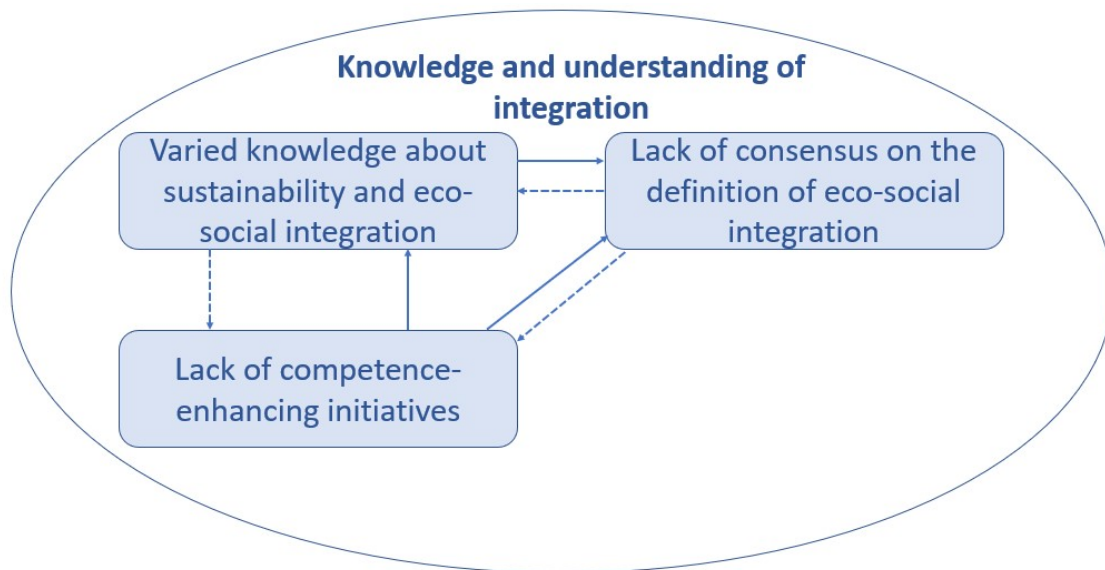
In other words, because of existing legislations and lack of directives nationally to work with eco-social integration, Gothenburg city is limited in its ability to take transformative action. Another topic brought up by one interviewee working as a politician in the city council is the confidence people have in the Swedish society. They described this as a barrier for transformative change because

We have a very broad trust in the Swedish society. We have confidence in the system. We believe the system works. While in many other countries you don't have that, you may have trust in your own group, for example your own religious group. [...] It has a downside that you don't roll up your sleeves and do things yourself because you trust the system to take care of you. [I8]

So, because people trust that the government will take care of important issues, you do not see as much initiative coming from the ground up, starting among people. Although, many interviewees gave examples that indicated that such initiatives has existed and exist today.

### 4.2.3 Knowledge and understanding of integration

Lacking and fragmented knowledge and understanding of eco-social integration was brought up as a central challenge in many interviews. One facet of this is that there is a lot of variation in how much knowledge employees in the municipality have about sustainability and eco-social integration as well as leadership for these topics. Another challenge is a lack of consensus within the city regarding how eco-social integration can and should be defined. A third challenging area brought up by interviewees is that there is a lack of competence-enhancing initiatives in the city. In figure 4.7, the three areas and their dependencies on each other can be observed. Notably, lack of competence-enhancing initiatives seems to affect both the level and variation of knowledge in the city as well as the lack of consensus on eco-social integration. However, the lack of competence enhancing initiatives seems to only be indirectly dependent on the other challenges; since a lack of consensus and knowledge can result in less focus on eco-social integration in general, and therefore less initiatives to enhance competences. This section starts by presenting the results regarding variation in levels of knowledge.



**Figure 4.7:** Overview of the three challenging areas regarding knowledge and understanding of integration, with solid arrows representing a direct dependence and dotted arrows representing an indirect dependence.

#### 4.2.3.1 Varied knowledge about sustainability and eco-social integration

Knowledge and competence around sustainability and eco-social integration was regarded by interviewees as an important area for succeeding with eco-social integration, which also constitute a challenge when there is lack of it. Participants argued that because of a lack of knowledge, especially in the right places in the city,

there is less possibility and ambition to work with eco-social integration. An interview participant working with municipality companies talked about Agenda 2030 as an opportunity to work with eco-social integration and said that *"The key for Agenda 2030 is having knowledge and education. This is when you create the most equality. And if you have knowledge, you also understand the climate issues, I think"* [I7]. Thereby, lacking knowledge specifically regarding sustainability and eco-social integration is considered by actors to be a barrier to integration of the dimension. A civil servant at the environmental administration explained

It depends, I think to a fairly high extent, on a lack of knowledge. Knowledge of the issues, lack of knowledge about ecological sustainability. Lack of knowledge about what strong sustainability is, which is really what we should be working towards. And then there is a lack of knowledge about how to integrate social and ecological sustainability. I think that is perhaps the biggest lack of knowledge. [I3]

They consider a lack of knowledge about eco-social integration to be the most pressing issue regarding knowledge. Other actors have also expressed that they themselves do not have enough knowledge about eco-social integration, which makes working with it more difficult.

Another problem brought up in the interviews was that there is knowledge within the city but the knowledge is spread out in the different administrations. For example, there is a lot of knowledge about ecological sustainability at the environmental administration but not enough in other parts of the municipality. A politician working in the city council and one of the committees explained how knowledge is spread out and that there is a need to share knowledge with each other. They said

So, it's probably the first step that we need knowledge about the issues. And it's not like that — there is knowledge in the city. But there is a bit of a spread in knowledge across all administrations and companies. [...] Those who are good at it need to share with us who are not as good. So we get an enhancement of knowledge. [I8]

This was explained by some interview participants to be connected to the fragmentation of Gothenburg city's organisation. They further explained that since the organisation works with issues separately, the knowledge about them is also fragmented; leading to a lower ability to know how to integrate dimensions even if there is a will to do so. Another issue lifted in an interview is that, except for developing knowledge, there is a need to translate the knowledge to an ability to act. A civil servant at the environmental administration said that it is about *"How to develop this knowledge into an ability. It's one thing to just absorb information, but 'how' is always the question"* [I1]. So, there is a need to translate the knowledge that exists into practical action.

### 4.2.3.2 Lack of consensus on the definition of eco-social integration

Connected to a lack of general knowledge about eco-social integration is a lack of consensus about what eco-social integration is and should mean for Gothenburg city. A civil servant at the environmental administration exemplified the lack of consensus about sustainability and how that affects the work with eco-social integration. They explained that

There is also no consensus on which definition of sustainable development is used. Everyone assumes different things. I discovered that quite quickly when I spoke to someone from the city management office. They work based on the Public Health Agency's definition, while we look at something completely different that has more to do with well-being. That affects how people work with social sustainability. [...] There is no consensus, everyone just talks about and looks at sustainable development in their own way, which is a big problem. [I1]

The lack of consensus was connected to a lack of forums — in which to communicate and collaborate within the city — by multiple interviewees. If there is no chance to talk about eco-social integration and sustainability, there will be no chance to see other peoples perspectives. A civil servant at the environmental administration explained that *"There aren't that many such collaboration spaces where you can discuss these issues and find consensus"* [I1].

Furthermore, not sharing perspectives leads to a fragmentation in how different parts of the city approaches eco-social integration. And conversely, the issues one prioritises can determine what definition you have of sustainability and eco-social integration. This was explicitly expressed as an issue for politics because the different ideologies have varying amounts of focus on the ecological- and social dimension. A politician was asked about consensus in the municipality and explained during their interview that

I would think that you will get slightly different answers, you will see that. That people have their own image. After all, I have a green ideology which is my political guidance and if you have a more red ideology then it is perhaps the class struggle and very much about the social sustainability. So, I can imagine that it is a little different how you formulate yourself around it. [I8]

Other interviewees agreed that the differing political ideologies can be a barrier to the common understanding of sustainability and eco-social integration. For example, one interviewee talked about how the political climate can make the political parties not want to agree in issues, instead they lean into their own ideology.

### 4.2.3.3 Lack of competence-enhancing initiatives

A reason brought up in interviews for the lack of knowledge about eco-social integration was that there is not enough competence-enhancing initiatives in the city. Several kinds of competence-enhancing efforts were discussed by interviewees. Many talked about taking courses and getting certifications. It was stated by one actor working with urban construction that competence-enhancing initiatives also are fragmented. They said that

If you have competence-enhancing training courses etc., they are usually so niche and focused on one of the issues, maybe even on one of the sub-issues. You learn about accessibility or you learn about climate impacts, instead of having the whole package. [I12]

This was reported to be an issue by several interviewees since fragmented competence-enhancing initiatives leads to a general fragmentation of knowledge and competence, which was also reported by many. A reason behind the lack of efforts to enhance knowledge and competence was described by an interviewee working with the municipality's companies. They said that

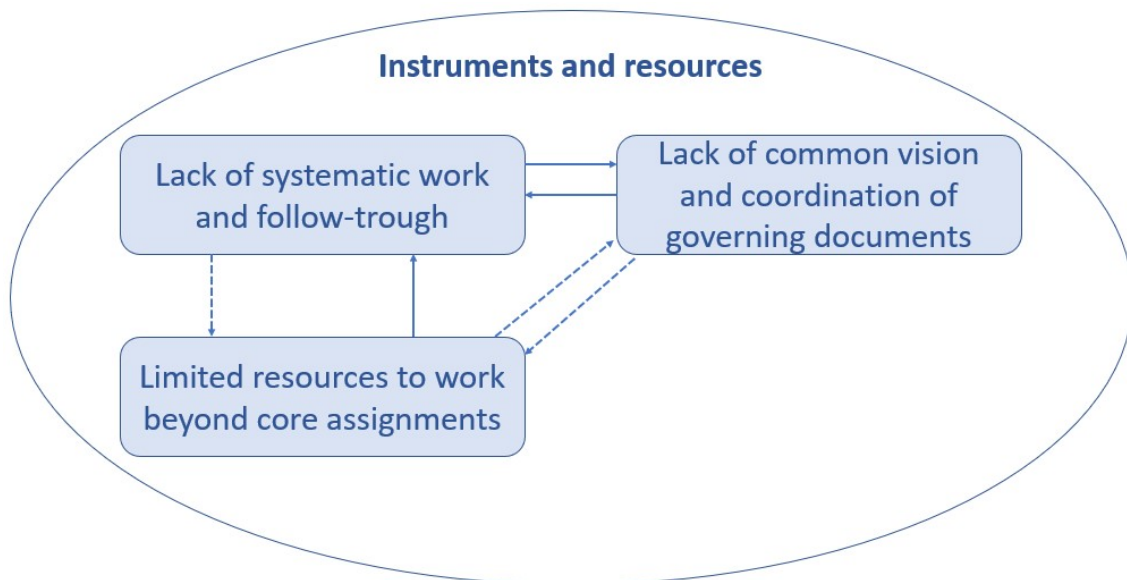
Maybe it's because the head of management doesn't see it or understand it. They just think "go to that course and you'll be satisfied". They don't see the benefit of it as an investment in both the person and the organisation. [I7]

Others reflected that there is a lack of time and resources to have more competence-enhancing initiatives. Although, some actors state that the largest need of enhancing competence and knowledge is at the leadership level; people in managerial or coordinating positions need an increased knowledge about how to govern and support the work with eco-social integration. A politician gave an example from reality of how such support could be developed and explained that *"Our chiefs will receive training in trust-based management. It's a very good way, I think, to develop an organisation"* [I8].

