

MASTER'S THESIS

Course code:

BE307E

Name/Candidate number:

Hanne Rendal/1

Solveig C. Henriksen-Sharp/13

Innovation in circular public procurement process; understanding the drivers and barriers to early market dialogue

Date: 18.05.22

Total number of pages: 87

Abstract

Global awareness of the climate challenges we face is on leaders' agenda worldwide. The Paris Agreement signed in 2015 by 192 countries, including Norway, reminds us of the responsibility to reduce emissions and climate impact through cooperation. A circular economy, where resources are regenerated rather than wasted, has been recognised as one way to accomplish the goals. To achieve the societal goals, a change of attitudes and behaviours is needed to protect and conserve the environment for future generations. This can best be attained with institutional pressures to guide the course and establish the best solutions of action.

Circular public procurement (CPP) is a vital innovation tool due to the considerable purchasing power of the public sector. CPP aims to achieve goals without negative environmental impacts by eliminating waste generation, focusing on renewability the transitioning to circularity. Within CPP, the early market dialogue is an essential mechanism for CPP to achieve the desired outcomes.

We investigate the CPP and the early market dialogue through the lens of institutional theory with analyses of the drivers and barriers, which mirror the pressure mechanisms present or lacking to contribute to market engagement in CPP. Literature in the field of circular economy, circular public procurement and innovation are used to give a better understanding of innovation in the public procurement process. Based on the findings from the literature, a framework for drivers and barriers is presented.

The thesis elaborates on the drivers and barriers of early market dialogue between suppliers and Norwegian municipalities. Albeit policy documents, prior studies and various articles point out the importance of early market dialogue for circularity inside the CPP; previous research remains remiss in providing a deeper understanding of the mechanisms. However, understanding the underlying drivers and barriers of early market dialogue is essential for attracting suppliers and inviting them to share their ideas and opinions when arranging a dialogue. This consequently resulting in a more effective CPP by reducing the asymmetry of information between stakeholders.

Our analysis is based on seven interviews from twelve informants divided between two municipalities and five suppliers. Allowing for data triangulation, the thesis will highlight the different drivers and barriers in the market dialogue between municipalities and suppliers. Analysis from primary data shows a clear desire by the suppliers for the municipalities to conduct more dialogues to allow them to share circular solutions. This goes hand in hand with the indications from our research that a market dialogue can positively affect the CPP results by reducing the asymmetry of information, giving a clear understanding of needs, less room for mismatch in bid and result, better understanding of what the market can provide and a platform for circular solutions to be established.

Environmental reasons like resource constraints, potential for preventing negative environmental impacts, and enforcing climate are found as strong drivers for participating in early market dialogue by all stakeholders. Regulative drivers are strong but are not perceived as strong by either municipalities or suppliers to market dialogue. Lack of strategy for conducting market dialogue is a strong regulative barrier for Bodø municipality to arrange market dialogue, but this is not identified as barrier to Stavanger. Strongest mutual driver for market dialogue is information sharing and knowledge seeking.

The identified drivers and barriers for market dialogue can benefit the public procurers when arranging the early market dialogue and contribute to process innovation in the early stage of circular public procurement. It was clear that Bodø Municipality needs more regulatory pressures to ensure a market dialogue is conducted and that circular solutions are requested in the procurement process.

Preface

This master thesis marks the final paper of our Master of Science in Business at Nord University Business School. The thesis constitutes 30 ETCS related to our major in innovation and entrepreneurship.

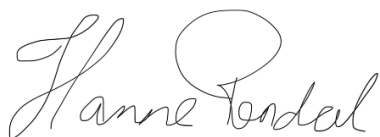
It has been a challenging and rewarding process that has given us profound new insights on the topic of public procurement and circular economy. Through the project EduSmart, we received funding to contribute to Smart City Governance and Performance Management research. This funding gave us encouragement and the means to elevate our research.

We are incredibly grateful for the guidance given to us by our main supervisor Dolores Modic and co-supervisor Elena Dybtsyna. Modic's insight and support from start to finish have exceeded our expectations, and we are so appreciative. Dybtsyna's guidance and an additional point of view have helped elevate the paper and progress. Without your feedback and encouragement, the completion would not be in equally good measure! Furthermore, we also want to thank

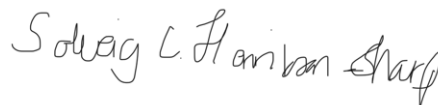
- Espen Isaksen
- Informants who contributed to the paper with their interviews.
- EduSmart project for believing in us and giving us a scholarship
- Nord University and the master teachers for preparing us for the thesis with educational and engaging subjects.

We trust this master's thesis offers interesting and reflective reading.

Nord University, 18th May 2022



Hanne Rendal



Solveig C. Henriksen-Sharp

Summary

Global bevissthet om klimautfordringene vi står overfor er på ledernes agenda over hele verden. Parisavtalen som ble undertegnet i 2015 av 192 land, inkludert Norge, minner oss om ansvaret for å redusere utslipp og klimapåvirkning gjennom samarbeid. En sirkulær økonomi, der ressurser blir regenerert i stedet for å kastes, har blitt anerkjent som en måte å nå målene på. For å nå de samfunnsmessige målene er det nødvendig med en endring av holdninger og adferd for å beskytte og bevare miljøet for fremtidige generasjoner. Dette kan best oppnås med institusjonelt press for å lede kursen og etablere de beste handlingsløsningene.

Sirkulære offentlige anskaffelser (CPP) er et viktig innovasjonsverktøy på grunn av den betydelige kjøpekraften til offentlig sektor. CPP tar sikte på å oppnå mål uten negative miljøpåvirkninger ved å eliminere avfallsgenerering, fokusere på fornybarhet og overgang til sirkularitet. Innenfor CPP er tidlig markedsdialog en viktig mekanisme for at CPP skal oppnå de ønskede resultatene.

Vi undersøker CPP og den tidlige markedsdialogen gjennom linsen av institusjonell teori med analyser av driverne og barrierene, som gjenspeiler press mekanismene som er til stede eller mangler for å bidra til markedsengasjement i CPP. Litteratur innen sirkulær økonomi, sirkulære offentlige anskaffelser og innovasjon brukes for å gi en bedre forståelse av innovasjon i den offentlige anskaffelsesprosessen. Basert på funnene fra litteraturen presenteres et rammeverk for drivere og barrierer.

Oppgaven utdyper driverne og barrierene for tidlig markedsdialog mellom leverandører og norske kommuner. Selv om politiske dokumenter, tidligere studier og ulike artikler påpeker viktigheten av tidlig markedsdialog i sirkulære offentlige anskaffelser, er tidligere forskning fortsatt mangelfull når det gjelder å gi en dypere forståelse av mekanismene. Imidlertid er det viktig å forstå de underliggende driverne og barrierene for tidlig markedsdialog for å tiltrekke leverandører og invitere dem til å dele sine ideer og meninger når de arrangerer en dialog. Dette resulterer i en mer effektiv CPP ved å redusere asymmetrien i informasjon mellom interessenter.

Vår analyse er basert på syv intervjuer fra tolv informanter fordelt på to kommuner og fem leverandører. Avhandlingen vil åpne for datatriangulering, synliggjøre de ulike driverne og barrierene i markedsdialogen mellom kommuner og leverandører.

Analyse fra primærdata viser et klart ønske fra leverandørene om at kommunene gjennomfører flere dialoger for å la dem dele sirkulære løsninger. Dette går hånd i hånd med indikasjonene fra vår forskning om at en markedsdialog kan påvirke CPP-resultatene positivt ved å redusere asymmetrien i informasjon, gi en klar forståelse av behov, mindre rom for misforhold i bud og resultat, bedre forståelse for hva markedet kan tilby og en plattform for å etablere sirkulære løsninger.

Miljømessige årsaker som ressursbegrensninger, potensial for å forhindre negative miljøpåvirkninger og håndheving av klima er funnet som sterke drivere for å delta i tidlig markedsdialog for alle interessenter. Regulative drivere er sterke, men oppleves ikke som sterke av verken kommuner eller leverandører til markedsdialog. Manglende strategi for gjennomføring av markedsdialogen er en sterk regulerende barriere for Bodø kommune for gjennomføringen, men er ikke identifisert som barriere av Stavanger. Den sterkeste gjensidige driveren for markedsdialog er informasjonsdeling, mer kunnskaps og bedre sluttresultat av prosjekter.

De identifiserte driverne og barrierene for markedsdialog kan komme offentlige innkjøpere til gode ved tilrettelegging av den tidlige markedsdialogen og bidra til prosessinnovasjon i tidlig fase av sirkulære offentlige anskaffelser. Det var tydelig at Bodø kommune trenger mer regulatorisk press for å sikre markedsdialog og at det etterspørres sirkulære løsninger i anskaffelsesprosessen.

Table of content

Abstract	i
Preface.....	iii
Summary	iv
Table of content.....	vi
List of figures	vii
List of tables.....	vii
Dictionary.....	viii
1.0 Introduction	1
1.1 Actualization	4
1.2 Research question.....	5
2.0 Theoretical framework	6
2.1 Public procurement by municipalities.....	6
2.1.1 Innovation in public procurement processes	7
2.1.2 Circular public procurement.....	8
2.2 Market dialogue.....	10
2.3 Institutional theory	12
2.3.1 Drivers and barriers through the lens of Institutional pressure	14
2.4 Theoretical summary and research model.....	19
3.0 Method	21
3.1 Research approach.....	21
3.2 Research design.....	21
3.3 Qualitative research method.....	22
3.4 Literature review	23
3.5 Semi-structured interview	24
3.5.1 Preparation and ethics	24
3.5.2 Empirical setting	25
3.5.3 Selection of informants	28
3.5.4 Conducting interviews and ensuring confidentiality.....	30
3.6 Research quality	32
3.6.1 Validity.....	32
3.6.2 Reliability	33
3.6.3 Transferability	33
4.0 Empirical	35
4.1 Introductory note	35
4.2 Drivers and Barriers for Market Dialogue in CPP	37
4.2.1 Municipality perspective	37
4.3 Drivers and barriers suppliers' perspective.....	42
4.3.1 Supplier perspective	42
5.0 Analysis.....	50
6.0 Conclusion.....	58
6.1 Practical implications and recommendations for Bodø Municipality	61

6.3	Recommendations for future Research.....	62
6.4	Limitations.....	63
	References/Literature	64
	Appendix 1 Interview guide public sector	67
	Appendix 2 Interview guide supplier	70
	Appendix 3 Consent form supplier	73
	Appendix 4 Consent form public sector.....	75
	Appendix 5 Approval NSD	77

List of figures

<i>Figure 1. Research model.....</i>	<i>20</i>
<i>Figure 2. Research process by (Johannessen et al., 2011).....</i>	<i>22</i>

List of tables

<i>Table 1 Drivers for circular economy identified pre-research</i>	<i>15</i>
<i>Table 2 Barriers for implementing CE.....</i>	<i>16</i>
<i>Table 3 Informants</i>	<i>30</i>
<i>Table 4 Identified drivers and barriers for market dialogue in circular procurement processes.....</i>	<i>52</i>

Dictionary

CE - Circular Economy

CPP - Circular public procurement

IPP - Innovative Public Procurement

PP - Public procurement

1.0 Introduction

This thesis will identify suppliers' drivers and barriers to early market dialogue in the circular public procurement (CPP) processes, since environmental challenges demand participation from all of us to achieve a sustainable future. This thesis can provide a more profound understanding of how this can be achieved by elaborating on the drivers and barriers of the early market dialogue in CPP. The subsidiary, the results of this thesis can also support, especially smaller municipalities, such as Bodø municipality, in enhancing their ability to innovate their CPP processes to be able to use CPP more successfully in pursuing both the circular purchasing goals as well as the broader societal goal of transitioning to a more circular society.

Our current consumption requires 1.7 Earths (Global Footprint Network, n.d.). Hence one way to move forward is to transition from a linear economic approach to a Circular Economy (CE). "Circular economy is a regenerative system in which resource input and waste, emission, and energy leakage are minimised by slowing, closing, and narrowing material- and energy loops" (Geissdoerfer et al., 2017, p. 759). Norway has also committed to reinforcing national climate goals and reducing emissions by at least 50 % compared to 1990-level emissions by 2030 (Regjeringen, 2020).

We all need to participate in the transition, and public authorities seek to contribute (Rotevatn et al., 2021) and encourage other actors to participate. In this line, cities and municipalities are relevant actors supporting the transition to the circular economy (Ellen Macarthur Foundation, 2019; Geissdoerfer et al., 2017). Governmental pressure is required in rules and regulations to reach the needed environmental and societal goals, including those related to circularity and regenerating consumption. These institutional pressures impact the value chain until they reach suppliers and consumers, which results in a better environment for its current and future inhabitants.

There are many ways a circular economy can be achieved; circular public procurement as a mechanism of institutional pressure is one of them (Alhola et al., 2018; Rotevatn et al., 2021). Public procurement refers to the process by public authorities, such as government departments and local authorities, of purchasing works, goods, or services from companies to fulfil the demands and needs of public administration and the society at large (European

Commission, 2017; Obwegeser & Müller, 2018; Uyarra & Flanagan, 2010). CPP has been introduced in the EU as a concept for a procurement process, and the interest in innovating the related process is emergent (Obwegeser & Müller, 2018; Rolfstam, 2012).

An essential part of the CPP process is the market dialogue, where information and knowledge are shared between actors who cooperate in the supply chain to increase innovative solutions and CE development (Alhola et al., 2017). It is difficult to change from a price focus to a more circular one (Obwegeser & Müller, 2018), but the market dialogue may help transcend these problems. “A common topic is how to change the behaviour of public procurement agencies from buying the cheapest goods and services to investing in innovative albeit riskier solutions, i.e., basing procurement decisions on a long-term perspective on strategic development rather than a short-term perspective on price” (Boes & Dorée, 2008; Eadie et al., 2013; Yeow & Edler, 2012).

The importance of market dialogue in CPP is recognised in the literature (Boes & Dorée, 2008; Uyarra & Flanagan, 2010; Vargo & Lusch, 2004), policy documents (DfØ, 2021; European Commission, 2017; LUP, n.d.-b) and studies (Obwegeser & Müller, 2018; Sönnichsen & Clement, 2019) with (Obwegeser & Müller, 2018) identifying that there is a gap in theory-based studies of innovation in public procurement processes. Increasing the knowledge connected to innovation in CPP processes can provide a better foundation for development procurement in the public sector.

To understand more, we connect within this thesis the concepts related to various institutions, the related institutional pressures based on institutional theory, and the drivers and barriers elaborated by the circular economy theory. We presume that the pressure mechanism can ensure organisational routines and requirements for conducting market dialogue as part of the CPP process. We believe that the insights from understanding the drivers and barriers of early market dialogue for all actors in the CPP (procures and suppliers) can help nudge the desired actions, which are circular solutions attained via circular public procurement processes as facilitated by early market dialogue.

Suppliers face known drivers and barriers for CE, i.e., environmental, economic, social, institutional, technological/informational, supply chain, and organisational (Tura et al., 2019). By identifying drivers and barriers faced by potential suppliers from the private market when interacting with the municipality in market dialogue in CPP processes as well as those faced

by the municipalities, this thesis aims to identify and potentially reduce information asymmetry between the stakeholders (Macagnan & Seibert, 2021). This can benefit the public procurers when arranging the early market dialogue and contribute to the process innovation in the early stage of CPP. The analysis will answer the research question: What are the drivers and barriers to market dialogue in circular public procurement? Understanding helps us to support needed innovative solutions in CPP process especially in terms of the pre-tender phase of market engagement. Subsidiary, we also explore whether the experienced drivers and barriers are diverse for different actors, i.e., procurers and contractors. This can benefit the public procurers when arranging the early market dialogue and contribute to process innovation in the early stage of circular public procurement. The institutional theory has been used to provide a categorisation of stakeholder's drivers and barriers for market dialogue and have been categorised in regulative, normative, and cognitive pressures before explaining whether they are endogenous and exogenous. Literature on CE, CPP, market dialogue and innovation have been used to understand the development of circular procurement. A qualitative study was done where two Norwegian municipalities and five suppliers have contributed through interviews. Data given by the stakeholders will provide a triangulation of information. The two municipalities have different experiences when it comes to conducting market dialogue in circular public procurement. One is a recent adopter, the other a frontrunner. Combining and comparing perspectives given by different stakeholders in the public and private sector, from both clients and suppliers, can integrate multiple perspectives that increase the validation of data provided (Jupp, 2006).

The thesis will compare the drivers and barriers of the different stakeholders for the market dialogue in the CPP process. Institutional pressure mechanisms were used to analyse the drivers and barriers for the dialogue

1.1 Actualization

Until recently, our economy has had a linear focus, with a “take-make-dispose” view of resources, whilst CE is a regenerative system that keeps resources in the life circle for longer (Bolger & Doyon, 2019; De Jesus & Mendonça, 2018; Geissdoerfer et al., 2017; Kristensen et al., 2020). CE aims to decrease resource consumption, reduce pollution emissions, minimise construction and demolition waste generation, eliminate environmental impacts, and produce social benefits, e.g., increase employment (Bao et al., 2019; Stahel, 2016).

Achieving Norway’s growth and circular economy goals are based on the European Commission’s guidelines. In June 2021, the government’s strategies for CE made the national strategy for a green circular economy (Regjeringen, 2021; Rotevatn et al., 2021). The strategy identifies the importance of resource efficiency and a higher degree of circular economy as necessary for achieving environmental and sustainability goals (Rotevatn et al., 2021). By 2050 Norwegian emissions should also be 90-95 per cent lower than in 1990, as stated in Climate Change Act §4 (Climate Change Act, 2017). The Norwegian government has set up a public committee to assess how Norway will reach the climate goals set by the European Commission.

Circular public procurement contributes to resource efficiency and a competitive low-emission economy and meets these goals (DfØ, 2021). Public procurement can play a crucial part in achieving a circular economy in municipality projects and encourage local innovations in line with sustainability goals like the Paris agreement (European Commission, 2017; United Nations, n.d.).

Cities and municipalities are relevant actors supporting a circular economy (Geissdoerfer et al., 2017). Research is lacking on why suppliers do not engage when cities want them to. Municipalities have a shared interest in promoting CE. Value chain-specific instruments like ongoing market dialogue are required to enhance CE (Alhola et al., 2017) and the effectiveness of Circular public procurement (CPP). CPP is defined as “The procurement of competitively priced products, services or systems that lead to extended lifespan, value retention and/or remarkably improved and non-risky cycling of biological or technical materials, compared to other solutions for a similar purpose on the market” (Alhola et al., 2017).

In this thesis, early market engagement and market dialogue as terms are used interchangeably and is defined as interaction with potential suppliers, manufacturers and service provider pre-tender phase of circular procurement (Alhola et al., 2018; Cramer, 2020; DfØ, 2021; European Commission, 2017; LUP, n.d.-b; Stahel, 2019; Sönnichsen & Clement, 2019).

1.2 Research question

This thesis will look at public circular procurement and early market dialogue in advance of competitive tenders. Early market dialogue in the pre-tender stage of public procurement is recommended. This can increase the procures ordering competence, optimise the offers and deliveries and stimulate the development of new and better solutions (LUP, n.d.-b). Hence, understanding them can help us innovate the circular public procurement process. It is the key pre-tender phase element, i.e., the market dialogue. Based on the challenge described, our research question is:

RQ 1a: What are the drivers and barriers to market dialogue in circular public procurement?

Subsidiary, we also explore if the drivers and barriers experienced by

RQ1b: Are there different drivers and barriers experienced by diverse actors of the market dialogue in circular public procurement, i.e., by procurers and contractors?

There are different types of actors involved in market dialogue in circular public procurement, whereby we have – as explained above – focused on dyadic relationship procurers-suppliers. Looking through the lens of the institutional theory, we can expect that we will detect at least some same (or similar) exogenous, but different endogenous rules, norms and values that will affect procurers versus contractors, hence we expect differences in drivers and barriers experienced between these two groups of actors of market dialogue within CPP.

This master thesis continues the obligatory term paper in ENT5000 - Perspective on innovation and entrepreneurship (Own work, 2021).

2.0 Theoretical framework

This chapter will present the literature relevant to answer the research question raised above. The theoretical section will create the framework for analysing the empirical data and introduce the theoretical approach to innovating the circular public procurement process. First, innovation in the public sector and Innovative Public Procurement (IPP) will be explained. Followed by drivers and barriers to the circular public procurement processes, where the importance of market dialogue in CPP will be presented. Institutional theory is presented as endogenous and exogenous pressure mechanisms for market dialogue. Drivers and barriers through the lens of institutional pressure will then be discussed. At the end of the chapter, the research literature is summarised in a theoretical framework based on expectations from past research.

