

# Chances and Challenges for Sustainable Public Procurement -The Supplier's Experience-

Master thesis

Science, Management & Innovation master specialisation  
Faculty of Science, Radboud University Nijmegen

Name:	Else Edwards
Student number:	4302230
Discipline:	Biology
Host organization & department:	Ministry of Infrastructure and Water Management, Directorate of Sustainable Environment and the Circular Economy & MVO Nederland
Start date:	15-02-2019
Academic year:	2018-2019 and 2019- 2020
University coach:	Raphaël Smals
Host organization coach:	Imke Haenen & Shirley Justice
Reader:	Michiel Zijp
Is this thesis confidential?	No
Date:	04-03-2020

## Abstract

With the government's significant purchasing power, sustainable public procurement (SPP) has great potential to aid in achieving public sustainability goals. In recent years, potential challenges and chances for SPP have been studied from the perspective of the procurer. This research focuses on the challenges and chances for SPP, as experienced by the supplier-side. To study their experiences, an online survey and eleven interviews were conducted and analysed. Results indicate that the majority of suppliers regard the concept of SPP as a positive development. However, adoption and application must still be improved upon. The five main challenges found were: ambition among smaller local governments, a conservative and risk averse attitude of the procurer, the competition for lowest price versus sustainable impact, the need for sustainability impact measurement and assessment tools, and optimisation of criteria formulation and tender method. To optimise application of SPP, much effort still seems necessary from both the scientific and the applicative perspectives.

## Executive summary

Sustainable Public Procurement (SPP) is increasingly seen as an important policy tool for pursuit of public sustainability goals. This research has been one of the first studies to focus on the supplier's perspective regarding SPP. To study the supplier's experiences, an online survey and eleven interviews have been conducted.

Both the online survey and the interview demonstrated that the majority of suppliers support the concept of SPP. None of the online survey respondents had a negative opinion on SPP, while 11.6% of survey respondents answered neutral and 88.4% answered they had a positive opinion about the concept. Many interviewees stated that public demand has great potential to influence the supplier's course of action.

Survey respondents were then asked how they perceived the effects of SPP. Less than 10% of survey respondents reported a negative effect from SPP, while about 30% reported no or neutral effect and 34 to 48% of survey respondents experienced positive effects from SPP. Negative responses were mostly based around a lack of implementation of SPP or monitoring and enforcement of the criteria. Positive effects included the encouragement of awareness and sustainability ambitions in the company and the industry, and financial stimulation of sustainable innovations. These effects were also mentioned in the interviews. Moreover, interviewees reported that attention for sustainability and well-designed SPP tenders were seen more frequently and the weight of price in tenders decreased. In their own company, interviewees saw their sustainability strategy being incentivised or confirmed and they noted that their company's size and investments could be influenced by SPP. Interviewees also mentioned that cooperation between companies occurred more frequently, in order to achieve sustainable development.

The main aspects that influence the successful application of SPP are the procurer's ambition, their -often conservative- attitude, the weight SPP criteria have in tenders, and the methods used for tendering and for formulation of the SPP criteria. About the first aspect, ambition, interviewees said that often political ambitions were high, especially among central governments and big municipalities. However, interviewees noted that attention to sustainability was often lacking among smaller local governments. Moreover, high ambition does not always seem to lead to successful application, as the transition to application seemed to be a bigger challenge.

The procurer's conservative attitude seems to be a result of risk averse tendering, as poorly executed tenders cause a risk of fines, extra work and lawsuits. To procure with progressive attitude, the procurer requires sufficient time and/or capacity and know-how. This know-how could for instance be acquired via the sharing of best practises and training.

Furthermore, the weight of SPP criteria should be of sufficient value. Interviewee's examples of best practises often involved tenders in which SPP criteria were set in stone and on which no concessions would be made. The main competitors for SPP in terms of assessment weight are aesthetics (in construction) and lowest price. The choice for aesthetics was usually influenced by an architect and the choice for lowest price seemed influenced by the procurer's management and serves as a safe criterion for avoiding lawsuits. The use of lowest price could be caused by a lack of knowledge about sustainability and SPP.

Three main methods for criteria formulation identified in this study were formulation of specific criteria, a flexible approach, and a partnership. Interviewees were divided on their preferences regarding these methods.