### 4.2.4 Instruments and resources

Many participants reported issues with not having the right tools to be able to work with eco-social integration. There is a broad range of missing or lacking instruments that both impede the general effectiveness of the organisation and the eco-social integration. On a very general level, a lack of systematic work and follow-through was reported. The main explanation for this was that the municipality does not have a good enough system for this. Another more specific instrument that, according to participants, is lacking is a common vision- and goal formulation that can be used in eco-social integration. Instead, some thought that there are too many governing documents which are not coordinated. A last area is the limited resources to work with eco-social integration and working in an innovative manner. Reportedly, employees in the city often only have the time and resources to focus on their core assignments.

In figure 4.8, the three main challenges regarding the lack of instruments and resources can be seen. The arrows show that all areas are interdependent, although some are not directly dependent on one another. For example, the lack of systematic work and follow-through and lack of common vision and coordination of governing documents are directly affected by each other. If there is a lack of systematic work, it can result in no coordination of governing documents. And there is also a connection that if there is no common vision, the work will not be as systematic. As can be seen in the figure, limited resources to work beyond core assignments also affect the way the work is performed.



**Figure 4.8:** Overview of the three challenging areas regarding instruments and resources for eco-social integration, with solid arrows representing a direct dependence and dotted arrows representing an indirect dependence.

#### 4.2.4.1 Lack of systematic work and follow-through

Eco-social integration done in a systemic manner was considered by many interviewees as a fundamental issue in order to reach a transition of the current organisation. Although, systematic work with eco-social integration was said to be lacking. In fact, the current organisation was described by one interviewee at the environmental administration as working with eco-social organisation mainly, but not only, in isolated initiatives. They described that "Yes, it is isolated initiatives. There is a person here and a person there [...]. But there is no systematic work, it is more embedded. When something just clicks" [I1]. However, this interviewee later clarified that they think there are cases where single administrations and companies work systematically with the issues, but not on an the overarching level of the city. This was mirrored by other interviewees, who also stated that the lack of coordination

and follow-through depends on the lack of cooperation between different parts of the city. A civil servant working at the city management office said that *"we have no established structures in the City of Gothenburg to create this cooperation and coordination of resources"* [I5]. Many examples of eco-social integration in isolated projects were presented by interviewees; for example networks that swap items and services and city gardening projects that employs troubled youth. However, this was considered by actors to only be scratching the surface of eco-social integration; structural changes need to be done to have a more systematic work.

Another issue connected to not having a good enough systematic work is that the follow-through of the work done is lacking. In the current organisation, the system for follow through is fragmented, divided into different issues. Interview participants talked about the importance of assuring that goals and strategies are met, by having a system for follow-through of decisions. This system should, according to one interviewee working at the city management office, be integrated. They said that *"I think you should follow up in the same system and preferably according to the same logic"* [I4]. Other participants also indicated the importance of having a homogeneous and integrated system for following through decisions and goal fulfillment, which there is not today. A civil servant at the environmental administrations talked about the issues with the current system for follow-through and explained that

"Stratsys" is the City of Gothenburg's follow-through system. That's where you have to report on the goals, the clear goals in the city's budget. [...] I know that some company, but I can't quite remember which, who added a sustainability module for "Stratsys" to be able to work with it in the follow-through system, within all these dimensions. [I1]

But even though some examples of integrated follow-through were mentioned by interviewees, it is clear that there is no established system for the whole city.

#### 4.2.4.2 Lack of common vision and coordination of governing documents

A problem with the current attempt at systematic work with eco-social integration is that there are too many governing signals coming from different directions. An actor working as a researcher at Gothenburg University said that it is *"difficult, above all, to disentangle these rather complex control signals that exist, which are criss-crossing"* [I11]. Examples mentioned of this were mainly regarding governing documents; that there are too many documents and that they are not coordinated enough. One interviewee working at the city management office, in a strategic position, mentioned that the governing documents should be more homogeneous and that the city should have common areas of vision. They said that

Technically, we would probably need... you have looked at the governing documents. They would need to be more similar in form and design. I also think that, even if you end up with separate governing documents, I think that there should be certain visionary areas or areas of focus that are common. [I4]

Other interviewees agreed that a lack of coordination of the governing documents create silos and a fragmented organisation; that if the city is not integrated at a visionary- and goal-level, there will not be integration at other levels.

Many interviewees talked about a lack of a common vision in connection to having to many governing documents and not enough coordination of them. An interview participant working at the environmental administration reflected on the lack of a common vision and said

[...] that you work more with integrated goals. Some kind of goal management I think, in some form, is much needed. An illustration of where we are going — call it what you want, an illustration of the future, a vision, goals. For it to become easier, there is a need I think. [I3]

Many other participants also talked about not having a common vision as a barrier for eco-social integration, arguing that the city needs to start the work with a clear and shared vision. Another civil servant at the environmental administration stated that *"you have to pull the question back a step. What do we really want to achieve? What type of city do we want?"* [I9]. Another actor, working at the city management office, agreed and also mentioned that other Swedish municipalities have a stronger common vision. They further explained that some people think that the budget is enough as a vision formulation, but they said that *"If you listen to experts in leadership and governance, I still think they come back to the need of and a strength of a common vision"* [I14]. However, during the workshop, some participant also mentioned that they thought the city does not need a new vision, but instead that they should work by implementing smaller changes that has potential for larger effects.

### 4.2.4.3 Limited resources to work beyond core assignments

As mentioned in section 4.2.1.3, many interview participants stated that there is a lot of will to work with eco-social integration in the city, but there is a lack in other factors. The main area of lacking factors is lacking resources, for example time, money and man power. One actor working at the environmental administration talked about why they are struggling to integrate the social dimension in their work and said

I actually think there is a will, but there are always limited resources which means that you have to prioritise your core assignments. We have very limited resources to work with it and we have to prioritise the *here and now* and what we clearly have to deliver. [...] Then that becomes the priority, not looking up and see how we can develop our work within the social dimension. [I1]

Several other interview participants, especially civil servants, expressed similar sentiments; where a stressful and busy working environment causes a lack of prioritisation

of eco-social integration. One participant who formerly worked as a civil servant in a social administration explained that they would have wanted to work more innovative but there was no time. They said

I believe for sure that there are many, not all, who would have liked to have been in an environment that was allowed to be a little uncertain and test ideas. [...] On an individual level I think you can create that, but then a lot is about workload and resource allocation. [I6]

This sentiment connects a lack of resources to the lack of space to explore new ideas, making it difficult to prioritise innovative work and cooperation.

The same participant, formerly at a social administration, also continued to point out what types of resources that are missing. They explained that "*There are not resources to work with these issues, in the form of time, staff or designated efforts like that which are resourced properly*" [I6]. Other actors agreed with this and one gave an example that in a school, employees do not have time to prioritize ecological issues because it becomes an extra workload in an already busy work environment. Another example comes from an interview participants working in the urban building sector. They expressed the following about the attitudes around working with eco-social integration with lacking resources:

I think you start with the feeling that "oh, then I need to think about so many things and do so many things" instead of seeing the possibility of "yes, but maybe I can combine them into one thing and then I don't have to think about so many things." [I12]

This exemplifies a feeling of not being able to prioritise eco-social integration and not seeing the opportunities to create more efficiency working with more than one dimension. This was also expressed by several interviewees, that mostly agreed that a lack of time and resources do not allow people to see the whole picture and how synergies could decrease the total workload for the city.

### 4.3 Possible areas of intervention

Here, three areas of intervention regarding governance, leadership and organisation considered as important to address are presented: *shift in leadership practices*, *enhancing exploration* and *processes and structures for collaboration*. The first two areas concern governance and leadership from a top-down and bottom-up perspective, respectively. The third area instead has to do with organisational preconditions which support intervening in the first two areas. These areas emerged from the workshop outcome regarding what the participants found important to consider related to the three most chosen challenges and barriers, as explained in section 3.5: *established habits regarding certain work practices and norms*, *lacking governance in eco-social integration*, and *limited resources to work beyond core assignments*. Also, the interview responses of suggested areas of intervention has complemented the

resulting areas.

In the sections below, the characteristics considered as essential in order to intervene in these areas are further motivated, given the results above on what is regarded as important aspects of eco-social integration and the current state of Gothenburg city. Before explaining the possible areas in more detail, an overview of the three areas is provided. The section then continues with presenting the shifts in leadership practices brought up by interviewees as necessary to enhance eco-social integration through governance. It continues with results regarding how top-down and bottom-up governance can enhance exploration in the organisation. Then it presents results regarding factors within the organisation of the city that are important to address to enhance collaboration.

### 4.3.1 Summarisation of areas of intervention

As explained, the three areas for intervention are based on suggestions and viewpoints of the interview and workshop participants. In figure 4.1 below, the characteristics stated as necessary for each area of intervention are specified, contrasted to the current state as described by the actors.

In summary, the first column in figure 4.1 show general tendencies of the current state of the municipality. For example, that the leadership is characterised by a lack of understanding of eco-social integration, and not enough clear directives as well as direction to work with it. There is a way of working where progress in enhancing eco-social integration is hindered by people's experience of a limiting mandate and by a lack of understanding and consensus on the topic. Organisational factors that enhance these problems are a fragmentation in several aspects and limiting use of resources, especially to work cross-sectional.