2.1 Public procurement by municipalities

Public procurement satisfies the needs and objectives on a macro level which serves the city and its inhabitants in accomplishing sustainable development for the current and future generations (Kristensen et al., 2020). Good public procurement is essential for the public sector to fulfil its social mission; it is a tool to ensure public funds are being managed well and contributes to innovation and efficiency in Norwegian business and industry (Meld. St. 22, 2018-2019).

Public procurement has three main phases: pre-tender, tender and post-tender. In the first phase, planning and preparation for procurement focus on market engagement, establishing possible solutions and suppliers, needs and requirements specifications (Holma et al., 2019). Based on the findings from the pre-tender phase, one defines the main tender document. Legal rules and organisational procedures determine the public procurement process. Actors cannot have beneficial advantages, and collaborative relationships with service providers are challenging (Holma et al., 2019). The needs specifications cannot advance or limit an actor in the tendering process. There are limited opportunities to adjust a tender after the pre-tender phase without extending the deadline or annualising the tender in a worst-case scenario (Holma et al., 2019).

Before developing the tender specifications, it is essential to create meaningful stakeholder involvement in the pre-tender phase; hence in our thesis, we focus in particular on this. During this phase, the municipalities gather information and define cooperative roles and

practices valuable to the task and situation. Suppliers can use the time to communicate their resources and influence the best solution (Holma et al., 2019). Suppliers can have different capabilities and capacities. The traditional public procurement process does not necessarily contribute to reaching the societal goals for today, where it is essential to choose circular solutions with a long-term focus. Hence there is a need for innovation in the public procurement process.

2.1.1 Innovation in public procurement processes

Innovating the public procurement process may accelerate the adoption of a circular economy in the public sector. It is in the pre-tender phase, where market dialogue can create the arena for innovation by allowing communication between the public sector and private suppliers. The word innovation comes from the Latin words *innovare* and *novus*, where *innovare* can be translated as renewal while *novus* means new. The joint consensus on innovation is that innovation consists of two activities 1) doing something new and 2) developing this new to work in a given context (Fuglsang, 2010, p. 67). Schumpeter thinks there can be a positive impact of market power on innovative activity. Schumpeter (1911) distinguishes between product and process innovation. Product innovation is “the introduction of a new good... or a new quality of a good”, and process innovation is “the introduction of a new method of production ... (or) a new way of handling a commodity commercially” (Schumpeter, 1911, in Hommen & Rolfstam, 2008).

There are differences between innovation in private settings, where the goal is to achieve competitive advantage and earn money, and in the public sector, the aim is to improve governance and service performance to create more value for the public (Hartley, 2005). The Norwegian government agrees with: “innovation is to implement something new that creates value for citizens and society” (Meld. St. 30, 2019-2020). Innovation in the public sector is slower or more difficult than in the private sector (Albury, 2005). There is no pressure from the market competition; pressure comes from the increased demands. “Market demand must be distinguished from the potentially limitless set of human needs. Demand-pull needs to be based on a precise concept, denoting a systematic relationship between price and quantities, devolving from the constellation of consumer preferences and incomes” (Mowery & Rosenberg, 1979, p. 140). Examples given are changed service, product, process, organisation, or mode of communication. The innovation can be new to the business/city; it may nevertheless be known and implemented in other companies (Meld. St. 30, 2019-2020).

Innovative public procurement (IPP) is a procurement method that facilitates cooperation with the market (Sætertrø, 2020). This is to develop a better solution in close contact with users and the surrounding environment (Meld. St. 30, 2019-2020). “Innovative procurement process change how suppliers are being asked to supply pre-existing solutions in an improved way, and the market is asked to respond in a new way which opens up for new actors to take part in the bidding process” (Knutsson & Thomasson, 2014; Torvinen & Ulkuniemi, 2016). The European Commission has introduced a good practice- and guidance procures where they specify that market dialogue and specification requirements in the tender should be more focused. “Procurement should seek to fulfil a certain need rather than acquire a specific product. The market is then given more freedom to innovate and provide the most effective solution, reducing resource use and cost” Edquist and Zabala-Iturriagoitia (2012, p. 1768) agree when saying, “The procurement of existing products should be partly replaced by the procurement of results in terms of societal problem solving and needs’ satisfaction “. In Norway, the procurement regulations implement the new procurement directives received from the EU (Ministry of Trade, 2017).

2.1.2 Circular public procurement

The societal needs and challenges, including those related to more circularity, are changing, and affecting the public sector’s tasks. Innovative solutions can help meet the challenges, such as the need for more circularity, climate change, demographic change and change because of technological development. Therefore, public procurement is relevant to change, job- and value creation in climate and environment, health/ageing and digitalisation (Meld. St. 22, 2018-2019). Reuse- and upcycling, with a shared costs and benefits model where actors estimate the overall cost result ratio in advance, can be one way to achieve innovative solutions (Cramer, 2020).

Circular Public Procurement (CPP) can be defined as “The process by which public authorities purchase works, goods or services that seek to contribute to closed energy and material loops within supply chains, whilst minimising and, in the best case avoiding, negative environmental impacts and waste creation across their whole life cycle” (European Commission, 2017, p. 5). CPP is a process where the tendering agreement is set, following engagement between potential suppliers and procurers.

The main difference between public procurement and circular public procurement is that CPP has been identified as a way toward achieving a circular economy. The traditional public procurement process consists of a rule-based design formed by European directives. The tender process in classical public procurement processes is also designed to be easily replicated, and the procurement process is designed from a need's perspective to deliver the product or process (Ntsondé & Aggeri, 2021). In contrast, municipalities implementing circular public procurement could embrace innovative design to their procurement process that collectively designs the product/service/process with a functional approach focusing on problem-solving or function solving (Le Masson et al., 2010). Circular success factors like the allocation of time and resources have been identified (Ntsondé & Aggeri, 2021).

Also, new innovative process solutions, which enable more communication, are needed inside CPP. One such opportunity stems from a better understanding of using the market dialogue in circular public procurement. “Early interaction and advance communication are among the most promising processes for innovation; however, these processes are not widely used” (Edquist et al., 2015, p. 53). This thesis is limited to the early market dialogue in the pre-tender phase of the procurement process.

In terms of municipalities, they can decide to be a passive recipient or an active contributor to demanding and co-creating innovation through the procurement process, market and tender specifications (Holma et al., 2019). In terms of circular economy, cities should actively seek CE solutions to fulfil their environmental commitments, whilst the market for CE friendly options has yet to be standardised. This can be achieved via circular public procurement by engaging in new process innovation related to improved market engagement in circular public procurement. Thus, this thesis aims to provide insights into how the circular public procurement process can be innovated as to its market dialogue in a pre-tender phase of CPP.

Hartley et al. (2020) identify policies that may accelerate and potentially be drivers for the transition towards a CE. Among them especially also point out to the role of circular procurement.

“Expanding circular procurement by EU and member states” through:

- “Reorientation of procurement rules towards circular procurement (favouring circular products over linear alternatives.”
- “Procurement standards through thresholds for per cent of recycled content, reusability, and eco-efficiency (based on a holistic view of CE).”

- “Continuous expansion of circular procurement to create markets for circular product producers” Hartley et al. (2020).

Based on Leire and Mont (2010)’s model, Sönnichsen and Clement (2019) identify five elementary steps necessary when implementing a socially responsible purchasing practice. Firstly, the internal policies must be based on CE factors and give the purchasing unit clear guidelines. Secondly, purchasing criteria need to be based on internal policies. Thirdly applying internal procedures for assurance practices to audit and evaluate supplier compliance with the purchasing criteria. The next step focuses on supplier relations management by, e.g., monitoring supplier practices, social targets, and the application of measurable indicators. The final step involves making an internal circular public procurement capacity flexible to alter internal practices that support and improve supplier conformance (Leire & Mont, 2010; Sönnichsen & Clement, 2019).

For municipalities, it is essential to follow through with circular efforts from the beginning to the end of the tender process. They need to facilitate collaboration internally and externally with suppliers and other stakeholders in the pre-tender phase. The tender agreement requirements should match the pre-tender solutions to ensure that sustainability is equally important to price when awarding the tender (Dybtsyna et al., 2021).

2.2 Market dialogue

For the future development of circular public procurement, market dialogue and cooperation between procurers and actors in the supply chains are essential (Alhola et al., 2018). The market dialogue is about communication and plays an integral part in eliminating the information asymmetry. New processes and communication methods are needed to enhance market engagement in circular public procurement.

Market dialogue is essential in circular procurement (Alhola et al., 2018; Cramer, 2020; Dfø, 2021). Market dialogue can be defined as interaction with potential suppliers, manufacturers and service providers (Alhola et al., 2018; Cramer, 2020; Dfø, 2021; European Commission, 2017; LUP, n.d.-b; Stahel, 2019; Sönnichsen & Clement, 2019). On the municipal level, the municipalities can also establish innovative partnerships based on development, research, and piloting for solutions, fulfilling the circular economy principles (European Commission, 2017). “Collaboration requires exchanging information and coordinating activities across

interdependent organisational units, such as research and development, procurement, and sales” (Witjes & Lozano, 2016, p. 40).

Collaboration and dialogue can potentially create better value propositions for end users (Alhola et al., 2018; Vargo & Lusch, 2004), by, e.g., sharing knowledge. “Market dialogue and co-operation between different actors in supply chains is essential for the future development of circular economy and innovative circular public procurement” (Alhola et al., 2018). The procurement regulations §8-2 state that procurers can dialogue with suppliers before the tender agreement without suppliers receiving an unreasonable competitive advantage (Anskaffelsesforskriften, 2017).

Understanding the drivers and barriers to a market dialogue in CPP can provide the municipality with insight into how to attract suppliers and invite them to share their ideas and opinions when arranging a dialogue. Identifying the factors can also “empower practitioners, policymakers and researchers to devise solutions to overcome these barriers and accelerate the adoption of circular economy solutions” (De Jesus & Mendonça, 2018; Guldmann & Huulgaard, 2019; Hölzl & Janger, 2012; Oghazi & Mostaghel, 2018).

National Program for Supplier Development (LUP), which aims to increase the innovation effect of public procurement, has developed a planning tool and handbook for planning and implementing early market dialogue in public procurement (Sætertrø, 2020). The dialogue needs to be well planned for all actors involved to achieve the optimal benefit of the dialogue (Sætertrø, 2020). The dialogue is also recommended to begin in advance of competitive tenders to get the best result for the circular economy (LUP, n.d.-b).

The aim of arranging a market dialogue is for the procurers to become familiar with suppliers’ opportunities (Dfø, 2021). When planning for early market dialogue, the procurer must have a good understanding and description of what purpose it should fulfil (LUP, n.d.-b). “Quality of contracts results from contingent negotiation processes, making market dialogue and sharing experiences through interdisciplinary iterative processes to be highly efficient in supporting greater circularity in public purchasing” (Sønnichsen & Clement, 2019, p. 10). Reasons can be increasing the procurer's ordering competence, creating a reasonable basis for competition, optimising the offers and deliveries, and stimulating the development of new or better solutions (LUP, n.d.-b). It can also reduce the risk of mistaken purchases and shorten

the procurer's time to conduct the competition (LUP, n.d.-b). "Market dialogue and shared experiences in interdisciplinary iterative processes of negotiation between suppliers, suppliers and other relevant stakeholders can enhance policy goals if put as quality parameters in tender process" (Testa et al., (2012) in Sönnichsen & Clement, 2019, p. 9). Reducing information asymmetry between the stakeholders by identifying drivers and barriers to market dialogue can benefit both municipalities and suppliers.

However, different regulatory, normative, and cognitive institutions, also mirrored in drivers and barriers, can be at play when organisations decide if they will engage in the circular public procurement market dialogue. The drivers and barriers will be elaborated on through the endogenous and exogenous mechanisms.

2.3 Institutional theory

Early market dialogue has been identified as an essential part of circular public procurement where the goal is achieving circular solutions that solve societal problems like global warming. Focusing on the market dialogue can allow us to understand if and how the different elements of the institutional setup, both endogenous and exogenous, and the related regulative, normative, and cognitive factors can influence the engagement of both the public and private sector, especially why the latter decide (or not decide) to make early on contributions to the focal CPP. Consequently, it impacts on the implementation of CPP as an innovation tool.

Organisations offer a formal structure and have a position as a dominant actor in society. Nonetheless, they do not remain unaffected by the institutional setup, both that of exogenous institutions and endogenous institutions. There are exogenous institutions' effects can differ due to diverse endogenous institutions. According to Coriat and Weinstein 2002 in Rolfstam (2012), exogenous institutions are external and posed to all agents, whereas endogenous institutions are those rules that individual agents decide to give themselves. Rolfstam (2012) explains them with an analogy with a soccer game; the players abide (exogenous) rules of the game but also apply their strategies (endogenous). Furthermore, the force of moral pressure cements social stability and is the essence of institutional theory (Scott, 2008).

The institutional theory broadly splits the institutional order into three elements: regulative, normative, and cultural-cognitive (Scott, 2008).

Regulative is the most formal element of institutional pressure, where organisational change stems from policies, monitoring, and sanctioning activities. It is often the most efficient tool to gain the desired result as actors must oblige for legal reasons (Scott, 2008).

Normative elements “introduce a prescriptive, evaluative, and obligatory dimension into social life” (Scott, 2008, p. 54). However, there are no guarantees that actors will conform to the pressure even though they ought to, due to ethical & moral obligations (Palthe, 2014).

The cultural-cognitive elements emphasise the “shared conceptions that constitute the nature of social reality and the frames through which meaning is made” (Scott, 2008, p. 57). To gain institutional change that is appropriately rooted, the individuals in the organisation must believe in the core values behind them. This will, in turn, emphasise cultural legitimacy where individuals in the organisation share a mindset and an internal drive. Establishing a mutual feeling of importance for the market dialogue is essential.

An agent could also feel morally obligated to concede for the greater good because they have given their word and reputation or because there is no alternative way of action. Each element of pressure supports an institutionalised social order and behaviour (Scott, 2008), which elements leads to more circularity in this thesis

Public procurement is operating in a strongly regulated environment, which is connected to normative, regulative, and cognitive mechanisms.

Scott (2008) identifies that the actors, i.e., also those inside CPP, may react to pressure with “avoidance, manipulation or compliance”. “Rules, norms and meanings arise with interaction, and they are preserved and modified by the behaviour of social actors “ (Scott, 2008, p. 57). Engagement between the municipality and suppliers will play an essential part in arriving at the best practice and creating an agreement in unison that both parties find meaningful to comply with (Scott, 2008). Instead of only imposing requirements and constraints with a top-down perspective to drive change, normative and cognitive elements can achieve more lasting results where actors oblige to change not because they must but because they want to (Palthe, 2014). Different pressure elements may increase the internal drive, supporting the desired social order or behaviour (Scott, 2008).

Institutional pressure is most effective when knowledge and understanding of core values create a shared mindset and market dialogue creates the arena for communication.

The bidding actors must be engaged and understand the project to buy into the importance of CE in the deliverance, so they support the necessary changes needed to deliver. In this thesis institutional theory is used to look at drivers and barriers suppliers have when municipalities arrange the market dialogue in the pre-tender phase of a circular public procurement process, and we also view the drivers and barriers through the classification of endogenous and exogenous mechanisms divided in regulative, normative, and cultural mechanisms. It is important to categorise the different drivers and barriers, whether they are endogenous or exogenous. This for municipalities to be able to make necessary changes for the barriers they are experiencing for market dialogue. This will be elaborated on in the following chapters.

2.3.1 Drivers and barriers through the lens of Institutional pressure

The market dialogue and CPP process is shaped by different institutional pressures as part of the institutional setup. The market dialogue is influenced by international, national, and local pressures that can be explained by the three above elements. EU regulations have pushed rules and regulations that can only be achieved if the CPP process is implemented, and this is a regulative influence. National regulations have strict guidelines for public procurement and enforces that the market dialogue must be put in place prior to a tender to avoid unfair competition. Local pressures from municipalities can shape the process of market dialogue and these can be based on normative and/or cognitive influences.

Municipalities typically conduct market dialogues because of a normative pressure, as it is appropriate and gives an advantage for achieving their environmental goals. The contractors that attend the market dialogue may attend because it benefits their business, and they wish to use normative pressures to gain advantages through knowledge sharing and collaboration. There are known drivers and barriers for circular economy which may be transferable to early market dialogue context and categorised as either regulative, normative, and cognitive. These are based on the three pillars by (Busch et al., 2007). The regulative is governed by rules and laws. The normative is derived from a standard or norm related to or morally controlled pressures. Cognitive are more of habit or part of cultural support. The barriers can enforce the rigidity of the system, dissuade actors from participating and therewith prevent the pursued of circularity goals by CPP to be less effective. On the other hand, the drivers can support the engagement of all actors in public dialogue, hence supporting the pursued circularity goals,

and the CPP as an innovation tool. Increasing the knowledge of both can be beneficial when public procures arrange the early market dialogue.

There are several known drivers and barriers for circular economy (Alhola et al., 2018; Cramer, 2020; Ghisellini et al., 2016; Govindan & Hasanagic, 2018; Kirchherr et al., 2018; Rizos et al., 2016; Tura et al., 2019; Vargo & Lusch, 2004; Zu Castell-Rüdenhausen et al., 2021). The drivers and barriers can also be usable to analyse the why municipalities and suppliers would or would not engage in early market dialogue inside CPP processes. Hence, there identification can be beneficial when public procures arrange the early market dialogue. Tables 1 and 2, provide the drivers and barriers, whereby barriers and drivers marked with * are exogenous and ** are endogenous and we divide them based on either the municipal or the suppliers' perspective. Both drivers and barriers can be either endogenous or exogenous, or not relevant. Although a significant part of the circular economy literature looks at drivers and barriers for companies, i.e., suppliers, these can be applied also to municipalities as procures in the CPP process and CPP's market dialogue.

Type	Driver	Municipal		Supplier	
		Endo	Exo	Endo	Exo
Environmental	Resource constraints and potential for preventing negative environmental impacts (Tura et al., 2019)		*		
	Support for recycling, because of regulatory push (Ranta et al., 2018)		*		*
	Enforcing climate change (Govindan and Hasanagic, 2018)		*		*
Economic	Potential for improving cost efficiency, finding new revenue streams, and gaining profit (Tura et al., 2019)	**		**	
Social	Potential to get extra jobs, (Govindan and Hasanagic, 2018)	**	*	**	
	Collaboration – potentially greater result for end user (Alhola et al., 2018); (Vargo & Lusch, 2004)	**			
Institutional	Directing laws and EU regulations create a demand for new solutions (Tura et al., 2019)		*		*
Technological and informational	Potential for the new development of service (Tura et al., 2019)	**			
Supply chain	Availability of knowledge and technological resources through collaboration (Tura et al., 2019); (Vargo & Lusch, 2004)	**		**	
Organisational	Potential for differentiation and strengthening company brand (Tura et al., 2019)	**		**	
	Strategy and culture implemented in organisation (Tura et al., 2019); (Ghisellini et al., 2016)			**	

Table 1 Drivers for circular economy identified pre-research

Type	Barriers	Municipality		Supplier	
		Endo	Exo	Endo	Exo
Environmental	n/a				
Economic	*Risk-aversion due to time and money (Cramer, 2020)	**		**	
Social	Cultural, limiting business interest (Cramer, 2020)		*	**	
	Hesitant company culture (Kirchherr et al., 2018)		*	**	
Institutional	Difficulties managing compatible technology (Tura et al., 2019)				*
Technical and informational	Companies' technology limitations (Govindan and Hasanagic, 2018)		*	**	*
	Difficulties managing compatible technology (Tura et al., 2019)			**	*
	Lack of information on setting green general requirements (Zu-Rüdenhausen et al., 2021)	**			
	Risk-averse due to lack of knowledge (Cramer, 2020); (Rizos et al., 2016)	**		**	
Supply chain	Lack of supply of secondary material (network support/collaboration) (Zu Castell-Rüdenhasuen et al., 2021)				*
Organisational	Lack of connection between CE and company strategy (Tura et al, 2019)			**	
	"Silo" thinking (Tura et al., 2019)			**	

Table 2. Barriers for implementing CE

Drivers

Growth of and demand for resources like raw materials and water can threaten the supply in the future (Andrews, 2015). Also, political instability, ring fencing of reserves and corruption are examples of possible causes for resource constraint (British Geological Society, 2012 in Andrews, 2015). Lack of resources can relate to that the suppliers cannot access the supply the municipality requires and is an exogenous driver for and municipalities implementing more circularity in procurement. Another push identified by Ranta et al. (2018) is that the most vital driver for CE was support for recycling because of regulatory push. Regulatory push for recycling can come from EU, government, or municipality (locally) and is an exogenous driver for suppliers and municipality. When regulation of recycling is working properly, like for e.g., regulation for batteries, this creates a strong push.