Specific criteria are common in SPP. However, in order to ensure a positive impact, criteria should be well developed and meet three requirements: criteria should be based on science, measurable and realistic. Using these requirements could ensure common terminology, an objective assessment method, and enforceable and proportional criteria. When assessment is objective and criteria are enforceable, greenwashing can be avoided, and therefore the supplier's competitive position can be protected against dishonest competitors. In order to meet the requirements for criteria formulation, it is important that sufficient knowledge is available on impact measurement and calculation. Lack of knowledge can lead to immeasurable, unmonitorable, unrealistic or ineffective criteria. The disadvantages of specific criteria are the inability to provide extra information of to distinguish from competitors.

To tackle these disadvantages, a flexible approach could be more useful. In this approach suppliers can answer to the sustainability demand more flexibly by means of open questions or an essay on how they approach sustainability. Although this method tackles the disadvantages of fixed criteria, it involves a more subjective assessment and therefore the procurer requires knowledge on how to compare such offers.

A final tender method recommended by respondents is the use of cooperative partnerships between procurer and supplier. In this case, a tender is designed for choosing a partner company instead of a product. This can be especially useful for long term projects or services, as these need healthy cooperation and a flexible contract. With a partner, sustainable development is pursued based on common goals instead of static criteria or labels. An open and confiding attitude is essential for successful cooperation.

Concluding, suppliers are supportive about using SPP as a policy tool. However, its translation from ambition to application is still lacking. For the procurer, availability of training, tools and good examples could benefit SPP adoption and stimulate a progressive attitude. Moreover, extensive knowledge is needed in order to measure and compare potential impact. This knowledge can be used to create effective and objective SPP criteria and assessment tools. Use of objective criteria and tools decreases risk of fines and lawsuits and may reduce reliance on lowest price. Potential solutions to optimize SPP are described in detail in the section: 'practical recommendations.

## Preface & acknowledgements

“It’s a matter of perspective.” A phrase that I had not heard before during my time as a Biology student. But then I started my specialization in Science, Management and Innovation and suddenly the world was full of perspectives. Facts and absolute numbers are now accompanied by experience, opinion and perception. First, I learned this theory in class, and now I’ve conquered this new truth in my very own research on the supplier’s experience of Sustainable Public Procurement. This research proved to be a massive learning opportunity and despite numerous moments of slight existential crisis, I am very happy to complete my Master’s degree with more new experiences and knowledge than I could have imagined beforehand.

In order to complete this research, my supervisors have been essential. I’d like to thank Raphaël Smals for his guidance, quick replies and effective advices, whenever I was in doubt. Also, lots of thanks to Imke Haenen and Shirley Justice, for their guidance, understanding and advices. Thank you both for welcoming me to the ministry of Infrastructure and Water Management and to MVO Nederland. I have enjoyed a really good time in both organizations.

Additionally, I’m grateful to the great number of people that have shared their knowledge and experience with me, in order to design this research. I’d like to thank the interviewees for their time and for sharing their experiences with SPP. And thank you to everyone that has shared and responded to my online survey.

Thank you for showing interest in this thesis and I hope you’ll find it informative.

Else Edwards

# Index

<b>Abstract</b> .....	<b>2</b>
<b>Executive summary</b> .....	<b>3</b>
<b>Preface &amp; acknowledgements</b> .....	<b>5</b>
<b>1. Introduction</b> .....	<b>8</b>
1.1 Context.....	8
1.2 Research Aim.....	9
1.3 Relevance.....	9
<b>2. Theoretical Framework</b> .....	<b>10</b>
2.1 Public Procurement.....	10
2.2 Procurement process.....	11
2.3 Sustainable public procurement.....	12
International Social Conditions.....	13
Social Return On Investment.....	13
Environmentally friendly.....	13
Bio based.....	14
Circular .....	14
Innovation oriented.....	14
SME-friendly.....	14
2.4 SPP ambition.....	14
2.5 Facilitators and barriers.....	16
Internal factors.....	16
External factors.....	17
2.6 Research Questions .....	18
Main Research Question .....	18
Sub-questions.....	19
<b>3. Methods</b> .....	<b>20</b>
3.1 Research strategy .....	20
3.2 Operationalisation .....	20
3.3 Data sources.....	22
Interview respondents.....	22
Survey respondents.....	22
3.4 Data collection and analysis.....	23
Qualitative interviews.....	23
Quantitative survey.....	23
<b>4. Results</b> .....	<b>24</b>
4.1 Online survey respondents.....	24