The second column in figure 4.1 present the characteristics of the governance and leadership which have been expressed by participants as needed and which could address the corresponding challenges and barriers in the first column. For instance, participants have said that here is a need for a governance where leaders considers expertise, see needs, as well as expect the city to work with eco-social integration and have a clear direction for that work. Furthermore, participants have stated that the way of working needs to be characterised by exploration new ways of working, understanding of purposes of tasks and by cross-sectional collaboration. For this, organisational conditions have been brought up by participants. It has been mentioned that having a systematic structure to facilitate collaboration, space for reflection and to incorporate the learning from this are necessary.

**Table 4.1:** An overview of the result regarding the three possible areas of intervention. The content is based on what the participants have expressed as necessary characteristics in order to change the current state. The tendencies to address are based on challenges and barriers brought up by participants.

Current general tendencies	Characteristics needed
<b>A leadership that...</b>	
<ul style="list-style-type: none"> <li>• Lacks sufficient knowledge of sustainability dimensions and eco-social integration</li> <li>• Do not clearly communicate intentions of eco-social integration</li> <li>• Lacks long-term perspective in governance</li> </ul>	<ul style="list-style-type: none"> <li>• Is responsive to needs and expertise</li> <li>• Is expecting work with eco-social integration</li> <li>• Shows clarity in long-term direction</li> </ul>
<b>A way of working where...</b>	
<ul style="list-style-type: none"> <li>• People are waiting for directives</li> <li>• There is a narrow perspective on one's mandate</li> <li>• There is lack of understanding for eco-social integration</li> </ul>	<ul style="list-style-type: none"> <li>• There is courage and will to explore implications of assignments</li> <li>• People take action for understanding purpose of assignments</li> <li>• Cross-sectional connections are sought</li> </ul>
<b>Organisational preconditions where...</b>	
<ul style="list-style-type: none"> <li>• Work is fragmented by silos</li> <li>• Time and resources limits working practices</li> <li>• Lack of resources to work cross-sectional</li> </ul>	<ul style="list-style-type: none"> <li>• Systematic structures and processes facilitate collaboration</li> <li>• There is space for reflection</li> <li>• The learnings from collaborations are integrated to the organisation</li> </ul>

### 4.3.2 Shift in leadership practices

In the interviews and workshop, participants expressed a range of issues with the current governance of Gothenburg city. Many also explained and reflected upon issues that need to be addressed by leaders and characteristics that are needed among leaders to do so. When the participants referred to leaders they included politicians in the city council, board and committees. Some interviewees also referred to the importance of leadership from people in strategic positions at the city management office and operations managers at the administrations. Although, in a majority of interviews, politicians were referred to as having the most principal leadership position; deciding what the city should work with but to a much less extent how it should be done. One actor at the environmental administration described it as *It is the politicians that determine what we should do, not how, but what.* [I1] Although it was brought up by some that the politicians in the city council and board have the possibility to have more overview over the whole organisation — unlike politicians in committees who, in a fragmented organisation, often have focus on one issue.

Along with the fragmented logic in committees, there are several other characteristics of the current leadership that were brought up in interviews as problematic. In Gothenburg city today, the leadership at the political level is characterised in large by an absence of prioritization of and directives for eco-social integration. This was stated by interviewees to partly be because of lacking knowledge at the leadership level, although this is said to be true not only for politicians, but also other types of leaders. The knowledge that was said to be lacking at the leadership level was regarding sustainability, eco-social integration and how to conduct leadership for these topics. During the workshop, one discussion group reflected that leaders need to be more aware about what they do not know and turn to those with more knowledge for support to make decisions. In general, interviewees requested a more attentive and responsive leadership who creates preconditions to work with eco-social integration.

Another factor that was raised by interviewees was that there is a lack of the long-term thinking needed to work with complex issues. As a result, they meant that there is a lack of directives from politicians regarding eco-social integration. One actor working at the environmental administration said that

We don't have a way to stay in the "what" question. [...] And that's where you should perhaps pause for a bit, if you're talking about these perspectives. Otherwise, you will quickly move on and think about how to do it, and then you do it based on the perspectives you already have. [I9]

Other actors talked about a specific problem to thinking long-term: the political mandate is limited to their term of office and politicians therefore tend to only plan until that point. An interviewee working as a sustainability coordinator at one of the municipality's companies explained that

If you can't count on having a mandate four years later, then you have to trust that your colleagues will not cancel projects you decided on. Because what good does it do if we make an investment of say 3 billion for something that the next round of politicians will shut down if it isn't an immediate success, and it was the others who started it? In general, people don't want to manage someone else's project, they would rather start their own. [I2]

Other interview participants reflected further upon the lack of communication between political parties and politicians, and suggested that this impedes a common vision for where the city should be in the future. These issues are all connected to the central challenge, lacking governance in eco-social integration, that emerged during the workshop.

As stated earlier, a central challenge that emerged from the workshop is that there are established habits regarding certain work practices and norms. It has been seen

that there is sometimes a lack of trust, listening and support in both politician-politician relationships and politician-civil servant relationships, which as elaborated on in section 4.2.1.2. An issue brought up which characterises the current leadership of the city is the comprehension that politicians do not give enough mandate to civil servants for working with eco-social integration. This is also connected to another central challenge that emerged from the workshop: that there are limited resources to work beyond core assignments. This issue was also viewed as connected to the lack of mandate experienced by civil servants to work cross-sectional: if one has limited resources, it is hard to prioritise innovative and cross-sectional work. Many interview participants stated that it is the leaders', mainly the politicians', responsibility to decide what is most important for the city to focus on. Therefore, participants meant that there need to be a leadership that have more pronounced expectations that the organisation should be working with eco-social integration. However, the issue of mandate and organisational factors for collaboration in the city is elaborated on further in sections 4.3.3 and 4.3.4.

Consequently, several areas need to be addressed with a shift in leadership practices. These can be observed in figure 4.2, together with important factors in leadership connected to these areas. Figure 4.2 is a summarisation of all areas necessary to change that were brought up by participants of interviews and the workshop in connection to leadership. The factors in the second column are suggestions on what should characterise the leadership in the city or expressed as a need for future leadership.

**Table 4.2:** An overview of areas which need to be addressed by the current governance (column 1) and the connected factors that need to be reached (column 2) to transform the governance and achieve success in the areas in column 1.

Areas to adress in leadership practices	Success factors for leadership
Politicians giving more mandate to civil servants	<ul style="list-style-type: none"> <li>• Courage and will to hand over decisions to civil servants</li> <li>• Encouragement to explore and try new things</li> </ul>
Civil servants taking more initiative to raise issues to politicians	<ul style="list-style-type: none"> <li>• Administration managers with courage to raise initiatives</li> </ul>
Cooperation and communication between politicians and civil servants	<ul style="list-style-type: none"> <li>• Leaders that are helpful, supportive, inquisitive and questioning</li> <li>• Communicative and listening leadership</li> <li>• Open-mindedness, trust and kind attitudes between politicians and civil servants</li> </ul>
Sufficient resources for eco-social integration	<ul style="list-style-type: none"> <li>• Prioritization of eco-social integration, over short term issue, by leaders</li> <li>• Knowledge about sustainability and eco-social integration</li> </ul>
Leaders knowledge about and perspectives on sustainability and eco-social integration	<ul style="list-style-type: none"> <li>• Leaders with a broad range of backgrounds and knowledge</li> </ul>
Co-creation of a common vision	<ul style="list-style-type: none"> <li>• Communicative and listening leadership</li> <li>• Knowledge about sustainability and eco-social integration</li> </ul>
Thinking and planning long term	<ul style="list-style-type: none"> <li>• Knowledge about strategic long term work</li> <li>• Knowledge about sustainability and eco-social integration</li> </ul>

In the first row of figure 4.2, the issue of a lack of mandate for civil servants is presented as an area to address. Two important factors in leadership for giving civil servants more mandate have been observed in the interviews and workshop with actors. The first factor is having courage and a will to consult with civil servants regarding decisions. Another factor for this area is that leaders should encourage

exploration of new ways to work and new ideas. In the second row of figure 4.2, it is contrariwise observed what has been mentioned by actors: that civil servants should bring more initiatives to the political level, by having leaders with courage to do this. As mentioned, these areas of improvement are further discussed in section 4.3.3 and are therefore not further elaborated here. Furthermore, it has also been stated by participants as a necessity to make general changes to the communication between politicians, between civil servants and between both of these parties. For this to happen, there are several factors listed in figure 4.2 that need to be attained among leaders. These mainly constitute attributes, such as being helpful, supportive, questioning, listening, trusting or kind.

Further, actors have expressed that there is a general need for leaders, mainly politicians, to allocate resources for working with eco-social integration, seen in row three in figure 4.2. Participants have emphasised that for this, it is required to have knowledge about the topic, why it is important and a will to prioritise it above other issues that are more short term. Furthermore, it has been mentioned that there is a need to address the lack of knowledge regarding eco-social integration and sustainability in general among leaders. In row five in figure 4.2, it can be observed that one important characteristic — according to participating actors — is to have leaders with a broad range of backgrounds and thereby knowledge. It has also been expressed a need for creating a common vision, which in row six can be seen to require leaders that are characterised by being communicative, listens and having knowledge about sustainability and eco-social integration. Finally, in row six it can be seen that leaders also were said to need to have knowledge about how to work long term and strategically with eco-social integration, allowing for long term planning and thinking in the city.

### 4.3.3 Enhancing exploration

In addition to the shifts in top-down leadership practices, it has also been expressed by interview participants that this has to be complemented with action and change of working practices by bottom-up approaches. In particular, there has been focus on the relations and division of responsibility between the decision-making and the executive organs of the organisation. As mentioned in 4.3.2, participants have requested a shift in leadership towards more encouragement and mandate which allows for working with eco-social integration. However, participants have reasoned that there is a responsibility to also bring forth issues to leaders and in particular politicians, as well as utilise the mandate one is already given.

As described in section 4.2.1.1, there is a tendency in the current organisational culture and mission-driven governance that people await directives or orders from "above", and strictly follow what is interpreted as their appointed assignments. Various reasons for this were brought up by actors, such as the lack of time and economic resources as mentioned in section 4.2.4.3, as well as fear of reprimands brought up in section 4.2.1.2. It was also recognised that this reserved way of working creates diffi-

culties when dealing with complex issues such as eco-social integration, particularly when the understanding of the concept and its implications is lacking, as stated in section 4.1 and further elaborated in 4.2.3.1.

Based on the current way of working in the organisation, a need and potential for working in a different way has been expressed, where exploration and taking action is key. For instance, it was mentioned that there is a need for widening the perspective on one's mandate and what is allowed to do within the appointed assignments, instead of asking or waiting for a new. Furthermore, it has been suggested that there could be more initiatives to raise issues from administration to politicians and the city management office, with administrations also taking a more active role in asking for input. For example, taking the opportunity to ask for advice, get support in interpreting directives and asking for resources according to needs has been mentioned as possibilities to enhance in the way of working in administrations.