Cost savings and potential for new service business development that can gain profit were found as economic drivers (Tura et al., 2019). Endogenous driver for supplier and municipality. For the supplier point of view because being able to deliver lower prices to municipality tenders can increase the likelihood of winning them. From the municipalities

point of view, the endogenous driver comes from getting more for less money, is important when reaching societal goals.

Potential to get extra jobs by using enforced CE systems is identified as a driver for CE (Govindan & Hasanagic, 2018). These drivers are for the municipality and supplier endogenous. For the municipality because they can fulfil societal goal of providing jobs for inhabitant. From the supplier's side, the drivers are endogenous due to them having potential to getting more jobs that can provide extra income to the company.

Tura et al. (2019) identified that directing laws and EU regulations create a demand for new solutions. This regulation is a solid exogenous driver for suppliers who need to familiarize themselves and adapt to the new requirements/rules to be ready to comply with the new demands. They know the rules will lead to their clients' demanding product/services adapted to this.

Potential for strengthening the company brand is identified as another driver (Kirchherr et al., 2018), and is a solid endogenous driver. Advantages of a strong company brand can e.g., be customer recognition, word of mouth- marketing, customer loyalty and credibility in the market. A strong brand name can thus help businesses differentiate from other companies in the market which can lead to greater competitiveness (Baniyani et al., 2021). We also contemplate the "brand" for municipalities – since they want to be branded as green, sustainable, and circular.

Strategy and culture for clear CE principles implemented in the organisation important for the development of CE (Ghisellini et al., 2016; Tura et al., 2019), and causes for speeding the desire to adopt CE goes hand in hand with the pressure to reduce environmental impacts (Tura et al., 2019). Strategy and culture are endogenous drivers that is within the company, but the pressure to reduce environmental impacts is exogenous and is manifested by, among many other reasons, increased focus in society.

Barriers

Circularity needs to be integrated in the company's strategy (Tura et al., 2019), but suppliers can be risk averse due to lack a lack of, time and money, to implement new circular products (Cramer, 2020), this is endogenous barriers, and will have different effects for the companies depending on their size, human resource- and monetary position. Furthermore, also so-called "silo" thinking, can be seen as an important organizational barrier.

According to Kirchherr et al. (2018), reluctant business culture appears being the most pressing CE barrier. This limited business interest coincides with finding by Cramer (2020). The lack of interest or culture inside the company is an endogenous cognitive barrier. (Kirchherr et al., 2018) believes that chain reaction mechanisms like low material prices and the lack of interest from the companies' customers can turn into a "hesitant company culture" but that these explanations are somewhat of an excuse and the real barrier can be due to high upfront investment cost (Kirchherr et al., 2018). Market readiness, difficulties related to the supply of secondary materials with high quality (Zu Castell-Rüdenhausen et al., 2021). For the supplier, these are exogenous barriers.

Governmental support through directional laws provides clear enhancing roles towards implementing a circular economy Dong et al., 2016. Regulative barriers are for the suppliers exogenous. Market for reused materials have not been established in Norway, and buildings regulations and Plan and Building act have not been updated and facilitated for circular solutions (SALT, 2022). Technological barriers are mentioned in several research, e.g., by Tura et al. (2019), where difficulties handling circular economy material flows and lack of compatible technology are identified as necessary for the development of CE. In order for suppliers to be able to use reused material in their production, the products must have been designed in a way that it can be recycled/remanufactured (Govindan & Hasanagic, 2018). Lack of technology can relate to a particular company not having the technology, which is endogenous barrier, or that the technical solution not existing at all which is an exogenous barrier.

Lack of knowledge has also been identified as a reason for companies being risk averse (Cramer, 2020; Rizos et al., 2016). Knowledge internally in the company is an endogenous barrier.

Lack of supply of secondary materials is barrier for a company to implement circular economy (Cramer, 2020; Rizos et al., 2016). For the suppliers, this is an exogenous barrier that can hinder the delivery of secondary materials when requested by the municipality.

Albury (2005) identified that barriers for innovation could be due to short-term budgets, planning horizons, and poor operational risk or change management skills. He also found few rewards or incentives to innovate or adopt innovations and the lack of cultural or organisational arrangements for implementing them in the existing technologies. The public sector tends to have over-reliance on today's high performers as sources of innovation and

greater reluctance to close failing programmes or organisations. The last identified barrier to public innovation is the public culture to act risk-averse, the high delivery pressure and the administrative burden (Albury, 2005, p. 55). The public sector has a significant pressure toward cost reduction, which again puts increased workloads for already heavily pressed professionals and other staff. A continuous flow of smarter innovation is needed to deliver public services (Albury, 2005).

2.4 Theoretical summary and research model

For this thesis, we limit the research to the pre-phase of circular public procurement and focus on the market dialogue in CPP in municipalities and what the drivers and barriers are from a supplier's perspective.

A circular economy requires everyone to contribute to sustainable development, but public institutions should lead due to their purchasing power in public procurement (Kristensen et al., 2020). Collaboration in the pre-tender phase by the public sector and external network of stakeholders can contribute to innovative solutions (Edquist et al., 2015; Kristensen et al., 2020).

Procurers have the power in the procurement processes but can suffer from informational asymmetry. The actors (municipality and suppliers) manoeuvre within regulatory, normative, and cognitive mechanism. By identifying the drivers and barriers the actors (municipality and suppliers) are experiencing, this can provide the municipality with understanding how to reach out to the suppliers that can fulfil their needs. In market dialogues knowledge can be shared and innovative solutions form.

As presented in figure 1, the research model will be used to answer the research question:
What are the drivers and barriers to market dialogue in circular public procurement?

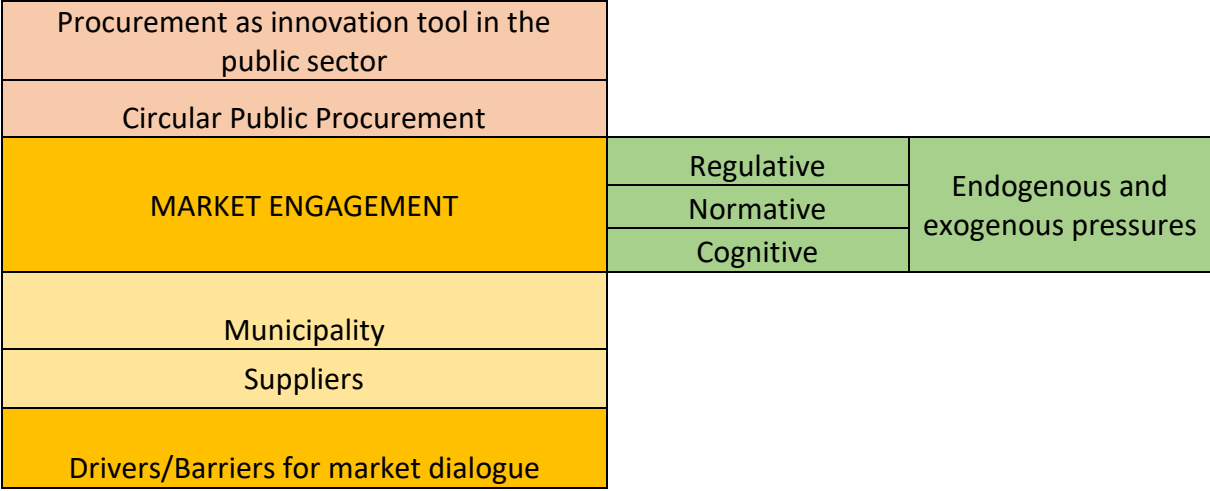


Figure 1. Research model

3.0 Method

This chapter will present the methodology and the approach we will use when answering the research question. Subchapters offer the research approach, design, method, and strategy used in the thesis. The time frame for the thesis will be discussed and which types of data, a method for conducting the analysis and the evaluation of the material gathered. Lastly, the ethics surrounding the thesis is presented.

3.1 Research approach

Depending on the nature of the research topic, the theoretical approach is essential. Saunders et al. (2016, p. 144-150) distinguish between three approaches to theory: deductive, inductive, and abductive. In a deductive approach, one assesses a theory. On the other hand, the inductive approach aims to analyse a phenomenon. The abductive approach is a combination of deductive and inductive approaches and is used to generate new or add existing theories.

The data collection is used to research a phenomenon, identify patterns and themes and locate this into conceptual frameworks before testing the current theory (Saunders et al., 2016, p. 145).

Market dialogue between procurers and actors in the supply chain has been important for the development of circular procurement (Alhola et al., 2018; Cramer, 2020; DfØ, 2021c; European Union. Drivers and barriers that influence and hinder suppliers from entering a CPP market dialogue, and identifying benefits for the municipality and suppliers, can provide signposts for arranging early market dialogue. Therefore, we have chosen an abductive research approach in this thesis. We wish to add to the existing theory on early market dialogue and establish drivers and barriers for participating in circular public procurement processes to specify the appropriate changes.

The research will be based on collected primary- and secondary data before we develop theoretical explanations for the research question.

3.2 Research design

The research design is the plan for executing the research project and explaining the research question (Saunders et al., 2016). The program must contain specifications of which data sources are used and how they will be collected and analysed before ethical issues and limitations are considered (Saunders et al., 2016, p. 164). Exploratory studies are helpful when dealing with an unclear phenomenon, and the benefits mentioned are flexible and adaptable to change. Changing direction can come from collecting data, what and how will be

the types of questions needed for answering the research question (Saunders et al., 2016, p. 174-175).

This research aims to identify suppliers' drivers and barriers to early market dialogue in CPP processes, which is an unclear phenomenon, therefore exploratory research is appropriate.

3.3 Qualitative research method

There are two main methods in research: quantitative and qualitative. The two methods can also be combined to answer the research question. The main difference is that the quantitative method often uses a questionnaire that gives numerical data, and the qualitative method uses interviews that provide more information that is non-numeric. Because qualitative research can be carried out in many ways, and different topics are researched differently, transparency becomes essential when reporting the research results (Johannessen et al., 2011, p. 86).

Qualitative research is often to come close to persons in the targeted phenomenon and acquire as much knowledge as possible and is usually less structured and based on less empirical data than quantitative (Johannessen et al., 2011). In this thesis, we want to come closer to the stakeholders in a CPP process and find the qualitative method that will be best to answer the research question.

All human sees the world with a certain pre-understanding, and through different knowledge and perceptions, we interpret what happens around us. A research strategy is a plan for how to answer the research question. Researchers have diverse expertise and perception, and during the cumulative research process, one is oriented through the research. Based on the selection of what is observed, one is also selective through data analysis. In figure 2, the process from reality to result is described (Wadel, (1991) in Johannessen et al., 2011, p. 43).



Figure 2. Research process by (Johannessen et al., 2011)

When conducting the selective interpretation, the researcher must be conscious that he is the chosen actor and use data not dependent on their preconceptions (Johannessen et al., 2011, p. 43). We have chosen a qualitative method and a case study for this research. Case design

characteristics are that the researcher gathers large amounts of information from a few entities or cases over shorter or longer periods through detailed and comprehensive data collection. Different data sources can be used, but commonly, sources are time- and place-dependent (Yin, 2008; Johannessen et al., 2011, p. 90). The data gathering for this thesis lasted from January to May 2022, giving limited research time. This is recognised as a cross-sectional horizon, where one gets a “snapshot” of a situation for a particular time (Saunders et al., 2016, p. 200). Using case design of two cases, this thesis aims to contribute to provide insights into how the CPP process can be innovated.

3.4 Literature review

A literature search was conducted to determine what has been researched before in the innovation of circular public procurement processes, drivers and barriers and market dialogue. These data will provide earlier research and give references to the sources of the data (Saunders et al., 2016).

Secondary data or second-hand knowledge is existing data and research, e.g., statistics, reports, and publications (Yin, 2018). A general Google search after EU policies, public documents and public procurement from official pages was done in addition to the literature search. Words used was in addition to “EU and circular procurement, “public procurement Norway”, “Paris Agreement”, policy and “procurement regulations”. This gave us information on legislation and EU-requirement for circular public procurement.

Our supervisor provided initial articles, which gave us initial knowledge and references for additional research. Online academic databases like Oria (Nord University) and Google Scholar were used to access more articles. Search words like “circular public procurement”, and “circular economy” gave us environmental perspectives on public procurement. “Public procurement and market dialogue/engagement” and “drivers and barriers of public procurement” gave more understanding of suppliers’ drivers and in public procurement, public procurement, and dialogue in the supply chain between public procurers and suppliers. Circular public procurement is new and needs more research. The search criteria focused on articles and books from the last ten years to ensure we had the latest information, also we used peer viewed articles.

Primary data (notes from interviews, audio/video recordings, completed questionnaires or documents) come from someone who has first-hand knowledge of the event or phenomenon about which information is provided (Johannessen et al., 2011, p. 448). We acquired this

through interviews of the municipality in Bodø and Stavanger and five suppliers that potentially could engage in public procurement.

3.5 Semi-structured interview

We have chosen to do interviews for collecting primary data. This can be done in several ways. Semi-structured interviews are selected for this thesis to allow informants to express themselves more freely. A lot of knowledge is specific to a particular situation, and a semi-structured interview is then suitable since the researcher can tailor each interview to the informants' situation (Johannessen et al., 2011). Informants' experiences and perceptions are best expressed when the informant can help decide what to talk about (Johannessen et al., 2011, p. 144-145). This differs from the structured interview, where both topics and questions have been determined, and there are fixed answer alternatives that the researcher ticks (Johannessen et al., 2011). When using a semi-structured interview, the informant can provide answers using their own words, giving more complementary solutions. The flexibility of asking questions as the interview flow allows the researcher to ask more in-depth questions when the informant provides data that one has not thought about. Johannessen et al. (2011) identify a risk when doing unstructured interviews, this regarding the risk of the interviewer influencing informants' answers. This we found to be true in our semi-structured setting as well. After the first interview we discussed this possibility. We discovered that one question could have been leading the person, this was a follow-up question not written down in advance. We therefore were more careful not influencing the informants.

We followed the recommended guidelines by Johannessen et al. (2011). We both participated in all interviews. We introduced ourselves before informing about the research and what topics we would get into when starting the interview. We highlighted informants' participation in the study, how their data would be used, and how we secured their anonymity. We also informed about the timeframe for the interview and the right to cancel the interview at any time, without any reason.

3.5.1 Preparation and ethics

Our role as researchers is to follow and adhere to ethical rules when doing the survey and ensure a good relationship with our respondents. First, we made a report to the Norwegian Social Science Data Service (NSD) for research approval from the Privacy Ombudsman (Sikt, n.d). The project was approved on January 28th, 2022, see appendix number 5. The personal

data act requires consent, and this must be given voluntary, explicit, and informed. When contacting informants, one should tell them that their participation is voluntary. Informants could request access to the information provided and be given the option of withdrawing at any time without justifying themselves (Johannessen et al., 2011, p. 93-96). Results from the master thesis containing personal data shall be disseminated anonymised, and information collected can only be used to collect data (Johannessen et al., 2011, p. 93-96). We made two different consent forms, one informant from the public sector and the other for private suppliers. Each informant got an information letter and a consent statement in the initial contact via email. Also, we repeated the information regarding their rights at each interview. The respondents could gain insight into the details, be confident in what we would use the data for, that their participation was voluntary, and could withdraw at any time without further explanation. They were informed that we have committed to writing the thesis as a part of the project EduSmart – Education and Knowledge Development for Smart City Governance and Performance Management in the High North, funded by the Research Council of Norway, 2021-2024. This means that after the thesis is delivered, the research paper and the result can be used as an input for the EduSmart project, and the data will be archived as a part of the EduSmart project based on the Nord University guidelines.

3.5.2 Empirical setting

For the empirical setting, two municipalities in Norway have been chosen for this study. Bodø municipality, a recent adopter of market dialogue in CPP and Stavanger municipality which has several years' experience of market dialogue in CPP processes and is therefore a frontrunner.

Bodø municipality

Bodø is a small peripheral municipality in Northern Norway with 50.000 inhabitants. In 2016 Bodø won the Government award for Sustainable Urban Development. (Municipal and district ministry, 2022). One of the reasons Bodø won was the community planning around their work with New City-New Airport (NCNA) where 5400 acres will be reused for urban development with a green, circular, and sustainable focus (Bodø municipality, n.d.). The new district will be a low-emission society with focus areas within: energy sharing and interaction between building and energy system; resource efficiency with a strong focus on reuse and recycling of e.g., materials, waste and building components; local handling and reuse of

soil/rock masses; green and innovative mobility solutions; nature-based solutions for dealing with the climate of the future, to and make society resilient to climate change. In this line, Bodø municipality's Climate and Energy Plan (2019-2031) states that the municipality will be a pioneer in climate and energy work and achieve a goal of reducing direct greenhouse gas emissions by 70 per cent by 2030, compared to 2009 (Bodø municipality, 2019). In 2019 Bodø also won the European Capital of Culture (Bodø 2024, n.d.).

Two previous theoretical literature explore circular public procurement with Bodø municipality as the case study. Dybtsyna et al. (2021) emphasise that CE is an area of focus for the Municipality of Bodø, but when it comes to tenders' price have been and remains the vital award criterion. Furthermore, research by Dybtsyna et al. (2021) and Åvangen (2021) concludes that Bodø Municipality has the potential to cultivate the market dialogue by increasing internal interaction and developing routines for early market dialogue with external suppliers (Åvangen, 2021; Dybtsyna et al., 2021). Bodø municipality has an opportunity to become a circular society and can use public procurement as a valuable tool to close material loops and minimise waste. This creates opportunities to pilot circular solutions for upcoming projects via public procurement, where municipality already recognises its role. In Bodø Municipality's climate and energy plan, they state that through taking its responsibility, purchaser, developer, and owner of infrastructure, construction, and roads, they can play a crucial role in sustainable societal development (Bodø municipality, 2019). Construction and infrastructure account for 42 per cent of Bodø's climate footprint. The plan states that the goal is to reduce greenhouse gas emissions for new construction of buildings by a minimum of 35 per cent compared to the industry norm in 2017 (Bodø municipality, 2019, p. 10).

Norwegian Environment Agency (n.d) issued a support scheme for municipalities and county municipalities that encourage reduction in greenhouse gas emissions and transition towards a low-emission society. Bodø municipality was assigned NOK 3 million to finance their transition to a low-emission society by use of circular procurement. Bodø municipality will be a driving force in reducing greenhouse gas emissions related to construction (State Administrator, 2020). This is an important initiative for the environment and has become a focus area for municipalities due to the incentive given by the government.

Stavanger Municipality

Stavanger municipality has 130.000 inhabitants, and their economy is pre-dominantly based on the oil and gas sector. Their past has allowed the city and its actors to gain competences

and skills, which now will transform the city and position it as the new energy capital (Stavanger Municipality, 2022).

Stavanger's climate and environmental plan aims to reduce direct emissions of greenhouse gases from building and construction sites by 50% in 2030, based on the 2015 level, and by 100% by 2040. Reducing greenhouse gas emissions is a challenge that requires extensive measures in the energy sector and waste management. Through dialogue and cooperation, a strategy is to be developed and environmental award criterion used for purchasing tenders (Stavanger Municipality, 2018a).

Measures for administrative cooperation and coordination from 2018 includes assessment of projects in collaboration with the purchasing department for innovative procurement and initiatives for a formalized climate partnership with Oslo, Bergen, Trondheim to ensure exchange of experience and rapid adoption of effective climate measures (Stavanger Municipality, 2018a).

Prioritization of sustainable services, to an extent and with a quality that contributes to maintaining the well-being of citizens, is a long-term effort to make Stavanger a better municipality. The UN's sustainability goals are set as a basis in all parts of the municipality's activities. Stavanger can become one of Europe's 100 climate-neutral leading cities and a pioneer in climate neutrality in Europe if they reach their goals in the environmental plan (Stavanger Municipality, 2021).

Stavanger wants to move away from a linear economy and over to a circular economy, whereas few resources as possible are lost. They believe circular economy can facilitate the development of new markets and business models (Stavanger Municipality, 2018b). In the long term the petroleum industry will gradually be phased out and Stavanger wants to explore the opportunities within circular economy and bioeconomy for prospects. They believe physical measures alone is not sufficient to achieve the environmental and climate goals. Changing attitudes by making it easier to choose less harmful solutions for the environment is also necessary. Circular solutions for buildings and increased use of renewable energy sources for the city will be gained through knowledge and competence about climate and environmental solutions developed both internally and in collaboration with external competence environments. Stavanger will work to create opportunities for business

development by being an attractive city for investments and leading in expertise in climate and environmental solutions (Stavanger Municipality, 2018b).

3.5.3 Selection of informants

This thesis intends to obtain in-depth knowledge from employees who work with public procurement from municipalities and suppliers in the private sector using a qualitative method. This thesis looks at barriers and drivers for early market dialogue and the CPP process. As interviews were our source for data collection, we needed to ensure that our informants had a good representation of knowledge that could help answer our research question.