Moreover, interview participants have expressed a need for cross-sectional initiatives where actors have the opportunity to discuss complex issues and cooperate in the executive work. In addition, cross-sectional communication has been stated as necessary in order to better grasp what is meant by eco-social integration as well as get a better understanding of the sustainability dimensions that are not one's main working areas.

### **4.3.4 Processes and structures for collaboration**

According to the reasoning above, there is a need for working with complex and cross-sectional issues such as eco-social integration in a collaborative manner. Indeed, the lack of opportunity for this in the city was identified as a barrier for enhancing eco-social integration, see 4.2.2.3. However, as explained in section 4.2.2.2, a prominent barrier to work in this way in Gothenburg city is the fragmented organisational structure. Currently, the organisation is characterised by governance in vertical silos, the occurrence of many governing documents, and having to work in line with appointed assignments rather than goals (see section 4.2.2.2, 4.2.4.2 and 4.2.1.1, respectively). This, in combination with the challenge mentioned in section 4.2.4.3 — that there is not enough time and resources to work outside the appointed assignments — prevents working with broader issues such as eco-social integration.

However, several participants stated that the city's organisation has been changed many times, which they expressed had negatively affected cohesion between parts of the organisation. Some also commented that another reorganisation is not what the city needs. Rather, what has been expressed as important given the current organisational set-up, are systematic processes and structures where new ways of working collaboratively can be explored. Specifically, increasing inclusion of citizens in processes of formulating proposals has been brought up as an important aspect to consider when working with eco-social integration, as explained in section 4.1.2. Furthermore, an important feature of such processes seems to be that there is time and space for reflection when working with complex issues. Platforms or forums for

collaboration have been mentioned in particular. Regarding these, both the need for dialogue on eco-social integration and the possibility for cooperative action has been brought up. For instance, it was expressed that similar opportunities for dialogue as the workshop are needed. Projects have been mentioned as a particularly well-functioning way of organising exploration and innovative work, since it gives a stronger sense of mandate for working cross-sectional and exploratory.

In addition, some actors have mentioned that supporting structures for learning from collaboration are needed. In particular, the need to integrate the things learned in explorations into the regular organisation was brought up. For example, one participant talked about the difficulties of learning new habits in organisations, and explained that a way to address this is by reflecting together on differences and similarities of working practices. A further consideration is that work with eco-social integration might preferably be conducted in prioritised areas, as stated in section 4.1.2. For instance, urban development and public health was brought up by actors as suitable areas. Such prioritised areas have been argued to potentially be able to support learning about work with eco-social integration. Thereby, the intent would also be to use the learnings in further areas, spreading the work with eco-social integration in the organisation.

Moving on to the discussion, the interconnections between the areas are discussed further, as well as the potential to achieve transformative change by addressing them.



# 5

## Discussion

The aim of this thesis was to investigate how integration of social- and ecological sustainability can be enhanced in Gothenburg. After fifteen interviews and one workshop with a mixed group of actors, the results cover different factors of eco-social sustainability, challenges and areas with transformative potential. Many of the aspects brought up also have a clear connection to governance, which is the intended focus for the thesis. In this chapter, we discuss the results from the qualitative study and the methodological framework used. Special focus is put on discussing and reflecting over the transformative potential of the areas in chapter 4.3.

### 5.1 Fundamentality of a common understanding

As mentioned in section 4.7, several actors argued that there is a varying understanding of the concept eco-social integration and its implications. This divergence was also evident as an overarching result, as explained in section 4.1. It was claimed by many actors that this complicates working with eco-social integration in the city. Many interview and workshop participants also agreed upon the importance of Gothenburg having a clear overarching direction, or vision, to enhance work with eco-social integration. This resonates with the backcasting methodology, in which it is regarded as essential to reach a shared understanding of the issue at hand, as well as what is or should be important to achieve (Holmberg & Holmén, 2020). To be specific, it is not only considered important, but stated as a measure which should be taken *before* continuing to work towards solutions for the problem in question. Since backcasting is stated to be especially useful when dealing with complex or wicked issues, it seems reasonable that this logic would be suitable to apply also for the issue of enhancing eco-social integration. However, Holmberg and Holmén (2022) emphasise that using the backcasting methodology is not a linear procedure, and that to work toward understanding these types of issues is a recurring process. To summarise, based on the result the understanding for eco-social integration is both lacking and varying. This seems to be an important aspect for the city to improve to be better prepared for working with sustainability transitions.

### 5.2 Presence of fragmentation in several aspects

Fragmentation in the organisation of Gothenburg city is an issue raised in connection to many of the barriers brought up by participating actors. In fact, the fragmen-

tation is in some way connected to almost all of the stated barriers for enhancing eco-social integration. This is an interesting result and as such, receives focus in this section.

The complexity and multifaceted nature of the fragmentation was not directly brought up by many actors, but has emerged through speaking to a variety of people in the city. As stated in chapter 1, the investigation by Khan et al. (2020) had similar results regarding fragmentation, where they concluded that the fragmented structure of the municipality is a barrier to eco-social integration. Matutini et al. (2023) also established that eco-social integration is often realised in small-scale projects, not connected to other parts of the organisation. However, we drew the conclusion that there are not only structural reasons for this. The result from the interviews suggest that there exist fragmentation within many areas, such as attitudes, knowledge and resources. There are also variations of attitudes in the city — both toward eco-social integration and toward leadership — where there is more trust and open in some parts of the organisation and more strained in others. This is further discussed in chapter 5.4.1.

Sveningsson and Alvesson (2003) explain that organisational fragmentation is a general tendency for organisations that have many levels of functions and positions. They continue to describe the tendency of people in manager positions to have a fragmented work, which can reinforce fragmentation in the organisation. This matches our findings, where interview participants have mentioned that people in leadership position often have many different missions to the point where it becomes hard to handle everything and see the whole picture. If this is the case — and as Sveningsson and Alvesson (2003) reasoned, that a fragmentation at the managerial level can be transferred to the organisation — it suggests that efforts to integrate at the leadership level is important.

Matutini et al. (2023) mean that in fragmented organisations, promoting change is hard both from above — at the leadership level — and from below. We argue that a two-pronged approach, like mentioned in sections 4.3.2 and 5.4.1, with shifts in leadership from the top and the bottom, has more potential than only directing focus to change from one direction. However, this is discussed further in section 5.4.1. Furthermore, Hodson and Marvin (2017) investigates how fragmentation affects sustainability transitions and they point out that many governing parameters were set a long time ago and become more and more fragmented. This is also a tendency shown in our investigation, since many interviewees have brought up how lingering historical aspects and traditions affect the fragmentation of the current organisation.

In summary, fragmentation is a complex problem that, in part, seems to be a significant cause for the lack of eco-social integration in Gothenburg city. But since it is a complex problem, we believe it should not be mended with one solution, rather we suggest addressing it by several approaches. Some of the approaches suggested by the results of this thesis are to enhance integration in knowledge, attitudes, leadership and organisation. These are aspects we believe could contribute to addressing

the fragmentation in the municipality.

### **5.3 Changes in collaboration and mental models to enhance reflexivity**

As mentioned in the last section, 5.2, both Khan et al. (2020), Matutini et al. (2023) and this investigation establish that fragmentation of different factors in organisations is a barrier to eco-social integration. However, Matutini et al. (2023) identified three main obstacles to eco-social integration and besides fragmentation, the other obstacles are said to be political- and cognitive obstacles. The political obstacles include an absence of a space for eco-social work within the policy agenda; where the "eco" work has not yet been integrated into the work with social issues. The cognitive obstacles include mental models, such as policy makers and other leaders not seeing how the current work can be linked to eco-social work. (Matutini et al., 2023) These obstacles matches the results of this thesis, that there need to be changes that enhance the space to work with eco-social integration and that alters the mental models in the city. Matutini et al. (2023) also state that the obstacles reinforce each other.

Because of our findings, it is of interest to know what other research says about the existing barriers for creating collaborative space for exploration and for changing mental models within an organisation. Starting with barriers for collaboration and exploration on the topic of eco-social integration, Khan et al. (2020) concluded that a main barrier for collaboration is the difference in understanding and language use regarding different topics. For example, people working with social issues might have a hard time understanding language and concepts used by environmental administrations. Khan et al. (2020) further suggest that this is a hurdle to collaboration because it makes it more difficult to give meaningful input on other topics than your own main topic. This barrier is further confirmed by our investigation, since interviewees and workshop participants talked about a lack of consensus on what eco-social integration is and that there is a varied knowledge about the sustainability dimensions in the city.

Another main finding from Khan et al. (2020) was that a key barrier to eco-social integration in policy formulation is a lack of resources. Most resources are bound up in the daily work and not put forward to work with eco-social integration. They found that it is more likely that resources, such as money and time, are allocated to foster collaboration in single projects and not in the daily work. This result also matches closely with the result of this investigation, where it is found that a lack of resources and prioritisation of eco-social integration in the daily work constitutes a challenge. Furthermore, Burch (2010) suggest that a barrier to taking action against climate change in municipalities is a lack of collaborative partnerships between municipal employees and experts on climate change. The author also states that

For change to occur that addresses a highly complex and pervasive issue like climate change, it “must be recognized as necessary, feasible, and advantageous to a broader range of actors and institutions” than are involved in traditional decision-making. (Burch, 2010)

Interestingly, the interviewees in our investigation did not bring up a lot surrounding collaboration with experts on the topics discussed; although, our results do suggest that there is a need for spreading knowledge within the organisation. Moreover, the notion that eco-social integration should be considered to be necessary, feasible and advantageous was not either directly discussed by many actors. However, it was similarly found that the city needs to have shifts in mental models; which is supported by Burch (2010).

In section 4.3.2, it is suggested that leaders at both the political and civil servant level need to shift several factors when it comes to attitudes and behaviours. However, the results from this investigation do not, to any further extent, suggest how these mental models could be changed. de Graaf (2019) suggests that reflection is key for professionals in order to learn and adopt. For example, they suggest that leaders should reflect on their own and the organisations norms and other mental models. While participants in the interviews and workshops talked about a general lack of reflection and issues surrounding mental models; it was in very few instances that they mentioned a lack of or need for reflection on mental models. We think this, in itself, could indicate a lacking knowledge about the importance to reflect on, for example, deeply rooted attitudes and norms. However, since participants have expressed that there is a lot to do and lack of time, it seems evident that there is a limited possibility for reflection, in general.

In section 2.3 and figure 2.3, three components of reflexive governance are presented, which is a concept presented by Pickering (2019) that suggest capacity for transformation. The components are recognition, rethinking and response. As can be seen in figure 2.3, facilitating deeper changes in an organisation first requires awareness of impacts on and impacts of eco-social systems, monitoring of these and anticipation of future impacts. The interviewees we talked with had a varying degree of recognition of eco-social integration, although a majority thought it was important. The city in general does not seem to have widespread awareness, monitoring or anticipation regarding eco-social integration, based on the participants’ reasoning that it is not a discussed topic at large, or a focus in people’s work.

Further in figure 2.3, one can see that a second component of reflexive governance is rethinking. This entails that there is learning from the past, critical review of values and practices and envisioning the future. Learning from past mistakes and success was not talked about a lot in the interviews; rather, people talked about learning from each other and learning about the topic. But this is perhaps not surprising, since the questions were not focused on learning in general in the organisation. There were remarks and reflections from the interviewees regarding the city’s core values and practices. Many also talked about the city’s visions or lack of

vision, or direction. For example, they questioned if the city is heading in the right direction and if the city even has a vision for eco-social integration. Although, it is hard to say if people besides those we interviewed think about this in the same way. However, based on the participants' reasoning, it seems like there are some signs in the city of a will to reflect critically on values and practices and a future vision.

The third component in figure 2.3 is response, which means that the organisation rearticulate aims, values and discourses. From the result in this thesis, it seems that this is not commonly occurring regarding eco-social integration. It was reported during interviews that integration is seen as an afterthought and that the city does not work with to the extent to satisfy this component of reflexive governance. Signs of response are also that the organisation reconfigure functions and practices. It has been noted that the city is lacking practical action on the issue in general, which also would suggest a lack of response. In summary, all three components of reflexive governance seems to be lacking in the city, although to what extent varies between them. Suggestions in order to enhance the city's capacity for reflexive governance would be to start with making eco-social integration a topic on the agenda, as well as making sure that people are aware of, anticipate and monitor the effects of in their work. Furthermore, there seems to be a need for the thoughts about reviewing values, practices and creating a future vision for eco-social integration to be translated into practice. Based on the participants' perceptions, there seems to be a will to do so, but a lack of action because of challenges mentioned in chapter 4.2.

Overall, the main barriers found by this investigation match earlier research on the topic. According to the triangulation method explained in section 3.5, we argue that this strengthens the trustworthiness of our research. It is also an interesting result that most results coincide with other research. However, the investigation by Khan et al. (2020) is the only other investigation we have found that is similar enough to make more specific comparisons regarding Gothenburg city. In other investigations, factors such as geographical location, scale or aim can complicate a comparison.

## **5.4 Implications for enhancing governance capacity for eco-social integration**

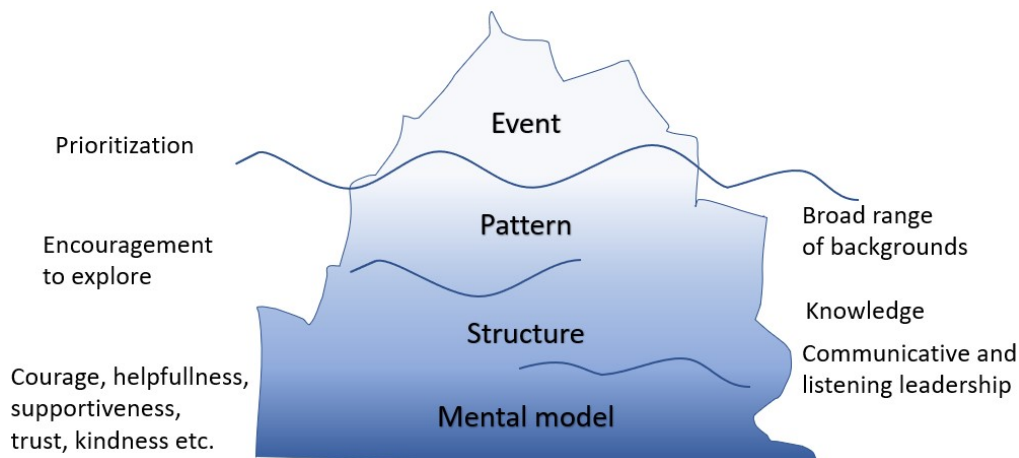
In this chapter, the results regarding the three possible areas of transformative potential presented in 4.3 is discussed and evaluated. Hence, the discussion is mostly connected to research question 3 which is *What are some areas of intervention that could possess transformative potential?*. It starts with a discussion on the suggested changes to leadership practises, especially the suggestions surrounding changes in top-down and bottom-up governance in Gothenburg city. Later, it discusses the necessity to organise for collaboration, given the discussion about the changes needed in governance.

### **5.4.1 Necessity of combining top-down and bottom-up approaches**

The results described in chapters 4.3.2 and 4.3.3 conclude that an approach with a combination of top-down and bottom-up governance could be effective to enhance eco-social integration in the municipality. This idea emerged from results pointing at the importance of both leadership and initiatives from people in traditional leadership positions, such as politicians, and from civil servants. We believe that a combination of initiatives from "above" and "below" have potential to work more effectively than if it only comes from one direction. Furthermore, in figure 4.2, specific areas that need to be addressed and factors that need to be shifted within the leadership for eco-social integration in the municipality are presented. The changes suggested by participants to leadership practices vary in size, feasibility and the leverage they have. Next, these are discussed based on their transformative potential and how they contribute to the combined top-down and bottom-up approach we suggest for the governance.

#### **Transformative potential of shifts in leadership practices — An analysis using the Iceberg model**

As mentioned in section 4.3, the three central barriers that emerged from the workshop were used as a basis to present the results regarding what changes need to be made in leadership practices; see section 4.2. Since they were collaboratively picked from a list of barriers based on the interviews and further discussed, we believe that they could be considered to be important and that they may have potential for transformative change. From these central barriers, shifts in leadership practices emerged to be an important area to address. By such a shift, several issues were identified to be possible to address. In figure 4.2, a total of seven suggested issues that leadership should address can be observed, together with the leadership practices that could be connected to them. The central question discussed in this section is if these shifts in leadership practices have transformative potential. To discuss this, the important factors for leadership from figure 4.2 have been sorted within levels of the iceberg model in figure 5.1, based on our understanding.



**Figure 5.1:** Iceberg model with four different levels of thinking. Here, the important factors from figure 4.2 are sorted into the levels.

The two first rows in figure 4.2 suggest that there is a need for politicians to have courage to give more mandate to civil servants, by receiving input from them and encouraging more explorative work. Correspondingly, actors claimed that leaders among civil servants need to have courage to raise initiatives to the politicians. The relationship between these two areas and their factors is further discussed in the next section. However, when looking at both areas separately it seems important to transition from a leadership with a lack of trust, to one where there is courage to address issues with each other and courage to give or utilise mandate. Courage and trust are ways of thinking and one needs to relearn or reframe to change these, putting them at the level of mental models in the iceberg model (Davelaar, 2021). According to Davelaar (2021), changing mental models requires changing the intent and has potential to transform the system. This would suggest that shifting the above mentioned leadership practices would hold great potential for enhancing eco-social integration. However, the questions then become if this is a feasible shift and if it is realistic to implement in the municipality. According to the reasoning by Fischer and Riechers (2019), interventions with greater potential for leverage of the system are more difficult to carry through. Hence, the difficulty to intervene in the system increases with deeper levels in the iceberg (Davelaar, 2021).

As seen in section 4.2.3.3, it seems that Gothenburg is already taking steps toward this, through planning to give training in trust-based leadership to leaders in the city. The lack of trust also seems to be an issue that is apparent to many people in the city and clearly connected to tradition and norms. That there is awareness of the issue speaks for an easier path towards shifting the situation. However, since this regards changes to mental models, it could also suggest that it would take some time to permeate the whole city, because many people would have to relearn behaviours and their way of thinking. In conclusion, it can be argued to constitute an area of transformative potential.

Another area suggested to address in shifting leadership practices is cooperation and communication between politicians and civil servants (row three in figure 4.2). This could also apply to leadership from the city management office, but since politicians were the focus in most statements from the interview, we mainly focus on this relation in the further discussion. The important factors for leadership that addresses this is considered to be helpfulness, inquisitiveness and being supportive. It was also stated that there is a need for leaders to be good listeners, communicative, open-minded, kind and trusting. These are all qualities that were discussed by participants in connection to leadership. Some were mentioned in the context of discussing barriers, implying that these traits are lacking in the current leadership. By the same logic as in the reasoning regarding courage above, these factors are also at the level of mental models in figure 5.1. This implies that the shift toward these characteristics therefore possess transformative potential. However, as with courage, it would not be feasible to make all leaders in the city change their mental models at the same time or fast. Nevertheless, the shift of characteristics so far indicate that changes of mental models on a leadership level need to happen. We believe that this further implies that learning and relearning is important.

A similar reasoning could hold true for the important factors listening and communicative leadership. Although, we consider these to lie somewhere between levels, perhaps closer to structures than mental models, in figure 5.1. According to Davelaar (2021), the interventions for the structure level is to restructure or re-design. Implementing certain structures or functions has been mentioned as a possibility to enhance communication (see further discussion in section 5.4.2). However, other needs mentioned in interviews were learning about leadership. For example learning about communication and listening, to create trust; which we argue would put it in between mental models and structures. This means that shifting these practices, by making changes to the intent and structures, can pose an opportunity to transform or reform the system. (Davelaar, 2021).

As the reader might have noticed, the potential for transformative change generally declines moving up the iceberg. Although, besides potential, feasibility of the shifts in leadership should also be considered. In several rows in figure 4.2, different types of knowledge is presented as important factors. Knowledge is placed at the structure level in figure 5.1 because it is deemed that there is a need of restructuring to reach this shift. Knowledge at an individual level could be considered to be at the mental model level. But for all or a majority of leader to have knowledge about eco-social integration, sustainability and long term leadership, there is a need for structural changes. The feasibility for this is considered by us to be high, because it could be done by introducing more competence-enhancing efforts across the organisation. However, Johnson (2008) state that effective leaders are not created by knowledge but by mental models, because mental models affect learning and the way leaders deal with issues. We therefore believe that competence-enhancing efforts should not only strive to convey simple knowledge, but help leaders learn about themselves.