We decided interviewing employees from Bodø municipality, Stavanger municipality, and a selection of their potential suppliers. For the municipalities, the selection criteria were that they worked in the purchasing department or had responsibility for early market dialogue with private suppliers. The suppliers' representatives hold a position in the company where they make decisions and work with sales towards public actors.

Bodø municipality are in the initial stages of establishing strategies for CPP and use of market dialogue as an innovation tool for their purchasing process. They have experience with market dialogue in recent years, but its use varies from each department. Stavanger municipality was selected because of their 12-year experience with market dialogue and being a part of the National Program for supplier Development (LUP) where they developed a handbook for planning and implementing early market dialogue in public procurement (LUP, n.d.-a, n.d.-b).

A selection of suppliers ranging from small, medium, and large-sized companies were interviewed. They all had experience with market dialogue through the public sector.

The selection of informants from different departments in two different municipalities as well as suppliers from different companies, this in different sizes, were chosen to give a multidimensional snapshot of the drivers and barriers stakeholders face before a market dialogue in the pre-tender phase of CPP. This gives a triangulation of data that increase the validation of the results given from the analysis.

Informants are presented in table 3. Their job titles or departments are not used to ensure informants' anonymity. The informants from the public sector belong to departments working with environmental issues and procurement and will have no further description. A group

interview was conducted with Stavanger municipality (PubS₁, PubS₂, PubS₃) and two individual were done from different departments within Bodø municipality (PuB₁, PuB₂). Five interviews were performed with private suppliers, two of which where group interviews and three with single representatives. One company is operating in Stavanger, the rest in Bodø. All companies have been supplying their municipalities. Their turnovers have been stated in approximate amounts and their operating experience have also been altered in anonymity purposes. Informants are listed in the conducted order.

Supplier PrivB₁ is working as a controller and PrivB₂ as a financial manager leader. They are representing a medium-sized company who is operating in Bodø as over NOK 500 million in turnover. The company has over 50 years of experience and have a good and long experience with supplying for the municipality of Bodø.

Supplier PrivB₂ are represented by the CEO and are working in a large-sized company with NOK 2 billion in turnover. The company has subsidiaries who are operating all over Norway. The interviewed company are operating from Trøndelag to Hammerfest.

The marketing manager is represented by supplier PrivB₄. The company was founded more than 60 years and have around NOK 300 million in turnover per year. They are identified as a medium-sized company and are operating from Salten to Bodø.

Supplier PrivB₅ are represented by the CEO are working in a small-sized company and have around NOK 50 million in revenues per year. They have over 20 years of experience. The company operating in Bodø-Fauske region.

Supplier PrivS₁₊₂, represented with PrivS₁ - who is the calculation manager and PrivS₂ - who is working with engineering and tender management. company. They have mother- and daughter companies in all regions of Norway. The company in question are operating surrounding the areas of Stavanger. The mother company has over NOK 10 billion in turnover per year and is identified as a large-sized company.

Interviews	Sector	Location	Type of interview	Informant	Size
1	Public sector – Municipality	Stavanger	Group	PubS ₁	130.000 inhabitants
				PubS ₂	
				PubS ₃	
2	Public sector - Municipality	Bodø	Single	PuB ₁	50.000 inhabitants
			Single	PuB ₂	
3	Private supplier	Bodø	Group	PrivB ₁	Medium sized
				PrivB ₂	
4	Private supplier	Bodø	Single	PrivB ₃	Large-sized
5	Private supplier	Bodø	Single	PrivB ₄	Medium-sized
6	Private supplier	Bodø	Single	PrivB ₅	Small-sized
7	Private supplier	Stavanger	Group	PrivS ₁	Large-sized
				PrivS ₂	
Total number informants:				12 (5 Public / 7 private)	

Table 3 Informants

3.5.4 Conducting interviews and ensuring confidentiality

The initial meeting with Bodø municipality representatives was done as a part of the obligatory term paper mentioned in 2.0 were conducted on September 21st, 2021, while the second was on January 18th. 22. Communicating through e-mail and telephone, the interviews were agreed upon. Informants were given four time slots to choose from and the possibility of selecting between synchronous electronic interviews using Teams, Zoom or physical meetings. Synchronous interviews are characterised by interviewing in real-time (Saunders et al., 2016).

The semi-structured interviews were done between in March and April 2022.

Due to challenges regarding the pandemic, time, informants being in other cities, and travelling is expensive; the best option was to do most interviews via Teams during working hours. A disadvantage Johannessen et al. (2011) mention is the danger of interruptions. Benefits of informants being in a familiar and safe environment can create a relaxing atmosphere (Saunders et al., 2016). Informants could speak freely about their experiences. Some of the informants from the public sector had been working with the circular economy and early market dialogue and others not. They had exceptional knowledge, which helped answer research questions. One public informant had no experience with CE and only one experience with early market dialogue, this due to Bodø Municipality being in their starting phase regarding CE and early market dialogue. In qualitative interviews, one purpose is to

come close to the informants and their experience with the themes in question, so it was essential for us to give them time to reflect on providing helpful information. A semi-structured interview guide was followed, this with follow-up questions when needed. Often, we got questions answered when asking one, especially when interviewing informants with knowledge. This made the conversation have a natural flow.

Documentation of the interview can be done in several ways. The most common are audio recordings, audio and video recordings or notes, which is what we used. “Trying to remember what is being said during interviews is impossible” (Johannessen et al., 2011, p. 154). We wanted to give a complete transcript of the interviews and deliberate on questions given. Saunders et al. (2016) recommend that two persons do the interview together and divide the tasks. One of us asked questions and had control over which questions were asked while the other took notes and had to control over the recording process. The web-form “Nettskjema” app was used to record. This automatically sends the audio file to a two-step verification protected website. The transcription process was easy since most were written down during interviews. We transcribed all recordings into written data because we feared losing critical points informants gave. Since interviews were done in Norwegian, we needed to translate the text into English. When translating, one must ensure that informants’ meanings are reproduced authentically (Saunders et al., 2016). The interview with Stavanger municipality and one of the private suppliers was group interviews with three and two informants respectively. This demanded more significant effort when doing the transcription. Having audio recording in this situation helped get the full extent of data given by the informants. Transcription was anonymised and stored in the two-step verification protected OneDrive facilitated by North University. After each interview, we discussed whether we got all information we wanted, and some changes were made to the interview guide before the next.

The tool Nvivo was used to categorise and analyse the data collected. Twelve overall nodes classifications were created to organise the content of the data and make comparisons between municipalities versus the viewpoint of private suppliers. After the interview was transcribed in was uploaded to Nvivo and categorized by municipality and supplier and the individual informants. Once that was done each interview was analysed and answers related to drivers, barriers, circular economy, institutional pressure, knowledge, organisational were connected to the topics which gave a good overview in the end of the result.

Confidentiality is an important aspect, and this can be challenging to fully meet when writing about a small municipality with few informants with unique roles. We anonymised Informants from the public sector in Bodø municipality PubB_{1,2} and Stavanger municipality PubS_{1,2,3}, private suppliers from Bodø PrivB_{1,2,3,4} and Stavanger PrivS_{1,2}. An overview of informants can be seen in table 3. Other details regarding their role, other than the private supplier or municipality employee, were not used. The topic of this thesis is not controversial, but it is specific, being about public procurement in a small municipality. We acknowledged that we potentially could get into areas that could be experienced as uncomfortable for respondents for various reasons. E.g., if we question how strategies come to life and how they are executed or lack communication between departments. Therefore, we were cautious with the questions. We believe we have given correct and precise rendering of respondents' information statements and have done our best to treat the data with caution for consideration of confidentiality.

Consequently, the respondents participating in our survey and thesis are considered low risk. As mentioned, our topic is not controversial. Our interview guides can touch on sensitive themes such as implementing strategies created in a small municipality. It can potentially affect relationships in the workplace of the respondents. We used this consideration when writing the questionnaires, doing the interviews, and rendering the information provided in this thesis.

3.6 Research quality

In the next section we will elaborate on the research quality. Validity, reliability and transferability are criteria that can evaluate whether the quality of research is good (Yin, 2018)

3.6.1 Validity

“Validity refers to the appropriateness of measures used, the accuracy of the analysis of the results and the generalisability of the findings”(Saunders et al., 2016, p. 202).

It is recommended to conduct additional interviews until data saturation is reached (Saunders et al., 2016). We conducted in total seven interviews within total informants. This number and

using triangulation when choosing informants with different experience makes us confident that creates higher validity.

Early on, we saw different perceptions of drivers and barriers to early market dialogue and their knowledge of CE. Therefore, we divided suppliers into small, medium, and large to see if we reached information saturation more easily. The question of whether Stavanger municipality is the best to use as a reference is present since we did not examine more municipalities. Early market dialogue in the procurement process is new for Bodø municipality and as new as a tool for circular public procurement across the EU. Literature review revealed that research of innovation in the circular public procurement process and early market dialogue have been limited.

3.6.2 Reliability

Reliability is related to the accuracy of the survey data, what data is used, how they are collected and how they are processed (Johannessen et al., 2011). This can be evaluated in several ways. One way is to evaluate the examination several times or for several researchers to investigate the same phenomenon. If the results are the same, it indicates high reliability (Johannessen et al., 2011). We were both present during all interviews, except for one. Here the person not participating could overgo the recording after. This made us able to agree on the data provided by the informants. We took notes during the interview and used audio recordings, all of which was done to increase our research's reliability and validity. The informants were via email sent the transcribed notes for reading and allowing commenting. Using a case study with a cross-sectional horizon, we got a “snapshot” over a small part of market dialogue in circular public procurement process in municipalities in Northern and West of Norway. We gathered information from a few informants over a short period. One cannot be one hundred per cent sure that we have asked the questions that illuminate the research question in a complementary way. Moreover, after reading the literature, we have picked out the information we believe is relevant to answering the research question. This means that even though we have done our best to give this high research reliability, one cannot overlook that the research can be considered subjective.

3.6.3 Transferability

The question of transferability entails whether the results from this thesis can be transferred to other parts of public procurement (Johannessen et al., 2011, p. 247).

The thesis aims to develop an understanding of the phenomenon in question. The interpretation of data found forms the basis of whether it can be transferred to other parts of public procurement. Through the discussion of theory and primary data from internal stakeholders in public procurement, including two municipalities and their suppliers, we have linked the transferability to other stakeholders working with public procurement. The purpose is that our findings can be used in diverse parts of public procurement. We have interviewed suppliers in the construction industry only, but the phenomenon of circular economy entails all parts of what the municipality procures. Circular procurement is found to be one way of achieving a circular economy due to the excellent purchasing power of the public sector. Based on our choice of theme, our research question and our findings, we feel the transferability is high.

Municipalities have committed to achieving sustainable goals and will achieve them by among other things, the transition to circular public procurement, where market dialogue is an essential tool. CPP is in the early stages, and uncovering drivers and barriers to engaging in the market dialogue between supplier and public procurer will contribute the transition of this innovative process. In the next chapter, we present our empirical findings.

4.0 Empirical

This part of the thesis presents the empirical findings for early market dialogue in circular public procurement process, where a selection of the findings from interviews that answers the research question is presented.

RQ: What are the drivers and barriers to market dialogue in circular public procurement?

The research will identify suppliers and municipalities' drivers and barriers for early market dialogue in the circular public procurement process.

- First the municipality perspective is presented
- Then, from the supplier perspective

4.1 Introductory note

The thesis will establish drivers and barriers for market dialogue to be able to reduce information asymmetry between municipalities and their respective suppliers, which can benefit the public procurers as they are arranging (i.e., innovating) market dialogues and their circular public procurement processes, especially in the pre- tender phase. However, we first provide some introductory notes which provide some general information about how the municipalities see the role of CPP and point out some surrounding issues.

The empirical findings for early market dialogue in CPP have shown that the two phenomena i.e., market dialogue and CPP are co-dependent. In this section, we will present findings that are indirectly linked to drivers and barriers for market dialogue.

The social obligation for circular economy can be a driver for company branding (Kirchherr et al., 2018). “Reasons we have a CE focus is that we are responsible for the environment and will leave this to the next generation, also, graduates will not work at a company that does not care about the environment” informant PrivB₃. The statement identifies endogenous pressures regarding the future, with concern for the environment and recruitment of employees.

Bodø municipality was assigned NOK 3 million to finance their transition to a low-emission society by use of circular procurement and NOK 1,5 million was budgeted to hiring a project coordinator to systematically work with climate- and environment-friendly building and construction sites in procurement

“The work on a climate-friendly procurement project that spans over the entire municipality has started. This is about making us a more sustainable consumer in our procurement and use

of the agreements we have” Informant PubB₁. Hence, the municipality points out they do want to be an active actor, as was pointed out above.

Innovating the procurement process and implementing circularity throughout the organisation will be challenging until a strategy and streamlined process is in place. “Early interaction and advance communication are among the most promising processes for innovation” (Edquist et al., 2015, p. 53).

Informant PubB₂ also points out: “We have some internal communication challenges we disseminate information regarding the climate budget and plan and how we collaborate with it. There are many in the municipality with particularly good expertise in circular procurement, but who do not necessarily talk with the others so that they go in the same direction. It is a large organization” This lack of information sharing can set the municipality back.

Procurement can be time consuming and demand human resources. It is mentioned later in the interview that several smaller contracts are challenging because of the additional administration. Seventy per cent of all municipalities in Norway are a part of a procurement collaboration in their region. Both Bodø and Stavanger municipality are a part of one (Oslo Economics, 2021). Informant PubB₂ shared: “Bodø Municipality is the host municipality for inter-municipal procurement cooperation with twenty other municipalities for which we implement agreements. We have a large portfolio in Bodø Municipality on agreements and are struggling to follow up on contracts. This procurement cooperation is therefore beneficial for us.”

Stavanger municipality are also a part of a collaboration together with four other municipalities in the Stavanger region (Oslo Economics, 2021). They know the market well because of their long experience of market dialogue. The municipality has found a way of cooperating with other municipalities through a joint purchasing body which relieve employees in the purchasing department.

A potential for improving cost efficiency, finding new revenue streams, and gaining profit is mentioned by (Tura et al., 2019), as endogenous drivers for implementing CE in businesses. We asked the informants if they see CE as something that can add more capital to the company or reduce costs. PrivB₁₊₂, PrivB₄ or PrivB₅ cannot see this opportunity, but PrivB₃

gave an example of reusing masses from one project to another and what would have been an expense for the company become a profit. The municipalities prohibition for dumping masses on landfills made them arrange a plot for containing the masses, which led to them seeing this opportunity to increase income. In turn, PrivS₁₊₂ shares that they see an opportunity to increase their competitiveness because switching to more circularity opens the opportunity to deliver lower prices in tenders.

4.2 Drivers and Barriers for Market Dialogue in CPP

In public procurement, the market dialogue between the municipality and potential suppliers is an important part of finding the best circular solutions for municipality projects. Therefore, data collection from municipality and suppliers has a key part of portraying the whole picture of the drivers and barriers for market dialogue. First the findings from the municipalities will be presented followed by the data from the suppliers.

4.2.1 Municipality perspective

The municipality have different types of drivers for arranging market dialogue.

It was important to first understand the extent of using the market dialogue as a part of the procurement process in Bodø and Stavanger municipality; “While working here, we have had one large conference for building and construction and dialogues regarding electric trucks, furniture, and renovation. Now we also started to do market dialogue routinely when we require zero-emission transport because we know so little about what we can ask for”

Informant PubB₂. In contrast, Stavanger municipality has a longer experience doing dialogues. “We have been actively working with market dialogue since 2010, it is rarer that we do not have a dialogue with the market now. We are a part of the supplier development program and have done this job for years - Informant PubS₁.

We first turn to drivers. Strategy and culture implemented in the organisation is important for CE development (Ghisellini et al., 2016; Tura et al., 2019). When asked how the municipality conducted the market dialogue as a key part of the procurement process in the municipality, informant PubS₂ shared; “This must be anchored through the policy in the municipality”. The informant makes it clear that the process for conducting market dialogue needs to be politically enforced and needs acceptance throughout the organisation. For the municipality, the driver for arranging the market dialogue is a strong normative endogenous driver

Directing laws and EU regulations create a demand for new solutions (Tura et al., 2019). During our interviews with representatives from Bodø Municipality and their suppliers, it became evident that market dialogue as a tool in circular public procurement is at an early stage. “I believe that increased demands for circular solutions mean that there is a need for more market dialogue” - Informant PubB₂. Stavanger municipality makes sure to balance the number of market dialogues they invite the same supplier to attend, so that it doesn't become too time consuming. When we asked how Stavanger transitioned from linear to circular procurement informant PUBS₁ explained that it was an internal process of change, but since 2015 it has been a part of their routine. Having a forward-thinking purchasing manager with clear instructions was a crucial factor. After guiding employees through they have also become good ambassadors of CPP and market dialogue. This internal process of change due to changed demands is a normative exogenous driver for arranging market dialogue.

The municipalities use CPP to contribute to “close energy and material loops within supply chains, whilst minimising and avoiding negative environmental impacts and waste creation across their whole life cycle” (European Commission, 2017, p. 5). Bodø municipality recognise the importance of market dialogue in the CPP process and informant PubB₂ shared: “This is about making the municipality a more sustainable consumer in our procurements”. The element of making the municipality a sustainable consumer is a normative driver for arranging market dialogue.

According to Govindan and Hasanagic (2018), a shift toward a circular society can create job opportunities. When informant PubB₂ were asked if Bodø municipality see the potential for creating more jobs when transitioning to circular economy the answer was clear: “Yes! We need inspectors, we need people who can repair things. There are opportunities there, just keeping things in circulation requires resources.” This coincides with the informants from Stavanger municipality, informant PubS₃ share; “Certainly, among other things for the implementation of the life cycle analysis of products and control mechanisms for reuse of material etc.” The potential of creating job opportunities is an endogenous normative driver for arranging market dialogue.

When discussing drivers for companies Tura et al. (2019), also mentioned economic drivers. However, these could also be relevant for municipalities; especially in terms of cost efficiency. Collaboration in the supply chain is important for development circular economy

(Alhola et al., 2018; Vargo & Lusch, 2004). Informant PubB₂ were asked if they see circular economy as something that can lower costs for Bodø municipality. “Certainly, there are many financial savings to be made by implementing the circular economy.” The municipality here recognises the potential of cost efficiency. “ We do not experience that implementing circular solutions is time consuming, we save time, money and become more efficient” PubS₂. Informant PubS₁ continue by saying that due to the market dialogue they get better descriptions for the tender, and better solutions. They experience that as a result they face less errors, and complaints.

When asked if new solutions had come out of collaboration in market dialogue, informant PubS₁ share; “Better needs descriptions and then better solutions. We also experience less complaints because of the clarifications.” Finding new solutions and reduce complaints can be both normative endogenous and normative exogenous drivers for arranging market dialogue. This because the municipality has exogenous pressures to reach societal goals and endogenous because they aim to save money where possible. Better descriptions that reduce errors and complaints is an endogenous driver for arranging market dialogue.

Information and knowledge shared between actors who cooperate in the supply chain can also increase innovative solutions (Ahloa et al.,2018) Sharing of information knowledge in the market dialogue was discussed with the informants. “Dialogue is the key to a lot of information and knowledge”- Informant PubS₂. Through interviews with suppliers, it is the large national contractors that have the most knowledge and experience of circularity. We asked the municipality what the reason for that is and they answered: “It is probably a bit about the size, that the large companies can develop their competence to a greater extent than the small ones have. We depend on suppliers to have knowledge of what we demand. Sometimes they have more knowledge than us and provide circular solutions we did not think of” informant PubB₂. For municipalities to gain knowledge from suppliers the market dialogue is especially important. “a problem is that the flow of materials in Bodø municipality has not been mapped. We are not big enough to provide sufficient access to circular materials and from internal projects. We must work with the county and private actors to get this to work PuB₂. As the informant shares, there is not a structure in place for circular solutions in the building sector when it comes to building materials. The lack of information to solve this

problem could be attained through market dialogue and is thus a normative endogenous driver.

Hence, knowing the market have different knowledge regarding circular solutions, sharing of information and knowledge in a market dialogue is important. This is an endogenous normative driver for the municipality to arrange market dialogue. Informant PubB₂ say that “local suppliers do not have enough expertise to choose the smartest solutions for us. “We have received feedback that the market is not there yet, and that they want us to set up the solutions we want for them, and I think that is a move you can make to include more small businesses because they often do things as we wish.” The large national players have knowledge to a greater extent than the smaller local ones.” The informant here confirms that they depend on knowledge from the suppliers about the possibilities available in the market. The informant continues and explain that sometimes small companies are circular in their solutions due to economic reasons and just not aware that what they are doing is actual circular. The suppliers having different skills and knowledge is a strong endogenous driver for arranging market dialogue.