In between structure and pattern or at the pattern level in figure 5.1 lies two impor-

tant factors: *encouragement by leaders to explore* and *broad range of backgrounds of leaders*. These are deemed to lie in the middle of the iceberg since they can constitute deeper causes of issues. Although, *broad range of backgrounds* could be more described as a pattern because it is something that can be changed over time with adjustments. Leaders with a more diverse range of backgrounds could be employed, shifting this factor over time without making any structural changes. *Encouragement to explore* is more fundamental and could require restructuring. It seems reasonable that a lack of it is also causing a pattern of a lack of innovative and integrated solutions. According to Davelaar (2021), these factors could create a possible reform or incremental changes to the system. Meaning that, at this level, the changes are not deep enough to have transformative potential by themselves. However, in line with the reasoning of Fischer and Riechers (2019) that deeper levels are more difficult to change, we believe that these are more feasible to attain than the changes to mental models and structures. This can make them a viable course of action to change patterns in the city. We believe that a change towards such encouragement from leaders could create a ripple effect, leading to more courage to explore one's mandate further. Hence, together with changes of mental models at the leader level, a pattern of leaders encouraging exploration could have a large effect on enhancing eco-social integration.

Finally, between the event and pattern level, *prioritisation of working with eco-social integration* is placed in figure 5.1. This is because we think that in the end, it is in singular actions where the choice is made, consciously or not, to not prioritise eco-social integration. Although, this could also be considered a pattern. Because it is clear from the interviews that in most cases it is not prioritised, which was expressed as a systematic problem. Since we place this factor further up in the iceberg, it is deemed to not have as much transformative potential. It does also not seem likely that a prioritising of eco-social integration will happen, if the factors below it are not changed first. According to Holmberg and Holmén (2022), when resolving issues in complex systems, attention should be put toward the root causes instead of the symptoms. So, factors such as courage and trust, that have been brought up a lot in interviews and is at the deepest level of the iceberg, should be prioritised to change. By the reasoning above, this entails a change of the culture and norms in Gothenburg city, which have deep roots in the city's history according to the result in section 4.5.

### **Top-down and bottom-up governance to create space for exploration**

The areas, suggested by participants to address, in the first and second rows in figure 4.2 are that politicians should give more mandate and encouragement and civil servants should take more initiative. To do this, it seems important that there is courage and trust from both sides, either to give mandate or take initiative. While there is a need for civil servants to explore and try new ways of working, it has also been expressed that they need to have the expectation from their leaders to do so. These areas and important factors laid the basis for the conclusion that there is a need for changes in the approach of both top-down and bottom-up governance. In this chapter, the connection between shifting leadership factors and having space

for exploration is discussed.

Creating space for exploration is essential for successful transformations (Holmberg & Holmén, 2020). Holmberg and Holmén (2022) explain that backcasting is a natural approach to expeditions, where one starts by determining a desired state for the system and then proceed to explore how it can shift from the current status toward the desired future. They further explain that this is key to not only reach incremental change. This investigation suggests that there is a lack of a common vision for the city and also a lack of collaboration between different parts of the city. It has also been stated by interview participants that these factors depend on a lack of possibilities to explore assignments beyond one's core assignments, which have several reasons; for example due to attitudes mentioned in chapter 4.2.1.1 and a lack of resources in chapter 4.2.4.3. More spaces to explore could facilitate both collaboration and give people working in the municipality a chance to work with more than their core assignments, even in an integrated manner.

Holmberg and Holmén (2022) present the cruise ship-expedition analogy and explain that the purpose of explorations should be different than that of the cruise ship. Therefore, the way of working and leadership needed in the two situations are different. For example, Holmberg and Holmén (2022) state that, in expeditions learning, reflection and experimentation should be in focus; as opposed to the more rigid logic with measurement and follow-up that are in focus in the cruise ship. To have successful expeditions, three factors are important: space, leadership and process. Space is needed to allow the participants on the expedition to explore an issue while putting their whole focus on exploration (Holmberg & Holmén, 2022). This would require a possibility to focus on the exploration and not on other assignments; which has been lifted by interviewees as a challenge in the city. This dedication, together with collaboration where the participants try to understand each others views, requires leadership.

The result in chapter 4.3.3 implies that a combination of top-down and bottom-up governance is needed to enhance eco-social integration. In explorations, this becomes even more apparent. Senge et al. (2015) states that explorations can not work with only top-down leadership. Leadership has to be collective among all participants, where they have self-leadership and lead together. Furthermore, Ryan and Deci (2000) state that space does not only need to be created, but also held by a leader who balance tasks, autonomy and safety in a good way. Finally, the process is how the work is done, for which Holmberg and Holmén (2022) suggest backcasting in expeditions. To make expeditions feel important for people to participate in, these three factors are needed. We argue that this further increases the importance to combine top-down and self-leadership in an organisation with expeditions.

Ackoff (1999) notes that, in sustainability transformations, one can not assume to have any answers before taking part in participatory exploration of a topic. They continue to explain that these explorations should be focused on learning together about possibilities and diversity, with as many stakeholders as possible participating.

But what type of leadership is needed to create this exploration? The author states that the leader should create a working environment that empowers employees to be confident. Furthermore, they should lead the employees in their work to reach the common vision, while listening to what they need to do that. Therefore, the leader must inhabit many different roles, for example a strategist, a visionary and an inspirer (Ackoff, 1999). Another factor, and possible issue in leadership needed for cooperative exploration, described by Ferdig (2007), is that leaders are often viewed by their coworkers as in control and the coworkers therefore feel that they can relinquish responsibility to them. The author means that this can create a "learned helplessness", where employees expect initiative and directions to come from their leaders. As we have seen in the interviews, this seems to be true for many in the municipality. Connected to this, a general tendency discovered through our research is that focus often was put by interview participants on how "the city" should change. From this, the question of what or whom they meant by "the city" arises. We see a similarity between this, what we perceive as lack of feeling responsible and part of the issue, and what Ferdig (2007) states about the "learned helplessness". The author further explain that "learned helplessness" can inhibit innovation and therefore is a barrier to working with sustainability. As Holmberg and Holmén (2022) stated, a good leader is revered but a great leader make people think they did it themselves.

So, even though leaders at the political level need to take initiative and make it easier for coworkers to navigate the goals and visions that the municipality has; we suggest that there is also a need for self-leadership. Although there seem to exist some restraints to the mandate that the civil servants have: interview participants stated that politicians have a mission to decide certain things, while the civil servants should carry them trough. It also seems to be the case that many people in the city wait for directives and feel like they can not lead their own work. Especially regarding eco-social integration, that according to interviewees is not a topic that is prioritised in practice. Although, we believe that civil servants could have more mandate to work with eco-social integration than they think. Like the reasoning by one civil servant in section 4.2.1.2, it is important to question tradition and explore one's mandate.

We have understood that there is a tendency that people working in the city wait for directives form "above" and do not work with things beyond core assignment if not specifically told to do so. We have also seen that some politicians, as well as civil servants, think that civil servants could use the mandate that they do have more and also bring issues forth to politicians. There is an apparent need to clarify and get a shared picture of the mandate that civil servants have. For this, participants have expressed that space for collaboration and communication regarding eco-social integration is needed, where knowledge and information can be exchanged. By having such forums, there could also be possibilites for participants to obtain realistic expectations on each other, which is emphasises by Jensen and Löfström (2022) as an important feature of collaborations. We think it would help actors to create this expectation, for example if politicians get a chance to express what they need from civil servants and not just the other way around.

Based on the results in 4.3.2 and 4.3.3, as well as the reasoning above, we argue that a combination of a combined top-down and bottom-up governance together with spaces to explore together could result in enhanced initiatives to work with eco-social integration in the municipality. To reach this, changes in the type of leadership that exist in the city seems inevitable in order to create a common understanding of where the city want to go, who should lead that work and how. However, to create this type of governance and space to explore eco-social integration, certain structures and processes could also facilitate for enhancing cross-sectional collaboration. This is further elaborated on in the next chapter.

### 5.4.2 Necessity to organise for collaboration

As explained in section 5.2, the fragmented organisation complicates working with eco-social integration. Indeed, this complex issue needs to be approached through cross-sectional initiatives, which silo-structures could obstruct (I. Scott & Gong, 2021). This need to organise for collaboration around eco-social integration — as explained in the section above and stated in section 4.3.4 — is further supported by previous studies and theories. The cruise ship and expedition analogy supports the idea of organising work and people around a complex and unexplored topic, such as eco-social integration (Holmberg & Holmén, 2020). In particular, expeditions are regarded as suitable for learning together about what is and should be important when working with complex issues. Thus, the cruise ship and expedition framework supports the result implying that organising for collaboration could be useful to address the lack of common understanding of eco-social integration. Based on the reasoning in section 5.1, it seems important to organise the collaboration to have space for enhancing this common understanding. The importance of learning through collaboration is further acknowledged by Sandow and Murray Allen (2005) who explain that: *"Learning can occur only through group reflection on what we do, how we do it, what we value about our practices, and how we can improve them."*

Different kinds of collaboration were proposed by the participating actors in this investigation, presented in section 4.3.4. There was a range of suggestions, from cross-sectional dialogue to cooperation in projects. We believe that all these types of collaboration might offer learning and enhanced understanding, if organised in a purposeful way. One of the concluding remarks by Jensen and Löffström (2022) is that spaces for meeting and sharing of knowledge are needed in the organisation. This would also support the idea from the workshop that sufficient knowledge exists in the organisation, which is also stated in 4.7; however there need to be ways to share it with each other. Although, other remarks focused rather on the need for action and solutions for working cooperatively across the fragmented organisation.

The aim to reach interventions possessing transformative potential leaves several implications on how to organise the collaboration. As mentioned in section 4.1.2 and 4.3.4, it was expressed both in interviews and during the workshop that it could

be more reasonable to choose certain areas within the city's responsibility to start working with eco-social integration in. Partly, this was motivated based on the organisation's limited capability to handle cross-sectional issues. Furthermore, it was said to be reasonable, because of the possibility that such a prioritisation could function as a learning opportunity. Also, we believe that the reasoning aligns with the idea of an expedition, exploring a specific issue and utilise it as an opportunity for learning. Regarding what areas that could be suitable to prioritise, several examples were brought up in the interviews and workshop, as mentioned in section 4.1.2 and shown in figure 4.3. In particular, urban planning and public health were suggested.