Clarification of the tender before it published is an important driver for the municipality, but also for the supplier it gives the opportunity to inform about what they can offer. This is a shared understanding by both Stavanger and Bodø municipality. “It gives suppliers the opportunity to talk about what the market can offer. If we are unsure if we can demand something, or if it is too ambitious, we have market a dialogue” -PubB₂. The uncertainty regarding the markets ability to provide solutions that the municipality requires can thus be expressed by the suppliers in a market dialogue and is a normative endogenous driver for the municipality to arrange market dialogue.

Ecosystem- building encourages innovative partnerships and is an important part of circular economy (European Commission, 2017). Informants from Stavanger municipality shares that a market dialogue creates a platform for network connectivity that may accelerate sustainable business growth which has high societal value. When asked for examples of how market dialogue could contribute, informant PubS₁ said: “We have arranged collaboration between several actors in innovation partnership through extensive collaboration (workshops) with sixty suppliers who worked together. The goal was for suppliers to find each other. We have had workshops where the client design team worked together to develop something together

with users and different suppliers. Creating innovative partnerships creates a normative endogenous driver for municipalities to arrange market dialogues.

We will now focus on barriers for arranging early market dialogue.

Bodø municipality are lacking a strategy that provides streamline process internally. This is now about to be changed. “The first thing we will do is to put in place a procurement strategy. This may be the most important thing we will do. This will provide guidelines for the entire organisation for how we will conduct procurements” PubB₂. The informant continues to say: “It is still the case that each departments work a little on their own mountain top”. This coincides with what Tura et al. (2019) have identified as a problem of “silo thinking” as one of the organisational barriers for companies, but we discover it can also be to some degree applicable to municipalities. Furthermore, this goes hand in hand with what the informant of another Bodø-municipality department shared; “A structure for circular economy is not yet in place and market dialogue is not a standardised thing PubB₁. When Informant PubB₂ was asked how the market dialogue was organised in Bodø municipality said: “each individual project manager is responsible for it and also decides whether to carry out market dialogue.”. Today it is down to each project manager and will also decides whether to conduct market dialogue.”- PubB₂. The fact that the municipality have not got a strategy for circular economy is an endogenous normative and regulative barrier towards arranging early market dialogue.

The municipality can be risk-averse towards implementing CE due to time and money (Cramer, 2020). Believing that implementing CE takes time and money for the municipality can be endogenous normative barrier towards having a market dialogue. When asked what barriers they experience for arranging market dialogue in a CPP, informant PubB₂ answered: “In the beginning there is a hill to climb which can often be an obstacle to overcome, it's time and capacity”. Stavanger do not report experiencing this barrier.

On the other hand, both suppliers and municipalities can be risk-averse due to lack of knowledge (Cramer, 2020). We asked both municipalities whether they have knowledge of circular solutions. Informant PubS₁₊₂₊₃ all said that Stavanger municipality had good knowledge regarding circular solutions. Informant PubB₁ shares; “What is difficult is that the competence of CE is still being formed. Rolling out a finished concept called circular economy is something we have not tried yet. When we decide to do it, we take on a risk that we do not yet have an overview of”. Informant PubB₂ explains that as an organisation they do

not have enough knowledge about circular solutions, but that some employees have knowledge that may not be disseminated to other parts of the organization. “We have a very nice climate and energy plan, but circular economy is not mentioned in words” PubB₂.

Bodø municipality was asked if they had the knowledge needed and informant PubB₁ answered: “What is difficult is that the competence for CE is still being formed. We take on a risk that we do not yet have an overview of, and we are dependent on the suppliers having knowledge. Municipalities can have an endogenous barrier towards arranging market dialogue due to their limited knowledge.

“Many of the problems we are facing now are because we have had it a little too easy. We have had a little too much money and it has been easy to just have a raw consumption of resources”. -

The informant continues saying that they experience it cheaper to buy new and when demolish something and want to look at what to reuse, it is expensive because it needs to be prepared. The informant points to internal guidelines that place restrictions on reuse and circularity as a barrier. A part of the process to become more circular is to remove regulative barriers that hinder the use of circular solutions. In this case the driver of cost saving is not recognised and loses its value and becomes a barrier for the market dialogue.

4.3 Drivers and barriers suppliers’ perspective

Understanding the underlying drivers and barriers faced by suppliers when they consider entering an early market dialogue in CPP, can reduce asymmetry of information and provide deeper understanding for municipalities when conducting the dialogues. When interviewing it was evident that drivers and barriers for early market dialogue in CPP had a lot to do with the corresponding drivers and barriers for circular economy.

4.3.1 Supplier perspective

Drivers

In this part we look whether there are endogenous or exogenous pressure mechanisms such as regulative, normative, or cognitive pressures that the suppliers consider as drivers for participating in early market dialogue in CPP processes. All informants found value in having early marked dialogue, although for different reasons. It was also evident that the suppliers had different experience regarding circular solutions and that this influenced their drivers for attending early market dialogue.

Strategy and culture for CE principles implemented in the organisation is important for the development of CE (Ghisellini et al., 2016; Tura et al., 2019), these are endogenous drivers within the company, but the pressure to reduce environmental impacts is exogenous and is manifested by increased focus in society. When discussing this with informants it was evident that the large-sized companies had strong environmental goals and strategies implemented in their companies. Both informants employed in large companies want to be market leaders in the field of circular economy and environment. Informant PrivB₃ shares; “We want to be a market leader when thinking circular economy and sustainability. The goals in the company are high.” “We have pressure internally; we want to be more circular. We know it is coming, then it is good to have things in order”. The company goal of wanting to be a market leader who is prepared for the future, is a normative endogenous driver towards participating in market dialogues. This due to the internal value of being informed early on about future happenings and expectations. For the large suppliers there will be less pressure when regulations come. “What others perceive as pressure can be our greatest advantages when implementation comes” informant PrivB₃. The internal commitment by the companies has been adopted due to society’s increased focus on climate change. Climate change is an exogenous and endogenous driver that can be cognitive, normative, and regulative. Cognitive endogenous because of inner drive of the company due to the cultural support in society towards being circular, normative exogenous because it is a social obligation and regulative exogenous because increasingly stringent laws and regulations enforcing the focus towards being environmentally friendly.

Moving towards more circularity companies have the potential to get extra jobs (Govindan & Hasanagic, 2018). Participating in a market dialogue can lead to supply of knowledge regarding circular solutions and or cooperation with other companies, which can lead to the company potentially increasing its ability to deliver more goods or additional services. This ability is an endogenous normative driver towards participating in a market dialogue due to the potential that these services could provide extra income. When asking informants if they saw this potential, the large-sized companies confirmed by saying; “Yes, there are many things that must be considered, for example when reusing materials. There one must be able to vouch for the quality of things.” - Informant PrivS₂. The job of verifying materials for reuse needs to be done and both large companies see that increasing the circularity will need employees with this skill set and potentially lead new jobs. By participating in a market

dialogue, there is a potential opportunity for market collaboration, where knowledge can be shared.

Cost savings and developing new service on one hand can give potential income to companies (Tura et al., 2019), and on the other it has the potential for differentiation and strengthening the company brand (Tura et al., 2019). Strengthening company brand are endogenous normative drivers who all informants agree upon. The large-sized informant PrivB₃ shares: “Absolutely, circular solutions as part of a larger environmental package, which includes waste reduction and energy use especially”. The big sized companies identified that by implementing circular economy could add more capital to the company and reduce cost. Informant PrivS₂ recognised that it can increase their competitiveness since they can deliver lower prices in tenders. For the medium companies, they have not seen this possibility and cannot see whether this can happen.

When asked if the market dialogue had led to new innovations or cost savings for either public actors or them as supplier due to solutions presented in the market dialogue: Informant PrivS₁ confirms that they believed that the municipality have saved money, and they had provided solutions that can potentially be sold to others when required. The case in question was a design-building competition where they interacted with the municipality. A cost-ceiling was set, and the suppliers had to suggest optimal solutions. Every supplier involved had to think what was best for the project rather than what was best for the company. The risk was therefore put on the suppliers. “The municipality got other solutions than they had thought of themselves. This is a good project that our company are proud of. Money was saved too”- Informant PrivS₁.

The collaboration in the market dialogue, and throughout the project led this informant to acquire knowledge through participating with others in the design-building cooperation. Collaboration is known for its possibilities to achieve greater results for the end user (Alhola et al., 2018; Vargo & Lusch, 2004), and market dialogue and cooperation between actors in the supply chain recognised it as important for developing the circular economy (Alhola et al., 2018). The possibility to achieve a good collaboration is also a normative endogenous driver for suppliers towards participating in market dialogue.

Quality of contract is a result from negotiation, e.g., when in market dialogue (Sönnichsen & Clement, 2019). When asking the informants why they participated in early market dialogue, an endogenous normative driver regarding the supplier's motivation for participating was revealed. All informants that had experienced early market dialogue saw the potential to, in the market dialogue influence the choices the municipality took. When asked what is your company's overall goal in participating in early market dialogue? Two informants share: "Position us so that we can participate in the competition with the knowledge and areas we have possibility to be involved in."- Informant PrivB₁:

The other informant said "We can ask questions about the requirements that are set. We like to be early in the process to be able to come with wishes" - Informant PrivS₂. Here one can see that informants feel they can benefit from early market dialogue. Informant PrivB₂ mentions that they want to hear what Bodø municipality says and influence the choices the municipality make. "We want them to divide contracts. Also, we can influence the time". This informant shares a concrete experience. "One-time Bodø municipality had set a progress plan that was not achievable, after discussing this in the market dialogue, they set a longer construction time".

Tura et al. (2019) has identified that directing laws and EU regulations create a demand for novel solutions. Informants elaborated on these exogenous regulative drivers for participating in market dialogue. Informants PrivB₃ and PrivS₁ who are both large sized companies elaborated when asked if the municipality's requirement specifications made them make circular financial investments or required new knowledge based on pressure. PrivS₁: "Yes, environment means more and more. Greenhouse gas reduction for example here we had an aha experience. We realised that the 40% were not good enough. That is how we learn; we relate to what the municipalities ask for. Informant PrivB₃ shares; "A new law is coming, now we cannot trade with countries that engage in repression (such as China). This will be challenging when it comes to materials and is a driver for turning us over to CE".

Informant PrivB₃ also believed that in the future there will be new technical regulation on reuse of material. "We are certain that the requirements will come". E.g., when a conversion or restoration of a building. Today, when tearing buildings down, materials are thrown away, but in the future the materials must be considered and evaluated whether it can be used further or not. "Since we have started with CE, we know what we can do, and be prepared. We have knowledge of this in advance. PrivB₃". The large suppliers know that regulation is coming

and are participating in the market dialogue because of the knowledge about the future regulative pressure. In the market dialogue they obtain information from the municipality and thus gain an increased understanding of how they need to enforce the regulatory requirements. However, although the informants understand that new regulations will come, they have not experienced that the municipality have demanded circular solutions to this time. One informant acknowledged that Bodø municipality have announced that there will be increased requirements, especially when talking about building certifications where environmental issues like CE can be considered. “We feel little pressure from anyone, although we see that it needs to be a part of the future. We are sure that the requirements will come. Then we know more what we can do and are prepared for it” Informant PrivB₃. So interestingly, the informants from companies are quite able to recognize exogenous regulatory pressures, yet these do not seem to be coming from the municipalities at all in any shape.

Barriers

Policies can accelerate and potentially be drivers for the transition towards CE (Hartley et al., 2020). This means that the municipality should be in forefront and demand CE solutions where possible also perhaps by exerting some regulatory pressures that demand circular solutions— however, as mentioned above this could also be missing, and thus do not represent a driver. When asked if informants experienced regulative pressure from their municipality and/or EU to become more circular, informant PrivB₃ shared that they had not experienced an outside pressure, only that they needed to deliver the lowest price.

The small- and medium companies all recognise high upfront investment cost being a strong normative barrier for implementing CE strategies and acquiring knowledge. Cramer (2020) have identified that companies can be risk-averse toward implementing circular product chains due to cost, and companies can also be risk-averse due to a lack of knowledge (Cramer, 2020; Rizos et al., 2016) Therefore, we asked our informants if they had knowledge of CE solutions and whether the public sector was requesting this. Informants from the medium-sized companies share that they leave the risk to the big companies. “We cannot afford to be at the front” Informant PrivB₄. Which corresponds to the statement given by informant PrivB₁; “We will not develop knowledge regarding CE until this is requested. The cost is too high”. Being risk-averse due to cost is also confirmed by the small-size company. Surprisingly, this lack of regulatory pressures from municipalities can represent a barrier.

The two large sized companies had significantly more expertise than the smaller ones and shared that the company is knowledgeable about CE solutions; Informant PrivB₃ shares: “Yes, we have a lot of knowledge regarding circular solutions”. On the other hand, the informant said that this was not requested by any municipality. Informant PrivS₁ confirmed this also being the case for them: “I will say that our company has this competence. We know we have better expertise than Stavanger municipality on this, and they demand little of it”. Informant PrivB₁ shared that they could hire consultants for this if the municipality required it. All informants but PrivB₄ and PrivB₅ thus have knowledge and/or can acquire it but are waiting for this to be requested from their respectively municipalities. The fear of sitting with competence and knowledge that the market will not demand because it potentially could be a waste of monetary resources, appears to have great significance for the smaller companies than for the large. The fear of upfront cost and, lack of knowledge or sitting with competence not required by the market represents a strong normative endogenous barrier towards sharing their thoughts and ideas during the market dialogue in CPP for PrivB₄ and PrivB₅, and less barrier for PrivB₁₊₂ Since they have the capacity to obtain a consultant when needed.

Solving technological barriers for circular economic solutions for material flows and compatible technology, are identified as necessary for the development of CE (Tura et al., 2019). Lack of technology can relate to a particular company not having the technology, which is endogenous barrier, or that the technical solution does not exist at all which is an exogenous barrier. PrivB₁₊₂, PrivB₄ and PrivB₅ said their company had neither the technology nor the knowledge needed to participate in CPP tenders. PrivB₁, would if requested by the municipality hire a consultant and cooperate with other businesses to gain the resources, but the others would not be able to participate in a CPP tender. The small-and- medium company’s lack of circular solutions made them not participate in market dialogues where CE is part of the criteria.

Zu Castell-Rüdenhausen et al. (2021) identify difficulties related to the supply of secondary materials and market readiness creates a bottleneck when it comes to the reuse and/or recycling of used materials. If the municipalities would demand recycled materials in their tender criteria, this would represent an exogenous normative barrier for the informants participating in early market dialogue. When it comes to the possibility of using recycled materials, all informants mention that this is challenging both in Bodø and Stavanger. The informants from Stavanger believe the market for reused material is more significant in the Oslo-region but also believe it is a challenge there. The informants from medium-sized

companies say that barriers are due bureaucracy to get used materials approved although new regulations have lowered this barrier, and that there is no market for recycled materials. Informant PrivB₄ shares “If you are building something new for the municipality, you are dependent on them to provide you with materials that have been recycled. There is not a recycling station where you can find used windows or doors – they are already ruined when dumped.” Informant PrivB₁ agrees: “Do even such markets exist. If the municipality wanted something being built using recycled materials, then they must be responsible for the delivery of the materials, and everyone who bid in a tender needed to know that materials were to be made available by the municipality”. This challenge could be clarified during the market dialogues, but it does not seem this would be so.

Lack of information on how to set green requirements are mentioned as a barrier towards implementing a CE (Zu Castell-Rüdenhausen et al., 2021). Informant PrivB₃ shares that the municipality has put demands when it comes to fossil-free construction site but cannot remember any other environmental requirements posed. Informant PrivB₃ shares their experience when building a larger public building and reveals that competence, implementation, and price were the award criteria – nothing about the environment. “It is a challenge when the client does not set environmental requirements. Because it is not possible for us to take environment into account in our offer for the project. Then we will lose the tender on price”. For the municipality the request from the suppliers for having environmental demands in public tenders should be a normative endogenous driver for having market dialogue. The suppliers are awaiting the initiative from the public sector.

Public procurements are strongly regulated by law and rules. The municipalities can regulate criteria. One informant explains that they want to participate in complicated tenders, but when criteria is too demanding, they are not easily met, and consequently they will also not participate in a market dialogue. One example mentioned was requirements regarding several reference projects that were not older than five years. This would be challenging when thinking of new solutions like i.e., circular. “If they made the requirement that we had to have a consultant, then we could use a consultant firm – and we could refer to a reference project by collaborating with others” informant PrivB₁. This exogenous regulative barrier in form of demanding five reference projects hinders the medium sized supplier participating in a dialogue (since they believe they would not be eligible anyway).

Medium-and-large suppliers see a potential for strengthening company brand as a driver to participate in market dialogue. PrivB₅ shares when asked if they saw potential to differentiate their company and strengthen the company brand; “Strengthening company brand if you are early on the market yes, but we do not have the capacity for that”. This potential relates to a normative endogenous barrier for the small-sized supplier because of capacity contingency. They would not be able to be on the market with new solutions due to risk-aversions like time and money and normative barriers like lack of technology and knowledge.

We asked how early the market dialogue should be prior to a tender if they were to come up with new solutions for the municipality. “It should have been before the project had been sketched, one can come up with more solutions then”. informant PrivB₂ shares. If the market dialogue is put too short time before the competitive tender, this leads to an exogenous regulative barrier that hinders suppliers participating in market dialogue. This issue regarding time can potentially hinder the possibility of producing circular solutions. Furthermore, the large suppliers emphasised that turnkey contracts take more human resources and need more planning than small contracts.

The large-sizes suppliers are operating with different departments in parts of Norway. Having knowledge and strategy regarding environmental and circular solutions, they would like the municipalities to demand more circular solutions and often experience that, when in market dialogues, little environmental demands are brought up. Informant PrivB₃ shares; “In the dialogue with the municipalities, we notice that it is very superficial”. If municipality does not provide useful information that can guide the suppliers’ decision-making, this would be a normative exogenous barrier for the suppliers for engaging in a market dialogue. Informant PrivB₃ shares in the end; “Municipalities must set the requirements and demands on us to deliver on CE solutions. Make demands that apply to all of us. Get the environment on the agenda. We can deliver, but there must be in demand from our clients! The authorities have set the environmental goals, something has been missed far as procurement is concerned”. However, we believe that market dialogue could help in correcting this oversight”

5.0 Analysis

In this chapter the empirical findings for drivers and barriers of market dialogue in CPP will be analysed through the lens of institutional theory. The categorisation of drivers and barriers is summarised in table 4. Drivers and barriers are categorised by the institutional pressure mechanisms; regulative, normative, and cognitive and divided between endogenous** and exogenous* factors. A comparison of the main differences between the municipalities and their suppliers' perspectives will be presented and explained. However, we have also found some differences between the two municipalities themselves, which we want to present at the beginning, and could also help our understanding of the differences between the municipalities and their suppliers.

During our research, it was clear that there were different drivers and barriers to market dialogue for municipalities and suppliers and differences between Stavanger and Bodø municipalities. In Stavanger, the market dialogues happen regularly and have been performed over a decade and competence of CPP has been gained. They have also acquired knowledge and experience from the piloting program where they developed “The national supplier development handbook for circular procurement” (LUP, n.d.-b). Stavanger municipality have a desire to be a national frontrunner for CPP. Information gathered from Bodø refers to just a few cases, and the municipality are lacking strategy for the arrangement of market dialogue in CPP processes. They are at the testing stages and cannot contribute to the same competence as Stavanger municipality when it comes to market dialogues in CPP.

The public actor can influence the market by communicating what the future needs and what their objectives are (Alhola et al., 2018) In addition the dialogue can give them information for reaching goals and solving problems.

Strategy and culture implemented in the organisation is important for CE development (Tura et al., 2019). There is an important parallel to be drawn between CE development and market dialogue in CPP. However, we detect that not only their participation in the projects - which many times allows them to also pilot pre-tender solutions - but also their collaboration in consortia of municipalities that are interested in innovating their processes to better support more circularity, including through finding new process solutions for market dialogue in CPP, are regarded as important by the municipalities.

In general, the municipalities see themselves as important actors in the transition towards circularity, and they express that they believe they need to be active within these processes. The strategy and culture in an organisation can either be a barrier or driver for CPP. Stavanger

municipality pinpoints their knowledge and experience to having a politically rooted strategy that gives acceptance for using market dialogue in public procurement throughout the organisation. The main responsibility for all market dialogue is held by the procurement department and the project manager from the relevant department the procurement is happening on behalf of. The lack of strategy and culture is a strong normative endogenous driver that ensures a streamlined market dialogue process and allows the procurement department to continuously gain experience and develop with the market. Bodø municipality on the other hand does not have a strategy for CPP, the market dialogue is the responsibility of the project manager and there is not established communication between procurers and project managers. The lack of strategy can be an endogenous regulative barrier that slows the development and consistency for market dialogues. It will take Bodø municipality longer time to gain the same knowledge of conducting market dialogues since every department is inventing the wheel every time a procurement of a product or service is needed, this because they lack internal interaction for knowledge- and result sharing during and after market dialogue or what Tura et al. (2019) mention as “silo” thinking. Having the strategy in place, the endogen regulative barrier will shift to a normative driver for conducting a market dialogue. Directing laws and EU regulations can create a demand for new solutions (Tura et al., 2019). The municipalities recognise that due to new regulations, market dialogues are even more important. Stavanger have implemented market dialogues as a routine and describes that they arrange it more often than not when purchasing and are developing their knowledge together with the market, to avoid demanding things that are not available in the market. The normative exogenous driver for arranging market dialogue is strong in both municipalities due to new upcoming laws and EU regulations.

We have identified that there are differences between the large and small-medium sized companies when it comes to knowledge regarding CE solutions. The same can be said for the municipalities. During our interviews with Stavanger and Bodø municipality it became clear that the level of knowledge about circular economy was quite different. The smaller companies and municipalities point out that their experience and knowledge for market dialogue and circular solutions are lacking. From municipality side, there should be a strong exogenous normative driver towards arranging market dialogues to relay the general knowledge regarding CE and CPP goals. Stavanger municipality has more extended experience arranging market dialogue resulting in circular solutions. The regulative, normative, and cognitive drivers are stronger for arranging market dialogue in Stavanger than

in Bodø due to their organisational structure and culture for using market dialogues as a tool in the procurement.

We next focus on the classification of drivers and barriers (Table 4) to be able to contemplate the differences between the municipalities and suppliers' potential differences of drivers and barriers experienced in terms of market dialogue in CPP.

	Regulative		Normative		Cognitive	
	Suppliers	Municipalities	Suppliers	Municipalities	Suppliers	Municipalities
Drivers	<ul style="list-style-type: none"> - Climate change * - Know the regulations will be stricter * 	<ul style="list-style-type: none"> -Reach climate goals * 	<ul style="list-style-type: none"> -engage in dialogue due to internal environmental goals** - wanting to be market leader** -Climate change* -potential to get extra jobs** -strengthening company brand** -achieve good collaboration** -influence choices the municipality takes** 	<ul style="list-style-type: none"> -Saving money** -Finding circular solutions** -finding new solutions** -relay the urgency or new requests** -suppliers request environmental demands** -lack of knowledge ** -Give information to prepare suppliers** -Strategy and culture implemented in the organisation** -Changed demands for circular solutions* -Importance of CE development* -municipality wanting to be a sustainable consumer** -importance of information sharing to increase job opportunities** -Reduce errors and complaints** -Suppliers having different skills and knowledge. -When uncertain if and what the market can deliver** -creating innovative partnership** 	<ul style="list-style-type: none"> -Climate change** 	<ul style="list-style-type: none"> -Sustainable consumer **
Barriers	<ul style="list-style-type: none"> Too high criteria* -Market dialogue short time before tender* 	<ul style="list-style-type: none"> -Lack of regulations to make the municipality comply* -No strategy for conducting dialogue** -Inconsistency because of lack of regulative rules* 	<ul style="list-style-type: none"> -Fear of upfront cost, lack of knowledge and sitting with competence not required by market** -if municipality requested reused material * - no market for recycled material* -capacity constringency for small-sized supplier ** -Municipality not providing useful information* 	<ul style="list-style-type: none"> -time consuming** -No routine for conducting CPP** -Low participation* -Market not ready for circular solutions* -Lack of knowledge and experience with circular solutions and circular procurement** - Individual processes in each department and no consistency** -Fear of being wrongly influenced** -To close contact to a supplier** -Lack of time to prepare sufficiently** -Lack of Internal communication ** -risk-averse towards implementing CE due to time and money 	<ul style="list-style-type: none"> -No culture for sharing information (afraid of sharing) ** 	<ul style="list-style-type: none"> - Risk of piloting **

Table 4 Identified drivers and barriers for market dialogue in circular procurement processes.

In the table above drivers and barriers are marked *for exogenous and ** for endogenous pressures. From the research conducted several of the drivers and barriers found can also be applied more widely for CPP, in addition to market dialogue. Since the two phenomena's are co-dependent, we have chosen to include all the findings in the table.

As noticeable above, although we started originally with classifications of drivers and barriers from the CE literature, especially as done by Tura et al. (2019), we have enriched this by using insights also from (circular) public procurement literature and especially the institutional theory perspectives. Mostly the identified drivers are categorised only under one type, i.e., either regulative, normative, or cognitive, yet there are some which needed to be classified under more than one. For example, we have the climate change which belong under all three categories because for suppliers, climate change is an exogenous regulative driver for the suppliers towards attending a market dialogue, the employees of the companies can also have personal agenda or strong strategies that also puts climate change under endogenous driver. The municipalities have an exogenous regulative driver to arrange market dialogues due to the regulations.

It is noticeable that normative pressure is dominant both for drivers and barriers in supplier and municipal perspective. In comparison there is very little regulative and cognitive pressures. This might be because market dialog and CPP are at the early stages, but informants from municipalities and suppliers would like more regulative pressure because it gives clarity for expectations. This is interesting, since much of the literature is seen, in general, as institutional pressure mechanism (Alhola et al., 2018; Rotevatn et al., 2021).

The municipalities and their suppliers have different agenda's for the market dialogue, but a common driver for them both is the need to give and receive information, which is a mutual endogenous normative driver. The municipality say that the marked dialogue is an effective way to give information and ensure that everyone has the same information. In addition to learning what the market can offer and what solutions that are best for the project. The suppliers wish to join market dialogues so they can influence the municipalities contracts, share their solutions, and gain information needed to attend the tender and potentially win the contract.

Interestingly, when suppliers are invited to a market dialogue, they often do not dare to say too much in front of competitors. It then becomes an information platform and a one-way communication for the municipality, and it is not before one-to-one meetings after a dialogue in plenum that suppliers share their solutions. This brings the emphasis that not only we need to focus on drivers and barriers for engagement in market dialogue in CPP, but especially on how these insights can be used to find new solutions for market dialogues, which will be efficient and effective.

Even more so, the suppliers point out that often they are not invited to share their solutions. The municipality says they are worried about being influenced by salespeople or being led by suppliers for their own winnings because they do not have enough knowledge to realise. Bodø municipality said, “What I am most afraid of is being influenced by the market, that I create specify a tender to fit for that supplier. This is something you must be prepared for when we have a market dialogue; what do we ask for, we might have a debrief afterwards about what they said, what does this mean, what did they not say. They are sellers” – PubB₂. Stavanger municipality shared: “we ask the supplier for written input before the meeting so that they are also well prepared. Then we manage suppliers so that they do not just look at it as a sales meeting.” – PubS₂. The scepticism to the information received during market dialogue, might lead to high demands for preparations in advance by the municipalities. This could lead to an endogenous normative barrier for market dialogue for the municipalities due to risk-aversiveness because of lack of time to prepare sufficiently.

The suppliers are positive to participating in market dialogue and express the desire for more dialogues prior to a tender competition. The consensus is that the municipalities arrange few dialogues. If they know they take place, the dialogues are considered however a priority, and the (potential) suppliers want to attend them. A driver for the suppliers is that the dialogue is early enough to be able to influence solutions, contract form and timeframe for the completion of the project. The municipalities find the dialogues a useful tool for CPP and acknowledge that the suppliers often have more knowledge than them and the market dialogue helps the information asymmetry. Stavanger municipality confirms that suppliers would like to attend market dialogues: “I have not experienced that suppliers do not want to participate. We take care not to wear out the market – e.g., if they are to participate in ten such conferences this will be a bit much.” – PubS₃. The perception that suppliers might think it is to

many dialogues could be an endogenous normative barrier for the municipality towards arranging a dialogue.

The lack of knowledge for circular solutions is something small municipalities and suppliers share. This could be a common factor that consequently causes their risk averseness. The municipality acknowledge that the suppliers play a significant role in circular public procurement through the market dialogue. On the other hand, the suppliers want the municipality to make precise demands for circular solutions before investing and acquiring knowledge. This lack of knowledge is an exogenous barrier to CE for the suppliers. The municipality look to the suppliers for solutions and the suppliers look to the municipality to make demands in tender criteria's before they invest time and human resources with the competence of CE. There seems to be a disconnect there, on which the municipalities should focus, and make sure, that the roles and contributions for the market dialogue in CPP are clear(-er).

Circular solutions are important to avoid resource scarcity. Bodø municipality point out that they cannot deliver recycled materials in circular solutions. On the other hand, their suppliers would like the municipality to be in charge of providing the recycled materials; this due to scarce opportunities for recycled materials and difficulties in getting materials approved. Some suppliers also see the challenge of managing to give a valid offer on tenders when using recycled material rather than virgin. These are barriers for CPP, but if the municipality wishes to gain the circularity focus, they need to also comply with the suppliers. One supplier shared that if they were to spend time tracing reused materials prior to a tender and ended up not winning the contract, this would be wasted time for everyone competing “It would be better if the municipality sourced instead of every potential supplier” – informant PrivB₃. This is a strong normative exogenous barrier towards participating in a dialogue in CPP processes.

Alhola et al. (2018) have identified that dividing contracts into smaller, separate contract can increase the number of potential small and medium suppliers gaining contracts and stimulate to local and regional business activities. This view is confirmed by our small and medium-sized suppliers. They acknowledge that the municipality are committed towards the local contractors. The big sized companies want only turnkey contracts where they do the projects from A-Z, while the small- and medium sized want the contracts divided. Informant PrivB₃ shares: “We will not agree to anything other than a turnkey contract”. Influencing the municipality’s decisions towards either dividing or arranging turnkey contracts becomes a

normative solid driver for the suppliers towards participating. This influence is also a vantage point from the municipality's side as they find turnkey contracts easier to manage due to being less labour intensive.

According to Kirchherr et al. (2018), a reluctant business culture appears to be the most pressing CE barrier. This limited business interest coincides with finding by Cramer (2020). The lack of culture inside the company is an endogenous cognitive barrier. Kirchherr et al (2018) believes that chain reaction mechanisms like low material prices and the lack of interest from the companies' customers can turn into a "hesitant company culture" but that these explanations are somewhat of an excuse and the real barrier can be due to high upfront investment cost (Kirchherr et al., 2018). PrivB₄ is not investing in circular competence as they are not convinced that the focus on CE it is here to stay. From the informant's experience this has happened before with high focus on radon-solutions. Some small-medium suppliers will not invest time and energy due to upfront cost, lack of knowledge or fear of ending up with competence not required by the market. They have no desire to be first in the market due to the risk it entails and will not require such competence until the municipality requests this. The municipality say they are much dependent on the knowledge the suppliers can give them on circular solutions and have noticed that it is the larger companies that have the most knowledge. Bodø municipality point to lack of market readiness, but when confronted with the suppliers saying the municipality have an unclear standpoint when only encouraging to circular solutions and not demanding it in tenders. The informant refers to the situations as: "it is the chicken and the egg" – PubB₂. All suppliers describe that the municipality never request circular solutions in tenders or in market dialogues. The lack of knowledge is thus a solid endogenous driver for the municipality to arrange a market dialogue. For the small-medium suppliers have a normative endogenous driver due to the possibility of connecting with other companies and working together.

In the end, we want to share another more general exogenous normative barrier. This thesis is about innovating the CPP process, not innovating circular economy as such. We asked our informants how they would proceed if they were to present a new innovative solution.

Informant PrivS₂ shares that the municipal advisors work by the textbook and lack the total image competence. "If a private client comes to us, we can sit together and make plans and can come up with more innovative solutions. Using a turnkey contract, they can describe everything in detail and relate to this. The consulting industry adheres to certain standards.

We are trying to create a bit of rift in this, as we believe a lot has gone out of date.” Here the informant believes that the consultants function as a barrier to the innovation of CE solutions.

6.0 Conclusion

We aim to increase the understanding of the underlying drivers and barriers of early market dialogue in CPP, to reduce information asymmetry between the stakeholders from both municipal and suppliers' point of view. This can contribute to a more informed innovating of the early stage of circular public procurement process. The drivers and barriers of market dialogue in CPP are explained through endogenous and exogenous institutional pressure mechanisms, and by using the regulatory, normative, and cultural classification. The result can be useful for peripheral municipalities like Bodø to identify what is needed when the municipality arranges early market dialogue.

We investigate the early market dialogue in CPP through the lens of institutional theory with analyses of the drivers and barriers, which mirror the pressure mechanisms present or lacking to contribute to market engagement in CPP. Literature in the field of circular economy, circular public procurement and innovation is used to understand innovation in the public procurement process better. Based on the findings from the literature, a framework for drivers and barriers is presented.

Different institutional pressures shape the market dialogue and CPP process as part of the institutional setup. CE literature and public procurement literature were used to initially identify drivers and barriers to CE, which we believe could be transferable and reapplied for market dialogue. The market dialogue and CPP process is shaped by different institutional pressures as part of the institutional setup and institutional pressure mechanisms were used to classify the drivers and barriers by use of exogenous and endogenous factors and using the lens of regulative, normative, and cognitive elements. -This then formed the base which could be adapted, and which allowed us to investigate the drivers and barriers for market dialogue in CPP as experienced by municipalities and suppliers/contractors, as well as explore the potential differences. In turn this is important because it allow innovation of the CPP processes and market dialogue based on insightful findings that will ensure more effective and efficient innovation.

A one-way dialogue (monologue) does not create a great result due to a lack of information sharing. Through empirical finding, we identified how Norwegian municipalities work with early market dialogue and CPP and which drivers and barriers suppliers face in the process. We knew that were barriers to participate in early market dialogue, but it seems like the

barrier to participate openly and actively is the most prominent. Seeing the phenomena as interdependent and keeping in mind how institutional pressure can further strengthen the process between the municipality and the supplier can form a foundation for exercising early market dialogue in CPP.

An essential part of the circular public procurement process is the market dialogue where information and knowledge are shared between cooperating actors in the supply chain to increase innovative solutions development a circular economy. Pressure mechanisms can ensure organisational routines and requirements for conducting market dialogue as a part of the CPP process. From the qualitative study, during which two Norwegian municipalities and five suppliers were interviewed, we have gained knowledge regarding their drivers and barriers to market dialogue in CPP process, where previously policy document, research and studies have already emphasized its relevance, but remained remiss in providing any in-depth understanding.

The suppliers' strongest drivers for participating in early market dialogue is to influence the municipalities prior to a tender and gaining information about future projects and expectations. The large supplier firms want turnkey contracts and municipality would prefer the same. This seems like an advantage towards achieving circular economy in municipalities since it is the large suppliers that have the most knowledge regarding circular solutions. However, this would be at the disadvantage of the smaller suppliers that would like the opposite. It would be advantageous to ensure local suppliers with contracts from a sustainability focus. It is a strong normative endogenous driver for the large suppliers to achieve a higher degree of E based on their beliefs about climate change. This is manifested by having a strategy for CE in the company and thus being at the forefront of developing knowledge about circular solution. This is manifested by having strategy for CE in the company and thus being at the forefront of developing knowledge about circular solutions. Due to solid normative barriers like knowledge, time and money, the small and medium suppliers have not implemented CE strategies in the company and perceive a barrier to participating. Currently, there is no set process for market dialogue in place in some municipalities, which is problematic.

The strongest mutual driver for market dialogue is information sharing and knowledge-seeking, and better end-result of projects. Suppliers' drivers for market dialogue are the potential to influence the municipalities decision on contract form and timeframe. From the municipality's perspective, lack of knowledge, strategy, experience, and internal communication were identified as the strongest most substantial barriers to market dialogue from municipality perspective. The strongest drivers and barriers for early market dialogue can be summed up:

- Environmental reasons like resource constraints, potential for preventing negative environmental impacts, and enforcing climate are found as strong drivers to participate and engage in market dialogue inside CPP.
- For some suppliers it is not a driver to participate in market dialogue due to lack of materials in the future, which points out to a need for even increased role and effort into preparing not only the conditions for CPP and the ability to carry out the tender activities, but also in preparatory work in front of the market dialogue in CPP.
- Regulatory drivers are typically pointed out in the literature as very strong but are surprisingly not perceived as such directly by either municipalities or suppliers to market dialogue.
- The lack of strategy for conducting market dialogue can be a strong regulative barrier for some municipalities to arrange the market dialogue, like in our case for Bodø municipality. Nonetheless, once in place this element can stop being perceived as relevant (even if there is still need for future new solutions for increased market dialogue efficient), like we have seen from Stavanger municipality. For the latter, their (good) strategies, that are rooted also on political level, are strong regulative and normative drivers for conducting early market dialogue.
- Little experience and knowledge of CE and market dialogue, as was pointed out for one of our municipalities, can be strong normative barriers for arranging early market dialogue. Because of the knowledge barrier, the municipality are risk-averse due to the possibility of being influenced by their suppliers. However, this presumably can stem from their lack of knowledge and competences in the field of market dialogue within CPP and the CPP in general.

All suppliers basically describe that the municipality never request circular solutions in tenders or in market dialogues. This magnifies the normative barrier small and medium companies have towards acquiring knowledge about circular solutions. The lack of knowledge for circular solutions could be a normative endogen factor making the municipality risk averse, but they also acknowledge that the suppliers, with their knowledge play an important role in circular public procurement through the market dialogue.

We hope that our research contribution where drivers and barrier are recognised through the lens of institutional pressure will give municipalities the insight needed to continue to improve the early market dialogue in CPP and reach the societal goals in a sustainable way.

6.1 Practical implications and recommendations for Bodø Municipality

Through interviews, it has been mapped that for the supplier's participation in early market dialogue and CPP, this should be carried out early enough so that suppliers have time to deliver circular solutions.

The phenomena of market dialogue are investigated and the findings from the study are a good starting point for municipalities to develop its circular approach to CPP and market dialogue. This is based on empirical findings that have looked at drivers and barriers to market dialogue and asymmetry of information. Municipalities can create good platforms for early market involvement and CPP by creating clear strategies, streamlined organisation and by using the right pressure mechanisms to achieve their goals. An important key to circular solutions is also through the large suppliers and by setting clear requirements. Through our findings, it has been shown that the phenomena CPP and market dialogue are in their infancy and experience is therefore lacking from both the municipality and suppliers. Stavanger municipality has gained more experience through the supplier handbook program (LUP) and therefore appears to be best practice and it can be great transfer value for other small peripheral Norwegian municipalities, Bodø being one.

Since our research work has been funded by EduSmart project, which focus is understanding circularity in Bodø municipality, we wanted to add some suggestions for Bodø municipality (with most of them generalizable to similar peripheral small sized municipalities):

- A design workshop together with e.g., waste companies can be an option for achieving the delivery of reused materials. Stavanger municipality have successfully arranged a design competition, and informant PrivS₁₊₂ emphasise that they are proud of solutions delivered through the collaboration with other suppliers.

- The regulative pressure for arranging market dialogue should be in place, this in form of a strategy. Communication between municipality departments seems as a solid endogenous driver for achieving CE. Communication between the procurement departments where results from market dialogues, knowledge- and experience should be conducted.
- All suppliers describes that the municipality never request circular solutions in tenders or in market dialogues. This magnifies the normative barrier small and medium companies have towards acquiring knowledge about circular solutions. The lack of knowledge for circular solutions could be a strong normative endogenous barrier and a factor for not achieving CE.
- Create local rehabilitation marketplace in a collaboration with Iris and Østbø
- Change regulations to encourage the industry to implement circular principles to a greater extent
- Introduce incentives for rehabilitation
- Monetary incentive for contributing to managing with reused materials.

6.3 Recommendations for future Research

For future research on market engagement and CPP it would be interesting to look closer at:

- Comparative studies of multiple municipalities and their approach to CPP and the market dialogue within CPP to better understand if and to what extent these are context specific.
- Qualitative study on how new regulations to implement circular solutions is followed up to monitor compliance, with the potential to use the agency theory as the basis.
- Explore the relationships between procurers and end-users, and the role of the later in the CPP building on some initial work done recently, especially in terms of
- End-user potential to co-design solutions that are sought though CPP.
- Explore the combinations of factors that produce the combination of factors that produce innovative CPP in terms of providing new solutions.
- Engage in a study aimed at understanding the needed skills and competences by staff engaged in circular public procurement.

6.4 Limitations

Some potential bias has been overcome by conducting quantitative analysis in addition to this qualitative. Still, due to little research done on early market engagement and even less from the view of suppliers, this does not seem feasible at this time, especially should we want to collect information from truly knowledgeable individuals with prior experience in CPP and market dialogue within CPP, or at least from those with an understanding of circularity.