To specify a more focused area, we think it could be interesting to investigate the characteristics mentioned during the workshop: that the areas should be such where the city can be resourceful and have a significant impact (see section 4.1.2). A further aspect to consider is the possibility of citizen inclusion, which has been brought up repeatedly by interview and workshop participants. There are possible benefits by organising collaboration to include citizen participation, such as strengthened social cohesion and increased legitimacy for authorities (Murphy, 2012). As the reader might recall, the opinion that eco-social integration should occur in all areas of practice in the organisation was also expressed (section 4.1.2). This might come across as rather opposing the above reasoning. However, it can also be seen as a desired objective to systematically consider all sustainability dimensions in all activities. Using a backcasting logic, such an objective could function as a guide for the work done with the prioritised areas, in order to actively consider what makes the eco-social integration successful and not, and how to scale up the work. Although, following the backcasting logic, we also believe that it is important to reflect upon the purpose of working with eco-social integration — is it a desired end, or a means to an end? What end? — which would be a question for an expedition. Moreover, there was a suggestion to perform collaborations in a project-based manner, which would be a familiar way of working for many actors in the city. Also, it was expressed that the mandate for exploring is perceived as more generous when working in projects, which could further facilitate the carrying through of the collaboration. To summarise the above reasoning, collaborating in projects focusing on prioritised areas already established in the organisation seems to both have potential and be feasible; qualities which indicates possibility for transformative change.

Likewise, Sandow and Murray Allen (2005) argue that in order to minimize resistance to change initiatives, there is value in keeping practices that works well and build upon them. However, to be able to address deeper levels in the iceberg model, it is important to carefully consider the purpose and function of the collaboration (Davelaar, 2021). How can it be avoided that the collaboration just becomes a "check in the box", resulting in marginal impact? Perhaps a key is that there is an outspoken intent of having learning and reflection as main goals, supporting the transformative potential in the collaborations. Indeed, this is a main point of the cruise ship and expedition framework, where also the importance of being supported from the higher management level — as put forward in section 5.4.1 — is empha-

sised (Holmberg & Holmén, 2020). We believe that this would allow space for the participants in the collaboration to use their expertise when exploring how to work with eco-social integration. Again, the connection between the proposed areas of intervention is evident.

Also related to the reasoning about the need to combine certain leadership practices with bottom-up initiatives are the findings by Vangen and Huxham (2003). The authors mean that there are benefits by having collaboration that is initiated based on certain expectations, and where actors are willing to take a risk to initiate the collaboration. They explain how the act of collaboration then can support a reinforcing cycle of trust among actors: when the outcomes from the collaboration meet the expectations actors had going in. Therefore, the authors argue that to build trust, collaboration should preferably start with relatively low expectations on the outcome to increase the possibility of meeting them (Vangen & Huxham, 2003). Does this contradict the reasoning in 4.3.2 that it is important that leaders should be more outspoken on expectations for eco-social integration? Not necessarily, we would argue. A pronounced expectation that the organisation should work with eco-social integration can still be compatible with refraining from putting too high expectations on the outcome. Rather, this could be a chance to redirect focus onto the process of learning rather than outcome. Moreover, Sandow and Murray Allen (2005) agree that collaboration is essential for building trust, and also adds that the absence of it risk resulting in a negative cycle of redundancy, increased costs and fear. Hence, it could be a way to address negative attitudes existing among people working in the organisation, for instance the fear of getting reprimanded.

Also, we notice a counter-argument to lack of resources being a reason to not work collaboratively with cross-sectional initiatives. On this topic, the authors further argue that

There is often a perception that “reflection” takes too long and requires endless consensusbuilding conversations to gain buy-in to a plan or decision. We offer a different view. Reflection is a foundational ingredient to effective value creation since it is how we collectively learn and improve. (Sandow Murray Allen, 2005, p. 12)

Whereas the importance of learning *through* collaboration has been a recurring topic thus far in this report, participants in this study have also emphasised that learning *from* collaboration is key, as mentioned in section 4.3.4. As described in section 2.3.1, this is another essential feature of the expedition and cruise ship analogy, where such transfer of knowledge to the regular organisation can be referred to as "docking". Similarly, Jensen and Lofström (2022) also concluded that, while temporary commitments can be good for practice, the collaboration needs to become more integrated in the ordinary work. The importance of having a connection to the "regular" organisation is further elaborated; Holmberg and Larsson (2018) emphasises the necessity that expeditions "*relate to and respect ongoing processes*" and Holmberg and Holmén (2020) claims the importance of being established by approval

from the top level management. For this, we think there could be an opportunity to utilise Agenda 2030 as a tool both to connect the learnings to the organisation, and to legitimise the cross-sectional work. As mentioned in section 2.4.1 and 4.2.2.1, Agenda 2030 is applied in the governance to some extent. However, as stated in section 2.4.1, the report by Göteborgs Stad (2021) concluded that a more cohesive and integrated governance is desired. In collaborations created on the topic of enhancing eco-social integration, it could more specifically be explored how to work in a way which further acknowledges the connection between the SDGs. Perhaps, the organisation could act on the concluding remarks from the report by having an outspoken intent to work in line with Agenda 2030 in a more integrated way. This could possibly create an urge to implement structures and processes to spread the learnings from collaborations in the organisation.

Based on the above reasoning in this and the previous section, it seems obvious that the connection between the three areas are reciprocal; collaboration need to be supported by leadership and other actors, and in turn collaboration can lead to reinforcement of trust and learning in the organisation. We have attempted to illustrate this relationship in figure 5.2 below. In summary, it aims to show how certain positive leadership characteristics can reinforce a strong collaboration, from top-down and bottom-up. It also aims to show that spaces to explore can bring along good opportunities for cross-sectional collaboration, while collaboration can also bring about chances for exploration. In addition to this, on the right side of figure 5.2, it depicts how other factors than those occurring at the mental model-level are needed in the governance of the city to enhance eco-social integration.



**Figure 5.2:** *Overview and visualization of the three areas of transformative potential and how they are connected. The proposed shifts in both top-down and bottom-up practices can be channeled in purposeful collaborations, which in turn can result in positive feedback to the organisation.*

## 5.5 Impact on result by chosen methods

The bulk of the data was collected through the interviews. Following a semi-structured layout, the interviewees were told that they could elaborate how much they wanted on each question. Some therefore gave more detailed answers, that covered more than the asked question, while some were more precise. Occasionally, the interviewees interpreted the questions differently, especially evident for question 4 (see Appendix A). Sometimes the interviewee asked for clarification or we asked a follow-up question if we felt a certain perspective was missing. Hence, there was no effort to keep the interview completely identical.

We have realised that there were probably two main issues with question 4, which could have contributed to the varying types of answer regarding important aspects for eco-social integration. Firstly, our intent with the interviews was to listen to the participants' opinion and perspectives; we explicitly encouraged them to express personal thoughts, opinions and feelings. Second, the question was a bit unclear for us too — did we want them to talk about how they imagined eco-social integration would be used as a tool, or the implications it could have on society? Because answers related to both aspects were interesting for the research question, we decided to keep the question as it was. However, in the end the ambiguity of the question might have been rewarding, since by this we got answers where the divergence regarding each different aspect became evident. Nevertheless, by taking time for reflection on the purpose of the question and rework the interview protocol, we might have gained a richer material regarding each aspect.

We believe that divergent interpretations could be a possible issue not only regarding participants, but for the researchers. Since we handled half of the coding each and sorted our "own" labels and sub-labels in Miro, it could have created slight differences in our approaches depending on interpretation. Potentially, it could also have had an effect on what each of us chose to write about and quote in the report. Our reflection is that it was easier to remember things interviewees said that were in the interviews one self coded. Although, we made sure to search for examples and fitting quotes in "each others" data. In many ways it could also have been advantageous to work in a pair. For example, we always had two pairs of eyes and memories, since we both attended all of the interviews. Thereby, we could check each other's writing, give feedback and discuss more effectively.

Another reflection upon our method of interviewing is that the questions that were formulated influenced by the episodic narrative interview method were not answered that differently, compared to other questions. Several interviewees seemed to regard these questions as rather difficult, in particular the prompt to recall specific episodes. If we would have followed the original method in more detail and had more time to focus on these types of questions, perhaps the character of the answers would have been different and given more in-depth descriptions. However, for the scope of this thesis, we consider the outcome sufficient to be able to answer our research questions.

The areas of intervention presented in section 4.3 were a result of what the interview and workshop participants had expressed. However, the characteristics which describes the current state were not always explicitly connected to the corresponding needs. Rather, we based the connection on the result regarding challenges and barriers in order to explain the area and to contrast the present and needed characteristics of the system.

Another reflection on how we chose to perform the data analysis is that we chose to not separately analyse what is currently done well in the city regarding enhancing eco-social integration. There are different expressions from the interview participants regarding this throughout the report. However, we chose to not analyse and present this data on its own. This could have been a way to more accurately follow the backcasting process, described in section 3.2, by more extensively mapping out the current system. Although, we decided that this was not necessary to do in order to answer our research questions. However, that does not mean that it would not have generated interesting results.

Furthermore, we would like to address some factors of significance in the type of participatory approach we chose for this thesis. Clearly, the outcome and methods were dependent on the contribution from several actors. As mentioned in section 3.3, we strived to have representation from all four dimensions in the quadruple helix both in interviews and the workshop. However, due both to our limited time frame as well as external circumstances, such as invited actors not being able to attend, the representation was skewed towards civil servants and politicians. While it would have been interesting to get further perspectives represented in the report and at the workshop, it is on the other hand possible that this enabled a more thorough discussion to be held related to challenges experienced by the intra-organisational actors. The workshop especially, was expressed by participants to be a good and rare opportunity for them to meet and talk about this topic.

Additionally, it turned out to be a balancing act to design the workshop in a suitable manner; following our aim to let actors in the city meet and exchange thoughts, while still being able to let the outcome from the workshop feed into our investigation. We wanted the participants to focus on the discussion and not be constrained by the collection of data. As a consequence of not wanting to induce a feeling of being test subjects on them, the material we collected from the workshop was not in ideal format for analysis. Reading the notes afterwards, it was sometimes difficult to understand the context, unless we remembered the specific discussions. Despite this, we do not regret the setup of the workshop since we think it was more valuable for the participants to let the discussions be more "free" — especially based on the finding that the topic of eco-social integration is rather unexplored in the city. Overall, we see the issues related to the participatory approaches as a reflection of the complex setting in which the study was conducted.

## 5.6 Recommendations for further investigation and research

This investigation has generated results answering the research questions. However, there are still some questions that, according to us, are important to further investigation and research. In general, there are two larger areas that we believe that further investigation should focus on. The first one is laying a good foundation for the formulation of a common direction for the city and taking practical steps toward creating it. To clarify the desired direction is the first step in the backcasting process, which facilitates taking measures towards a sustainable transition. Thereby, we argue that without a common idea of direction, further implementations for enhancing eco-social integration will be weaker. Such a process should be collaborative and include many participants from different working areas in the city. We also believe that it would be beneficial to include experts, for example from academia. A direct recommendation is that as many people as possible feel involved and that the vision is spread to the whole municipality.

The second suggestion is to build upon our use of the backcasting process and have extra focus on the fourth step. This would mean focusing on experimentation to find strategical and practical solutions to implement in the municipality. In this process, we think it is important to involve experts and let earlier research substantiate and support the work. Even with a sense of clear direction, the practical steps that need to be taken to enhance eco-social integration can still be unclear. As shown in this investigation, a challenge for working in an integrated manner in one's daily work is by not having clear directives how to take on the work. For this, we suggest that in line with the reasoning in the previous discussion, to make case-study of collaborations focusing on a specific area for eco-social integration and where the importance of learning is pronounced. By this, we argue that the research on this could be used in order to scale up what seems to be working and identify what could be different. In such an effort, we also recommend involving many different participants. For example, we think it would be beneficial to look at other municipalities and find possible best practices.

Another factor to take into consideration in further research is discovering more about how mental models support different patterns and structures in the municipality. In this investigation, we have identified certain behaviours, attitudes and other factors. In further investigation, we would suggest to study the interconnection between them. If we were to further investigate this topic, we would choose to use the Episodic Narrative Interviewing method more extensively than done in this study. It is stated in section 3.4 that according to Mueller (2019), ENI is appropriate to use when one aims to investigate social phenomena through personal experience. We partly made use of this method, but feel like it has further potential to be used when researching mental models, which could be considered as social phenomena. One attitude in particular that we have reflected upon after carrying out this investigation is that many interview and workshop participants seemed to have an easier time focusing on challenges and barriers rather than ways forward.

It also seemed easier for participants to mention what changes others, rather than themselves, can make; which could indicate that they do not view themselves as a part of the problematic system. Investigating this further could generate interesting results regarding how the lack of action for eco-social integration potentially can be transformed with attitude changes.



# 6

## Conclusion

This investigation confirms that working with sustainability is complex, issues are intertwined and factors at different levels in the iceberg model are interconnected. This was also stated in chapter 1 from texts by Liu et al. (2015), Espinosa et al. (2008), reinforcing this notion. Like the statements by Liu et al. (2015) in chapter 1, this investigation concludes that sustainability issues often are addressed separately both on a national and municipal level; while participants in the investigation recognised the need to have a more holistic approach. In Gothenburg city, consensus and direction for eco-social integration tends to be lacking. Through interactions with participants in interviews and collaborative discussions in a workshop, it has been found that the participants' view on what is important to be reached with eco-social integration varies. Establishing a common understanding and vision formulation, created through cross-sectional collaboration, could give direction to the work.

Evidently, there are many challenges to enhancing eco-social integration in the city. Four themes emerged through the process of data analysis which are: culture and norms, organisational and structural conditions, knowledge and understanding of integration, and instruments and resources. Connected to all themes is one central barrier, which is that the city is fragmented in several aspects. Furthermore, there is an absence of apparent governance and direction, cross-sectional collaboration, coordination of governing documents and resources. Also, there is a variation of knowledge in the city about relevant topics. These conditions create a situation where people working in the city tend to not prioritise other work than their core assignments, even if there is will to do so.

Three possible areas of intervention were recognised, which if addressed properly could enhance awareness and ability to work in an integrated manner. There is an apparent need to shift leadership practices, such that the city becomes more clear with its intention to work with integration of sustainability dimensions. Changing certain attitudes, norms, leadership behaviours and characteristics could move the city's governance toward being more responsive, reflecting and long-term thinking. Thus, creating an expectation to work with eco-social integration and clear directions for doing so.

There is potential for transformative change by combining top-down and bottom-up approaches in governance, where politicians and civil servants have the courage and trust to take initiatives and explore complex topics, learning together in the process. For this to become a practical reality, a feasible option could be to establish more

## 6. Conclusion

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forums and channels, where people can collaborate and focus on different issues of eco-social integration. By emphasising the importance of transferring the learning from these spaces, there could be further positive implications on the work with eco-social sustainability. Moving forward, it is encouraged that the municipality explore practical solutions to allow for collaboration that creates a common understanding and direction.

Finally, the implications of this investigation reach beyond Gothenburg city. In national governance and global collaboration on sustainability challenges, the need for holistic and integrated work is apparent, since many seemingly have similar challenges. The conclusions from this study therefore have a possibility to be applied in other municipalities.

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## 7

## Appendix A

## 7.1 Numbered list of interviewees

**Table 7.1:** *A brief description of the interviewees' roles are provided, together with a corresponding reference number.*

Interview no	Professional role of interviewee
I1	Civil servant at the environmental administration with various assignments, such as coordinating a network for environmental issues.
I2	Sustainability manager at one of the municipality's companies.
I3	Civil servant at the environmental administration, working with environmental investigations and as a project leader.
I4	Civil servant and department manager at the city management office and responsible for one of the city's programs for social sustainability.
I5	Civil servant at the city management office with various assignments.
I6	Current politician in one of the city's committees and former civil servant at one of the social administrations.
I7	Leader- and coordinating role at Business Region Gothenburg.
I8	Politician working in the municipal council, municipal board and in one of the city's committees.
I9	Civil servant at the environmental administration, coordinating one of the city's programs.
I10	Currently working at Lindholmen Science Park and formerly working at one of the city's administrations.
I11	Researcher at Gothenburg University's School of Business, Economics and Law.
I12	Leader- and coordinating role at a municipal construction company, working with one of the city's strategies.
I13	Researcher at RISE, working with system innovation.
I14	Civil servant with coordinating role at the city management office, working with sustainable development.
I15*	Experience of working together with companies and municipalities regarding dialogues and collaboration.

\*This interview was only around 20 minutes long and did not follow the original interview protocol.

# 8

## Appendix B

Below, in sections 8.1 and 8.2, the interview guide with all questions posed to the interviewees are presented. In section 8.1, the interview guide is translated to english and in 8.2 it is in Swedish, which is the original language for the interviews. In the beginning of the interview guide, an overview of the interview topics are also presented.

## 8.1 Interview guide — English

Subjects covered in the interview
Vision - what it looks like if we succeed in integrating social and ecological sustainability
Will and thought patterns within the city regarding the integration of social and ecological sustainability
Challenges and barriers to integrating social and ecological sustainability
The role of leadership and organization within the city
Thoughts on areas of intervention with transformative potential (transformative refers to long-term and profound changes)
What the way forward looks like, how the city succeeds in integration

### Introductory questions

*This part of the interview is for us to get to know you a little better and therefore we will ask a couple of basic questions.*

1. What is your current role? (organization and position)
  - a. How long have you worked there?
2. What would you say you have experience with/knowledge about regarding integrating sustainability areas?
  - a. Is your main expertise within social or ecological sustainability, or any other relevant field?
3. Anything else we should know before moving on?

### Vision

*Our investigation is about the integration of social and ecological sustainability, so we now want to ask you what it means to you and whether you think there is a common view of the issue within the city. We read the documents that exist, but want to know how people see it.*

4. What does it mean for you if we succeed in integrating social and ecological sustainability in the city? (What would it look like?)
  - a. Do you think it is important, why/why not?
  - b. What is important to your organization and how is this operationalized?
5. Regarding the concept of integration of social and ecological sustainability, how do you feel that the understanding looks around the concept in the city? Is there consensus? *For example, if a person who works mainly with social sustainability gives an example of when they collaborated on a project with a person who works mainly with ecological sustainability. They may have different views on what integration means.*

- a. Would you like to tell us about a situation where it became clear to you that there is/is not consensus?
- b. What was your view on integration on this occasion?

## Will and thought pattern

*Now we would like to hear a little more about your opinion on how to look at/relate to the work of integration in the city.*

6. How great do you feel the desire to work with integration of sustainability areas in the city is?
  - a. *From which "direction" in the city do you mainly feel that there is initiative for such work? This can be, for example, politics/administration, environment/social, individuals or departments, business, etc.*
7. Are there any assumptions, beliefs and values that influence how one works with the integration of social and ecological sustainability?

## Challenges and barriers

*In this part, we will focus on challenges and barriers that you see and we will ask a main question that you will then have time to think about and develop.*

8. Do you see any challenges and barriers in the city when it comes to integrating social and ecological sustainability?
  - a. In that case, which are they?
  - b. What do you think these depend on?

## Governance

*In our work, governance is in focus and we would therefore like you to think about your previous answers and think about whether governance can be linked to them. First, we will ask a more general question about the area and then we will dive a little deeper.*

9. How would you describe the governance in the work with integration today?
  - a. Anything that is done better/worse today?
10. Do you see any governance that tells you to work with integration of social and ecological sustainability?
  - a. If yes: In what way? (and how do you experience that it works?)
  - b. If no: Why do you think it is that way?

## Areas of intervention

*Now we have talked a bit about the current situation and challenges and barriers that you see. We therefore want to focus a little more on which interventions could help. If you do not feel that you have any specific solution proposals, you can be more general in your answers.*

11. What do you think are important aspects in the city to address/change to improve integration?

12. Could you tell us about an experience where some effort has been made to work with increasing integration of social and ecological sustainability?
  - a. What was your role?
  - b. Did it work or not and do you have an idea why?

## Way forward

*We are about to end the interview but would like to ask some closing questions about the way forward for the integration of social and ecological sustainability.*

*In early interviews: We have not worked out any proposed solutions yet, so this part of the interview is not in focus now.*

13. Do you have a suggestion or idea, about what could be done to increase the integration of social and ecological sustainability?

*In later interviews: Briefly present the areas we have identified.*

14. Do you have any suggestion or thought on how to move forward in the defined areas/area?

## Closing

*Now we are nearing the end of the interview and have some closing questions to capture if there are thoughts or information that you think would be good for us to include.*

15. Is there anything you feel you have not been able to express so far in the interview that you think is relevant?
16. Is there anyone else you think we should definitely talk to? Or any project or effort we should check out?
  - a. To what purpose?
17. Quick impression of the interview. We send out a feedback email if we have follow-up questions and where you can reply if you have any more feedback.
  - a. Is there any information you missed from us? Or anything else we could have improved?

## Additions for certain people

18. For “ecology-heavy” people: How do you see that the social dimension can be integrated into your and your organization’s environment/climate/ecology work?
19. For “social-heavy” people: How do you see that the ecological dimension can be integrated into your and your organization’s work with social issues?

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## **8.2 Original interview guide — Swedish**

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