One could discuss if there should be one more small-sized company so that all suppliers' categories had equal number of interviews. This was ruled out for two reasons. One being the lack of small-sized companies with experience of being a supplier for public actors and finding suppliers wanting to be interviewed. Market dialogue has not been used as a tool for CPP or PP for long in Norway. Therefore, there were actors that did not have experience or could even see the relevance of the dialogue. Informant PrivB₅ is a good example. This supplier had opinions about market dialogue that did not seem valid either in relation to theory or when comparing with empirical data from the other suppliers in Bodø

In Bodø the implementation of market dialogue has not been conducted recently. Informant PrivB₄ have been to one dialogue and PrivB₅ have never participated in one. PrivB₅ was chosen because of the lack of participation. Our thought was that this informant would express drivers and especially barriers for not participating. But the informant did not. On the contrary, the informant believed that Bodø municipality never arranged a dialogue. This means that the municipality for some reason has not reached this informant. The informant did not see any disadvantages participating and but could not see advantages either. We considered removing this informant due to little information, but the fact that the municipality had not reached the company is asymmetry of information and for this reason brings valuable information for the thesis.

In conclusion, we believe despite some limitations of our work, we have brought to light important issues surrounding our understanding of why municipalities and suppliers would or would not engage in market dialogue, and thus provided a stronger evidence-based foundation for engaging in finding new solutions for the pre-tender phase of CPP, in particular that of the marked dialogue process.

References/Literature

Referanser

Uncategorized References

- Albury, D. (2005). Fostering Innovation in Public Services. *Public money & management*, 25(1), 51-56.
- Alhola, K., Ryding, S. O., Salmenperä, H., & Busch, N. J. (2018). Exploiting the Potential of Public Procurement: Opportunities for Circular Economy. *Journal of industrial ecology*, 23(1), 96-109.
- Alhola, K., Salmenperä, H., Ryding, S.-O., & Bush, N. J. (2017). *Circular Public Procurement in the Nordic Countries*. Copenhagen: Nordisk Ministerråd.
- Andrews, D. (2015). The circular economy, design thinking and education for sustainability. *Local economy*, 30(3), 305-315.
- Anskaffelsesforskriften. (2017). *Forskrift om offentlige anskaffelser* Lovdata. Retrieved October 1.
- Baniyani, A., Ahmadi, M. H., Motamedi, M., & Gholami, M. (2021). Providing a model for brand strength in banking industry using yazd city banks. *Asia Pacific management review*, 26(2), 78-85.
- Bao, Z., Lu, W., Chi, B., Yuan, H., & Hao, J. (2019). Procurement innovation for a circular economy of construction and demolition waste: Lessons learnt from Suzhou, China. *Waste Manag*, 99, 12-21.
- Boes, H., & Dorée, A. (2008). Public procurement of local authorities in the Netherlands: a case of breaking tradition for a more strategic approach. 24th ARCOM conference proceedings,
- Bolger, K., & Doyon, A. (2019). Circular cities: exploring local government strategies to facilitate a circular economy. *European planning studies*, 27(11), 2184-2205.
- Busch, T., Johnsen, E., Valstad, S. J., & Vanebo, J. O. (2007). *Endringsledelse i et strategisk perspektiv*. Universitetsforlaget.
- Climate Change Act. (2017). *Act relating to Norway's climate targets (LOV-2021-06-18-129)*. Lovdata. Retrieved October 1.
- Cramer, J. M. (2020). Practice-based model for implementing circular economy: The case of the Amsterdam Metropolitan Area. *Journal of cleaner production*, 255, 120255.
- De Jesus, A., & Mendonça, S. (2018). Lost in Transition? Drivers and Barriers in the Eco-innovation Road to the Circular Economy. *Ecological economics*, 145(C), 75-89.
- Dybtsyna, E., Modic, D., Nikolajeva, K., & Sjørgård Hansen, R. (2021). Circular procurement: Innovation tool for municipalities? In T. L. Jakobsen, F. Quattro, E. Rasmussen, & M. Steinmo (Eds.), *Research Handbook of Innovation for a Circular Economy*. Edward Elgar Publishing.
- Eadie, R., McKeown, C., & Anderson, K. (2013). The impact of recession on construction procurement routes. *International Journal of Procurement Management*, 6(1), 24-38.
- Edquist, C., Vonortas, N. S., Zabala-Iturriagoitia, J. M., & Edler, J. (2015). *Public Procurement for Innovation* (C. Edquist, N. S. Vonortas, J. M. Zabala-Iturriagoitia, & J. Edler, Eds.). Edward Elgar Publishing Ltd.

- Edquist, C., & Zabala-Iturriagoitia, J. M. (2012). Public Procurement for Innovation as mission-oriented innovation policy. *Research policy*, 41(10), 1757-1769.
- Fuglsang, L. (2010). Bricolage and invisible innovation in public service innovation. *Journal of innovation economics*, 5(1), 67.
- Geissdoerfer, M., Savaget, P., Bocken, N. M. P., & Hultink, E. J. (2017). The Circular Economy – A new sustainability paradigm? *Journal of cleaner production*, 143, 757-768.
- Govindan, K., & Hasanagic, M. (2018). A systematic review on drivers, barriers, and practices towards circular economy: a supply chain perspective. *International journal of production research*, 56(1-2), 278-311.
- Guldmann, E., & Huulgaard, R. D. (2019). Barriers to circular business model innovation: A multiple-case study. *Journal of cleaner production*, 243, 118160.
- Hartley, J. (2005). Innovation in Governance and Public Services: Past and Present. *Public money & management*, 25(1), 27-34.
- Hartley, K., van Santen, R., & Kirchherr, J. (2020). Policies for transitioning towards a circular economy: Expectations from the European Union (EU). *Resources, conservation and recycling*, 155, 104634.
- Holma, A.-M., Vesalainen, J., Söderman, A., & Sammalmaa, J. (2019). Service specification in pre-tender phase of public procurement - A triadic model of meaningful involvement. *Journal of purchasing and supply management*, 26(1), 100580.
- Hommen, L., & Rolfstam, M. (2008). Public procurement and innovation: towards a taxonomy. *Journal of public procurement*, 8(3), 17-56.
- Hölzl, W., & Janger, J. (2012). *Innovation barriers across firms and countries*.
- Johannessen, A., Christoffersen, L., & Tufte, P. A. (2011). *Forskningsmetode for økonomisk-administrative fag* (3. utg. ed.). Abstrakt forlag.
- Jupp, V. (2006). *The Sage dictionary of social research methods*. Sage.
- Kirchherr, J., Piscicelli, L., Bour, R., Kostense-Smit, E., Muller, J., Huibrechtse-Truijens, A., & Hekkert, M. (2018). Barriers to the Circular Economy: Evidence From the European Union (EU). *Ecological economics*, 150, 264-272.
- Knutsson, H., & Thomasson, A. (2014). Innovation in the Public Procurement Process: A study of the creation of innovation-friendly public procurement. *Public management review*, 16(2), 242-255.
- Kristensen, H. S., Mosgaard, M. A., & Remmen, A. (2020). Circular Public Procurement Practices in Danish Municipalities. *Journal of cleaner production*, 281.
- Le Masson, P., Weil, B., & Hatchuel, A. (2010). *Strategic management of innovation and design*. Cambridge University Press.
- Leire, C., & Mont, O. (2010). The implementation of socially responsible purchasing. *Corp. Soc. Responsib. Environ. Mgmt*, 8,17(4,1), 27-39.
- LUP. (n.d.-a). *About LUP*. Retrieved April 23.
- Macagnan, C. B., & Seibert, R. M. (2021). Sustainability indicators: Information asymmetry mitigators between cooperative organizations and their primary stakeholders. *Sustainability (Basel, Switzerland)*, 13(15), 8217.
- Meld. St. 22. (2018-2019). *Smartere innkjøp - effektive og profesjonelle offentlige anskaffelser (Smartere innkjøp - effektive og profesjonelle offentlige anskaffelser)*.
- Mowery, D., & Rosenberg, N. (1979). The influence of market demand upon innovation: a critical review of some recent empirical studies. *Research policy*, 8(2), 102-153.

- Norwegian Environment Agency. (n.d). *Climate rate - support for climate measures (Miljødirektoratet, klimasats - støtte til klimatiltak)*. Retrieved March 29.
- Ntsond , J., & Aggeri, F. (2021). Stimulating innovation and creating new markets – The potential of circular public procurement. *Journal of cleaner production*, 308, 127303.
- Obwegeser, N., & M ller, S. D. (2018). Innovation and Public Procurement: Terminology, Concepts, and Applications. *Technovation*, 74-75, 1-17.
- Oghazi, P., & Mostaghel, R. (2018). Circular business model challenges and lessons learned- An industrial perspective. *Sustainability*, 10(3), 739.
- Rizos, V., Behrens, A., van der Gaast, W., Hofman, E., Ioannou, A., Kafyeke, T., Flamos, A., Rinaldi, R., Papadelis, S., Hirschnitz-Garbers, M., & Topi, C. (2016). Implementation of circular economy business models by small and medium-sized enterprises (SMEs) : Barriers and enablers.
- Rolfstam, M. (2012). An institutional approach to research on public procurement of innovation. *Innovation (Abingdon, England)*, 25(3), 303-321.
- Saunders, M. N. K., Lewis, P., & Thornhill, A. (2016). *Research methods for business students* (7th ed.). Pearson.
- Schumpeter, J. A. (1911). *The theory of economic development (R.Opie, trans.) (1934 English ed.)*. Harvard University Press.
- Scott, W. R. (2008). Approaching Adulthood: The Maturing of Institutional Theory. *Theory and society*, 37(5), 427-442.
- Stahel, W. R. (2016). The circular economy. *Nature*, 531(7595), 435-438.
- Stahel, W. R. (2019). *The Circular Economy: A User's Guide* (E. M. Foundation, Ed. 1 ed.). Routledge.
- S nnichsen, S. D., & Clement, J. (2019). Review of green and sustainable public procurement: Towards circular public procurement. *Journal of cleaner production*, 245, 118901.
- Torvinen, H., & Ulkuniemi, P. (2016). End-user engagement within innovative public procurement practices: A case study on public–private partnership procurement. *Industrial marketing management*, 58, 58-68.
- Uyarra, E., & Flanagan, K. (2010). Understanding the Innovation Impacts of Public Procurement. *European planning studies*, 18(1), 123-143.
- Vargo, S. L., & Lusch, R. F. (2004). Evolving to a New Dominant Logic for Marketing. *Journal of Marketing*, 68, No 1, 1-17.
- Witjes, S., & Lozano, R. (2016). Towards a more Circular Economy: Proposing a framework linking sustainable public procurement and sustainable business models. *Resources, conservation and recycling*, 112, 37-44.
- Yeow, J., & Edler, J. (2012). Innovation procurement as projects. *Journal of public procurement*, 12(4), 472-504.
- Yin, R. K. (2018). *Case study research and applications: design and methods* (Sixth edition. ed.). SAGE.
- Zu Castell-R denhausen, M., Wahlstr m, M., Fruergaard Astrup, T., Jensen, C., Oberender, A., Johansson, P., & Waerner, E. R. (2021). Policies as drivers for circular economy in the construction sector in the nordics. *Sustainability (Basel, Switzerland)*, 13(16), 9350.

Appendix 1 Interview guide public sector

Hanne Rendal og Solveig Henriksen Sharp skal skrive masteroppgave i innovasjon og entreprenørskap ved Handelshøgskolen Nord Universitet.

I denne masteroppgaven ønsker vi spesielt, fra leverandørens side, se på tidlig markedsinvolvering mellom offentlig aktør og interessenter.

Oppgaven avgrenses til interaksjon mellom offentlig aktør og interessent under fasen før-anbud, som kan akselerere skiftet mot sirkulær økonomi ved å skape nye krav for effektiv bruk av ressurser.

Det kan for eksempel være markedsdialog ved:

- Dialogkonferanser (innlegg om behovet, faglige innlegg og en diskusjons-/workshop-del)
- Workshops, kreative øvelser
- RFI (Request for Information)
- Innspillsnotat:
- En-til-en-møter:
- Konkurransesgrunnlag på høring

Tema	Spørsmål	Oppfølgingsspørsmål
Introduksjon i forkant av intervju	<ul style="list-style-type: none">○ Presentasjon av oss og tema for oppgaven○ Informere om deres mulighet til, uten videre forklaring, å trekke seg fra intervju, eller unnlate å svare.○ Informere om anonymiteten og konfidensialiteten○ Informere om arkivering av anonymiserte data (EduSmart)	
Innledningsspørsmål	<ul style="list-style-type: none">○ Hvilken rolle har du i organisasjonen?○ Hvordan avdelinger har dere prosjekter for? (bygg eller andre)○ Hvor lenge har du/dere jobbet med offentlige anskaffelser?	
Sirkulær anskaffelser	<ul style="list-style-type: none">○ Hvordan prøver dere å bidra med å nå målene i Bodø Kommunes klimaplan – med tanke på anskaffelser?○ “Hvilke rutiner/protokoll har dere, der ansatte kan utvikle kompetanse for å holde seg oppdatert på sirkulær offentlig anskaffelse?”○ “Hvordan tenker dere helhetlig når det gjelder innkjøp?”○ Livsløpsanalyser?○ Hva gjør det utfordrende å få gjennomført CPP? (økonomi, tid)○ Er det tilfeller hvor dere deler opp anbud i mindre kontrakter – dette for at SME kan delta i større grad?○ Har dere “makt” til å endre CE holdningen i samfunnet?○ Hvordan stiller dere slike klimavennlige krav? (Offentlig aktør har en stor mulighet til å etterspørre og stille krav til	

	<p>klimavennlige varer, ved å påvirke leverandører - sertifiseringer f.eks.)</p> <ul style="list-style-type: none"> ○ Hvilke tildelingskriterier setter dere ved sirkulære anskaffelser - pris, miljø og kvalitet ○ Hvordan vektlegges disse i prosent? <p>Barrierer:</p> <ul style="list-style-type: none"> • Opplever dere at dere har nok kunnskap om sirkulærøkonomiske løsninger? (risikoavers grunnet mangel på kunnskap) • Er det tilstrekkelig tilgang på sirkulære materialer/løsninger som kan leveres til prosjekter? <p>Drivere</p> <ul style="list-style-type: none"> • Er kommunen bekymret for mangel på ressurser – materialer, metall, treverk med mer. • Opplever dere press fra myndigheter/EU om å bli mer sirkulære? • Ser dere på sirkulærøkonomi som noe som kan senke kostnader for kommunen? • Ser dere potensiale for å skape flere arbeidsplasser når vi nå går over til mer sirkulærøkonomi? • Har dere sett sirkulære løsninger i andre kommuner/land som ikke tilbys i Bodø? • Ser dere potensiale for å styrke merkenavnet Bodø ved å være mer sirkulære? (organisatoriske drivere Tura et al, 2019) 	
<p>Tidlig markedsinvolvering</p>	<ul style="list-style-type: none"> ○ Hvor lenge har dere holdt på med markedsdialog før anskaffelser? ○ Hva var incentivet for at dere begynte med dette (var det for eksempel Reguleringsplaner/EU-direktiver) -hvordan påvirkes dere av dette? ○ Tidlig markedsdialog er definert som en suksessfaktor for å oppnå sirkulærøkonomi - Har markedsdialogen blitt gjennomført før sirkulære anskaffelser? ○ Hvor ofte gjennomføres markedsdialog i forkant av anbud? ○ “Hvem har ansvaret for at en eventuell markedsdialog gjennomføres? (Individuelt ansvar hos innkjøper eller prosjektleder? og innkjøpsavdeling) ○ “Hvem er involvert i prosessen? ○ Samarbeider dere internt i virksomheten horisontalt og/eller vertikalt?” ○ Hvilke typer prosjekter har dere best utbytte av markedsdialog? (er det ved større prosjekter/små) ○ Hva vil dere si er suksesskriterier for tidlig markedsdialog? ○ Har dere oppnådd bedre sluttresultat enn om en slik dialog ikke hadde blitt gjennomført? (tid/kostnadsbesparelser, forbedrede forhold mellom leverandørene, forbedre gjennomføringsprosess) (fører til innovative løsninger (økt CE?), og bedre kommunikasjon). ○ Tror dere at faren for “feilkjøp” blir redusert med en markedsdialog? ○ Har tidsbruken av en anbudsprosess blitt påvirket ved å gjennomføre en markedsdialog? 	<p>Kartlegger dere behovene i forkant av dialogen med leverandører?</p>

	<ul style="list-style-type: none"> ○ Har markedsdialog ført til at dere har blitt bedre kjent med hva leverandører kan tilby? (flere leverandører/flere produkt) - og har forholdet deres til markedet endret seg etter at markedsdialog ble mer vanlig? ○ Hvordan får dere flest mulige leverandører til å delta på tidlig markedsdialog ○ Hva er fordelene for leverandører å delta? (insentiver for å delta – er det vinn-vinn. Samarbeid og løsninger) ○ Tror dere at alle som kunne hatt mulighet deltar i en slik dialog? (identifisere barrierer for leverandører) ○ Fikk leverandørene mulighet til å presentere seg i plenum på konferansen/dialogen? (Som en fordel av å delta og for å muliggjøre framtidig samarbeid mellom leverandørene) ○ Er dere kjent med Håndboken for planlegging og gjennomføring av tidlig markedsdialog i offentlige anskaffelser? - laget av Nasjonalt program for leverandørutvikling (LUP) - NHO, KS, DFØ. ○ Bruker dere denne, eller har dere andre fastsatte verktøy, systemer og teknologi for gjennomføring av markedsdialog (fastsatte?) ○ Ser dere til andre kommuner når det gjelder hvordan gjennomføre markedsdialog? (erfaringsutveksling) ○ Teorier sier at leverandører opplever barrierer for å delta i sirkulærøkonomiske markedsdialoger – vet dere om noen slike barrierer? (asymmetri av informasjon/leverandører syns kontrakter blir for store/ønsker ikke å være med på sirkulærøkonomi pga mangel på slik kunnskap/teknologi/mangel på materialer som betegnes som sirkulærøkonomiske/mangel på strategi for sirkulærøkonomi-ønsker ikke å ta miljøansvaret) ○ Hva skal til for å få et godt samspill under markedsdialog? (oppfølging, effektivitet og godt første møte = fører til effektivt partnerskap/samarbeid) ○ Opplever dere at leverandører hemmeligholder sine ideer/kunnskap i frykt for "industrispionasje" ○ Har dere identifisert potensielle utfordringer ved en tidlig markedsdialog? ○ Hva er kommunens overordnede mål med tidlig markedsinvolvering? ○ Kunne vi fått informasjon om en mulig leverandør i Bodø som har vært med i en slik dialog? 	
Avslutning	<ul style="list-style-type: none"> ○ Noe du ønsker å tilføye? <p>Takk for at du tok deg tid til intervjuet</p>	

Appendix 2 Interview guide supplier

Har din bedrift vært involvert i markedsdialogen *før* en offentlig anbudskonkurranse? Hvor leverandører blir invitert til dialog i forkant av større prosjekter? Hvor kommunen presenterer utfordringer og behov fra deres side og for å få innspill fra leverandører til mulige løsninger, samt forstå hvordan man legger til rette for nye løsninger i konkurransegjennomføringen.

Det kan for eksempel være markedsdialog ved:

- Dialogkonferanser (innlegg om behovet, faglige innlegg og en diskusjons-/workshop-del)
- Workshops, kreative øvelser
- RFI (Request for Information)
- Innspills-notat:
- En-til-en-møter:
- Konkurranses grunnlag på høring

Tema	Spørsmål	
Introduksjon	<ul style="list-style-type: none"> o Presentasjon av oss og tema for oppgaven - Vi ser på markedsdialogen før en sirkulær offentlig anskaffelse. Dette sett fra et leverandørperspektiv. o Informere om deres mulighet til, uten videre forklaring, å trekke seg fra intervju, eller unnlate å svare. o Informere om anonymiteten og konfidensialiteten o Informere om arkivering av anonymiserte data – data kan bli brukt (anonymisert til videre forskning) (EduSmart) o Forklar hva vi mener med sirkulær økonomi /CPP - Sirkulærøkonomi kan være gjenbruk av materialer, men kan også være «gjemt» under andre betegnelser. For eksempel kan det handle om at ting man designer blir laget på en måte som gjør at de kan repareres, har god kvalitet og lang levetid. 	
Innledningsspørsmål	<ul style="list-style-type: none"> o Beskriv selskapet du jobber i, og rollen du innehar i selskapet 	
Sirkulær anskaffelser	<ul style="list-style-type: none"> o Er sirkulærøkonomi, bærekraft eller evt en annen miljøvennlig retning et område med fokus hos dere? Hvis ikke fokus/deltatt i sirkulærøkonomisk anbud – hva mener du er årsaken til det? o Vi hører om mange ulike terminologier, sirkulære offentlige anskaffelser, grønne offentlige anskaffelser, miljøvennlige anskaffelser etc. Hvor har dere mest fokus? o Hvilke tildelingskriterier har dere opplevd i CPP og hvordan har det blitt vektlagt (Miljø, pris, kvalitet og materiale) o Legger kommunen til rette for at lokale firma kan vinne anbud, kanskje de deler opp et anbud i mindre deler? Eller opplever dere ofte at store nasjonale/internasjonale firma vinner.. Fordi? (pris eller kunnskap) o o Jobber dere for å innhente informasjon om sirkulærøkonomi eller annen miljøvennlig retning? Hvis ja: hvordan? o Er innhenting av informasjonen basert på din egen interesse, eller er det noe som ligger forankret i bedriften? 	

	<ul style="list-style-type: none"> o Hvordan mener du dere kan stille krav til offentlig aktør når det kommer til miljø og sirkulære krav? o Har kommunen sine kravspesifikasjoner gjort at dere har blitt mer miljøvennlige eller gjort sirkulær økonomiske investeringer på bakgrunn av press fra kommunen for å bli vurdert til anbud. <p>Barrierer:</p> <ul style="list-style-type: none"> • Har dere teknologien og kunnskap som skal til for å delta i sirkulærøkonomisk anbud? (risikoavers grunnet mangel på kunnskap eller teknologi) • Er det tilstrekkelig tilgang på sirkulære materialer/løsninger som dere kan levere? • Har dere kunnskap om sirkulære løsninger som ikke det offentlige etterspør? • Er ditt selskap bekymret for mangel på ressurser – materialer, metall, treverk med mer. <p>Drivere</p> <ul style="list-style-type: none"> • Opplever dere økt etterspørsel om sirkulære løsninger fra markedet – enten fra det private eller offentlige? • Opplever dere press fra kommunen/EU om å bli mer sirkulære? • Ser dere på sirkulærøkonomi som noe som kan tilføre bedriften mer kapital/senke kostnader? • Ser dere potensiale for å skape flere arbeidsplasser eller utvikle flere typer sirkulære løsninger? • Ser dere potensiale for å styrke merkenavnet deres ved å tilby sirkulære løsninger? (organisatoriske drivere Tura et al, 2019) 	
<p>Tidlig markedsinvolvering</p>	<ul style="list-style-type: none"> o Har deres firma vært i en tidlig markedsdialog med offentlig aktør? <p>Hvis NEI:</p> <ul style="list-style-type: none"> o Hvorfor ikke? (barrierer som ligger i veien?) o Er dere redde for at andre leverandører kan "ta deres ideer" hvis dere delte dette i plenum på en dialogkonferanse? o Er dere redde for at en offentlig anbudsprosess tar for lang tid for dere? o Er det fordel/ulempe ved å delta? <p>Hvis JA:</p> <ul style="list-style-type: none"> o Hvordan foregår dialogen med offentlig aktør før utlysningen? - har de møter (enten i plenum med flere aktører til stedet, eller møte bare med dere), eller er kommunikasjonen ikke-fysisk via mail/telefon? <p>Drivere:</p> <ul style="list-style-type: none"> o Hvorfor deltar dere, hva føler dere er gevinsten for å delta? Er det et overordnet mål for eksempel? o Teori sier at om leverandører deltar i tidlig markedsdialog, så øker sannsynligheten for å få anbudet – tror du dette stemmer? o Tror du det stemmer at fordeler med å få anbudet også kan gi andre fordeler for virksomheten deres i framtiden? (flere oppdrag for kommune/andre, utvikling av egen kompetanse som kan gi vekst for dere). o Ved å delta i en markedsdialog, føler du/dere at deres deltakelse kan påvirke hva som blir satt av anskaffelseskriterier i tinglysningen? o Fører markedsdialogen frem – har den påvirkning på anbudsutlysningen og gjennomføring/resultat av prosjektet? 	

	<p>Barriere:</p> <ul style="list-style-type: none"> ○ Hvordan har markedsdialogen blitt lagt opp, er det noe som ikke har fungert i deres øyne? (Hva er viktig for deres firma for at det skal være en god dialog) ○ Ser dere noe negativt ved å delta i tidlig markedsinvolvering?? (Tidsbruk i forhold til gevinst osv.) ○ Føler du at dere blir hørt i dialogen? ○ Hva mener du må til for at en slik dialog skal fungere bedre? ○ Hvordan får dere vite om markedsdialogen som skal være i forkant av en anskaffelsesprosess? (Doffin?) ○ Hvilke tildelingskriterier føler du tynger størst? Pris, miljø, kunnskap/teknisk ferdighet. ○ Er det noe du ser som utfordrende i en offentlig anskaffelsesprosess? <p>Generelt:</p> <ul style="list-style-type: none"> ○ Hvordan går dere frem hvis dere skal presentere en ny løsning? 	
--	--	--

Avslutning	<ul style="list-style-type: none"> ○ Hvis dere fikk bestemme hvordan markedsdialogen gjennomføres: - Hvordan ville dere gått frem for å sikre deres deltagelse - Hvor lenge før anbudsutlysningen skulle dialogen begynt/gjennomført - For å oppnå sirkulær økonomi i prosjektet (4 r's) hvordan synes du tildelingskriteriene burde vært vektlagt i % - Noe du ønsker å tilføye? <p>Takk for at du tok deg tid til intervjuet</p>	
------------	--	--

Appendix 3 Consent form supplier

Samtykkeerklæring interessent

Vil du delta i forskningsprosjektet «*How can municipalities achieve circular economy through market engagement by public procurers and contractors?* (arbeidstittel, denne kan endres)

Dette er et spørsmål til deg om å delta i et forskningsprosjekt hvor formålet er identifisere hvilke drivere og barrierer entreprenører opplever som hindrer dem i å delta i offentlige sirkulære anbudsprosesser. I dette skrevet gir vi deg informasjon om målene for prosjektet og hva deltakelse vil innebære for deg.

Formål

Vi heter Solveig Henriksen-Sharp og Hanne rendal og skal skrive en masteroppgave i innovasjon og entreprenørskap ved Handelshøgskolen Nord Universitet. Temaet for oppgaven vår er tidlig markedsinvolvering mellom offentlig aktør og interessenter (entreprenører/leverandører) som et virkemiddel for å stimulere til sirkulær praksis i offentlige innkjøp samt barrierer og drivere som private aktører opplever som hindrer dem i å delta i sirkulære anbudsprosesser. Vi vil gjennom en kvalitativ tilnærming undersøke hvordan og når slike dialoger blir gjennomført fra offentlig side, samtidig som vi vil kartlegge hvordan interessenter ønsker en slik dialog skal være samt opplevde barrierer/drivere.

Hvem er ansvarlig for forskningsprosjektet?

Handelshøgskolen ved Nord Universitet er ansvarlig for prosjektet.

Hvorfor får du spørsmål om å delta?

Som ansatt i privat sektor, er det ønskelig å intervju deg for å få belyst begge sider av markedsdialogen. Det er relevant for oss å intervju deg som jobber med innkjøp, eller innenfor strategi, markedsføring og kommunikasjon.

Hva innebærer det for deg å delta?

Hvis du velger å delta i dette prosjektet, innebærer det et intervju som vil ta omtrent en time å gjennomføre. Dette er en samtale om temaene sirkulære anskaffelser og markedsdialog. Intervjuet vil gjennomføres senvinter/våren 2022. Sammen kan vi avtale hvor og når intervjuet finner sted. Siden smittesituasjonen varierer avtaler vi nærmere gjennomføringen om intervjuet vil gjennomføres fysisk eller Teams/Zoom. Under intervjuet ønsker vi å benytte oss av lydopptak, dette for å sikre korrekt informasjon. Opptaket vil bli anonymisert. Ingen andre enn meg vil vite hvem som er blitt intervjuet i oppgaven, og informasjonen vil ikke kunne tilbakeføres til deg. Hvis ønskelig kan jeg sende en kopi av oppgaven etter den er levert våren 2022.

Det er frivillig å delta

Det er frivillig å delta i prosjektet. Hvis du velger å delta, kan du når som helst trekke samtykket tilbake uten å oppgi noen grunn. Alle dine personopplysninger vil da bli slettet. Det vil ikke ha noen negative konsekvenser for deg hvis du ikke vil delta eller senere velger å trekke deg.

Ditt personvern – hvordan vi oppbevarer og bruker dine opplysninger

Vi vil bare bruke opplysningene om deg til formålene vi har fortalt om i dette skrevet. Vi behandler opplysningene konfidensielt og i samsvar med personvernregelverket.

Tilgang til informasjonen og opplysninger er det kun jeg som har.

Etter gjennomføring av intervju vil lydopptak transkriberes, deretter vil lydopptak slettes. Det vil ikke bli spurt om navn og andre kontaktopplysninger i forbindelse med intervjuet. Informantene vil få en unik kode der anonymitet sikres.

Hva skjer med opplysningene dine når vi avslutter forskningsprosjektet?

Opplysningene anonymiseres når prosjektet avsluttes/oppgaven er godkjent, noe som etter planen er 18/05-22

Dine rettigheter

Så lenge du kan identifiseres i datamaterialet, har du rett til:

- innsyn i hvilke personopplysninger som er registrert om deg, og å få utlevert en kopi av opplysningene,

- å få rettet personopplysninger om deg,

- å få slettet personopplysninger om deg, og

- å sende klage til Datatilsynet om behandlingen av dine personopplysninger.

Hva gir oss rett til å behandle personopplysninger om deg?

Vi behandler opplysninger om deg basert på ditt samtykke.

På oppdrag fra Handelshøgskolen ved Nord Universitet har NSD – Norsk senter for

forskningsdata AS vurdert at behandlingen av personopplysninger i dette prosjektet er i samsvar med personvernregelverket.

Hvor kan jeg finne ut mer?

Hvis du har spørsmål til studien, eller ønsker å benytte deg av dine rettigheter, ta kontakt med:

Hanne Rendal

328186@student.nord.no

930 68041

Eller

Solveig Henriksen-Sharp

Solveig.henriksen@magicnorth.no

952 88215

Vårt personvernombud:

Toril Irene Kringen

74 02 27 50

Toril.i.kringen@nord.no

Hvis du har spørsmål knyttet til NSD sin vurdering av prosjektet, kan du ta kontakt med:

NSD – Norsk senter for forskningsdata AS på epost (personverntjenester@nsd.no) eller på telefon: 55 58 21 17.

Med vennlig hilsen

Hanne Rendal

Solveig Caroline Henriksen-Sharp

Samtykkeerklæring

Jeg har mottatt og forstått informasjon om prosjektet [sett inn tittel], og har fått anledning til å stille spørsmål.

Jeg samtykker til:

Å delta i intervju, samt at mine opplysninger behandles frem til prosjektet er avsluttet. Opplysninger gitt kan (anonymisert) brukes i videre forskning.

(Signert av prosjektdeltaker, dato)

Appendix 4 Consent form public sector

Samtykkeerklæring offentlig

Vil du delta i forskningsprosjektet «*How can municipalities achieve circular economy through market engagement by public procurers and contractors?*» (Arbeidstittel, denne kan endres)

Dette er et spørsmål til deg om å delta i et forskningsprosjekt hvor formålet er identifisere hvilke drivere og barrierer entreprenører opplever som hindrer dem i å delta i offentlige sirkulære anbudsprosesser. I dette skrevet gir vi deg informasjon om målene for prosjektet og hva deltakelse vil innebære for deg.

Formål

Vi heter Solveig Henriksen-Sharp og Hanne rendal og skal skrive en masteroppgave i innovasjon og entreprenørskap ved Handelshøgskolen Nord Universitet. Temaet for oppgaven vår er tidlig markedsinvolvering mellom offentlig aktør og interessenter (entreprenører/leverandører) som et virkemiddel for å stimulere til sirkulær praksis i offentlige innkjøp samt barrierer og drivere som private aktører opplever som hindrer dem i å delta i sirkulære anbudsprosesser. Vi vil gjennom en kvalitativ tilnærming undersøke hvordan og når slike dialoger blir gjennomført fra offentlig side, samtidig som vi vil kartlegge hvordan interessenter ønsker en slik dialog skal være samt opplevde barrierer/drivere.

Hvem er ansvarlig for forskningsprosjektet?

Handelshøgskolen ved Nord Universitet er ansvarlig for prosjektet.

Hvorfor får du spørsmål om å delta?

Som ansatt i offentlig sektor, er det ønskelig å intervju deg for å få belyst begge sider av markedsdialogen. Det er relevant for oss å intervju deg som jobber med innkjøp, miljø, strategi for å se hvordan dere jobber med tidlig markedsdialog samt hvordan dere legger til rette for at flest mulig interessenter deltar i markedsdialogen.

Hva innebærer det for deg å delta?

Hvis du velger å delta i dette prosjektet, innebærer det et intervju som vil ta omtrent en time å gjennomføre. Dette er en samtale om temaene sirkulære anskaffelser og markedsdialog. Intervjuet vil gjennomføres senvinter/våren 2022. Sammen kan vi avtale hvor og når intervjuet finner sted. Siden smittesituasjonen varierer avtaler vi nærmere gjennomføringen om intervjuet vil gjennomføres fysisk eller Teams/Zoom. Under intervjuet ønsker vi å benytte oss av lydopptak, dette for å sikre korrekt informasjon. Opptaket vil bli anonymisert. Ingen andre enn meg vil vite hvem som er blitt intervjuet i oppgaven, og informasjonen vil ikke kunne tilbakeføres til deg. Hvis ønskelig kan jeg sende en kopi av oppgaven etter den er levert våren 2022.

Det er frivillig å delta

Det er frivillig å delta i prosjektet. Hvis du velger å delta, kan du når som helst trekke samtykket tilbake uten å oppgi noen grunn. Alle dine personopplysninger vil da bli slettet. Det vil ikke ha noen negative konsekvenser for deg hvis du ikke vil delta eller senere velger å trekke deg.

Ditt personvern – hvordan vi oppbevarer og bruker dine opplysninger

Vi vil bare bruke opplysningene om deg til formålene vi har fortalt om i dette skrevet. Vi behandler opplysningene konfidensielt og i samsvar med personvernregelverket.

Tilgang til informasjonen og opplysninger er det kun jeg som har.

Etter gjennomføring av intervju vil lydopptak transkriberes, deretter vil lydopptak slettes. Det vil ikke bli spurt om navn og andre kontaktopplysninger i forbindelse med intervjuet. Informantene vil få en unik kode der anonymitet sikres.

Hva skjer med opplysningene dine når vi avslutter forskningsprosjektet?

Opplysningene anonymiseres når prosjektet avsluttes/oppgaven er godkjent, noe som etter planen er 18/05-22

Dine rettigheter

Så lenge du kan identifiseres i datamaterialet, har du rett til:

- innsyn i hvilke personopplysninger som er registrert om deg, og å få utlevert en kopi av opplysningene,
- å få rettet personopplysninger om deg,
- å få slettet personopplysninger om deg, og
- å sende klage til Datatilsynet om behandlingen av dine personopplysninger.

Hva gir oss rett til å behandle personopplysninger om deg?

Vi behandler opplysninger om deg basert på ditt samtykke.

På oppdrag fra Handelshøgskolen ved Nord Universitet har NSD – Norsk senter for

forskningsdata AS vurdert at behandlingen av personopplysninger i dette prosjektet er i samsvar med personvernregelverket.

Hvor kan jeg finne ut mer?

Hvis du har spørsmål til studien, eller ønsker å benytte deg av dine rettigheter, ta kontakt med:

Hanne Rendal

328186@student.nord.no

930 68041

Eller

Solveig Henriksen-Sharp

Solveig.henriksen@magicnorth.no

952 88215

Vårt personvernombud:

Toril Irene Kringen

74 02 27 50

Toril.i.kringen@nord.no

Hvis du har spørsmål knyttet til NSD sin vurdering av prosjektet, kan du ta kontakt med:

NSD – Norsk senter for forskningsdata AS på epost (personverntjenester@nsd.no) eller på telefon: 55 58 21 17.

Med vennlig hilsen

Hanne Rendal

Solveig Caroline Henriksen-Sharp

----- **Samtykkeerklæring**

Jeg har mottatt og forstått informasjon om prosjektet [sett inn tittel], og har fått anledning til å stille spørsmål.

Jeg samtykker til:

Å delta i intervju, samt at mine opplysninger behandles frem til prosjektet er avsluttet. Opplysninger gitt kan (anonymisert) brukes i videre forskning.

(Signert av prosjektdeltaker, dato)

Appendix 5 Approval NSD

Vurdering

Referansenummer

270469

Prosjekttittel

Masteroppgave om innovasjon i offentlig sektor gjennom sirkulærøkonomi

Behandlingsansvarlig institusjon

Nord Universitet / Handelshøgskolen / Innovasjon og entreprenørskap

Prosjektansvarlig (vitenskapelig ansatte/veileder eller stipendiat)

Dolores Modic, dolores.modic@nord.no, tlf: 75517591

Type prosjekt

Studentprosjekt, masterstudium

Kontaktinformasjon, student

Hanne Rendal, 328186@student.nord.no, tlf: 93068041

Prosjektperiode

10.01.2022 - 18.05.2022

Vurdering (1)

28.01.2022 - Vurdert

Det er vår vurdering at behandlingen av personopplysninger i prosjektet vil være i samsvar med personvernlovgivningen så lenge den gjennomføres i tråd med det som er dokumentert i meldeskjemaet 28.01.2022 med vedlegg, samt i meldingsdialogen mellom innmelder og NSD. Behandlingen kan starte.

TYPE OPPLYSNINGER OG VARIGHET

Prosjektet vil behandle alminnelige kategorier av personopplysninger frem til 18.05.2022.

LOVLIG GRUNNLAG FOR UTVALG

Prosjektet vil innhente samtykke fra de registrerte til behandlingen av personopplysninger. Vår vurdering er at prosjektet legger opp til et samtykke i samsvar med kravene i art. 4 nr. 11 og 7, ved at det er en frivillig, spesifikk, informert og utvetydig bekreftelse, som kan dokumenteres, og som den registrerte kan trekke tilbake.

For alminnelige personopplysninger vil lovlig grunnlag for behandlingen være den registrertes samtykke, jf. personvernforordningen art. 6 nr. 1 a.

PERSONVERNPRINSIPPER

NSD vurderer at den planlagte behandlingen av personopplysninger vil følge prinsippene i personvernforordningen om:

- lovlighet, rettferdighet og åpenhet (art. 5.1 a), ved at foresatte får tilfredsstillende informasjon om og samtykker til behandlingen
- formålsbegrensning (art. 5.1 b), ved at personopplysninger samles inn for spesifikke, uttrykkelig angitte og berettigede formål, og ikke viderebehandles til nye uforenlige formål
- dataminimering (art. 5.1 c), ved at det kun behandles opplysninger som er adekvate, relevante og nødvendige for formålet med prosjektet

- lagringsbegrensning (art. 5.1 e), ved at personopplysningene ikke lagres lengre enn nødvendig for å oppfylle formålet

DE REGISTRERTES RETTIGHETER

NSD vurderer at informasjonen om behandlingen som de registrerte og deres foresatte vil motta oppfyller lovens krav til form og innhold, jf. art. 12.1 og art. 13.

Så lenge de registrerte kan identifiseres i datamaterialet vil de ha følgende rettigheter: innsyn (art. 15), retting (art. 16), sletting (art. 17), begrensning (art. 18) og dataportabilitet (art. 20).

Vi minner om at hvis en registrert/foresatt tar kontakt om sine/barnets rettigheter, har behandlingsansvarlig institusjon plikt til å svare innen en måned.

FØLG DIN INSTITUSJONS RETNINGSLINJER

NSD legger til grunn at behandlingen oppfyller kravene i personvernforordningen om riktighet (art. 5.1 d), integritet og konfidensialitet (art. 5.1. f) og sikkerhet (art. 32).

For å forsikre dere om at kravene oppfylles, må dere følge interne retningslinjer og eventuelt rådføre dere med behandlingsansvarlig institusjon.

MELD VESENTLIGE ENDRINGER

Dersom det skjer vesentlige endringer i behandlingen av personopplysninger, kan det være nødvendig å melde dette til NSD ved å oppdatere meldeskjemaet. Før du melder inn en endring, oppfordrer vi deg til å lese om hvilke typer endringer det er nødvendig å melde:

<https://www.nsd.no/personverntjenester/fylle-ut-meldeskjema-for-personopplysninger/melde-endringer-i-meldeskjema>. Du må vente på svar fra NSD før endringen gjennomføres.

OPPFØLGING AV PROSJEKTET

NSD vil følge opp ved planlagt avslutning for å avklare om behandlingen av personopplysningene er avsluttet.

Kontaktperson hos NSD: Olav Rosness, rådgiver.

Lykke til med prosjektet!