4.2 Sub-question 1: How do suppliers feel about the government’s aim for transition to sustainable by means of SPP?.....	26
Online survey.....	26
Qualitative interviews.....	26
4.3 Sub-question 2: What effects of SPP do suppliers experience within procurement, their company, and in the market?.....	28
Online survey.....	28
Qualitative interviews.....	29
Effects in industry.....	31
In summary.....	32
4.4 Sub-question 3: What experiences do suppliers have with tenders and their processes, and which factors are vital for successful application of SPP? .....	33
Findings compared to the theoretical framework .....	33
Ambition.....	35
Conservative/progressive procurement.....	36
Weight of criteria.....	37
Formulation of criteria.....	40
In Summary.....	44
<b>5. Conclusion .....</b>	<b>46</b>
<i>Practical recommendations.....</i>	<i>47</i>
<b>6. Discussion.....</b>	<b>50</b>
<i>Limitations and suggestions for further research.....</i>	<i>50</i>
<b>7. References.....</b>	<b>53</b>
<b>9. Appendix.....</b>	<b>57</b>
<i>App. 1: Online survey in Dutch .....</i>	<i>57</i>
<i>App. 2: Complete overview of dimensions found.....</i>	<i>67</i>

# 1. Introduction

## 1.1 Context

The Dutch government wants to use its purchasing power to contribute to policy goals aimed at sustainability, such as CO<sub>2</sub> emission mitigation, circular use of resources and the support of honest social conditions in the international market (Dijksma, 2017). This practice is called Sustainable Public Procurement (SPP). SPP is commonly described as procurement of products, services and works, with attention for the effects on people, planet and profit. SPP can be used as an instrument to support the transition towards a sustainable economy.

The challenge for SPP policy is to encourage as many (governmental) organisations as possible to adopt SPP. Therefore, SPP policy is shaped by cooperation with other governments, societal organisations and supplier-side organisations (Rijksoverheid, 2019a). The Ministry of Infrastructure and Water Management is responsible for coordinating the public activities regarding SPP, and for contribution concerning its environmental aspects. These activities are a joint effort with the ministry of Economic Affairs and Climate Policy, the ministry of Social Affairs and Employment, the ministry of the Interior and Kingdom Relations, and the ministry of Foreign Affairs.

For the period of 2015-2020, the government has formulated an action plan (Rijksoverheid, 2015), mentioning four intended goals for their SPP practise: (1) Increase of effectivity, in terms of effective market stimulation towards developing products, works or services which are as sustainable as possible. (2) Professionalization of sustainable procurement. This means that the responsibility for formulating sustainable criteria of the internal client is emphasized as well as the need to procure more strategically in order to achieve the desired impact. (3) European and international cooperation. This cooperation is aimed at sharing of knowledge, harmonisation of standards and strategies, and influencing international markets (because supply chains often transcend national borders). (4) The Dutch government should be a role model and aims to lead in Europe in terms of SPP ambition, practise and transparency. As a role model, the government also intends to stimulate knowledge sharing.

An important aspect of the second goal, professionalization of sustainable procurement, is the availability of knowledge about strategic procurement, and providing governments with tools to translate their sustainability ambitions to their procurement plan. Cooperation between the market (potential suppliers or parties with state-of-the-art market knowledge) and the procuring organisation is stressed as an important facilitator for strategic procurement (Lauesen & Vium, 2005; Weimar, 2015).

Another government-market interaction is found in the government's aim to stimulate their suppliers to develop products (works, services) with more sustainable impact, or make their own business processes more sustainable. At EU level, environmentally sustainable public procurement, or Green Public Procurement, is supported by several policies in order to drive the market for sustainable development (Testa, Iraldo, Frey, & Daddi, 2012).

As the period for which the government's action plan was devised has ended, a new plan is being made. The following study is devised to serve as an interim evaluation for the SPP policy. This research will inform the ministry on what aspects they may focus in the new action plan. Moreover, over the last years several complaints from suppliers about SPP have been reported. As these have never been evaluated on a broader scale, this study also aims to validate and provide better understanding of such complaints. Finally, knowledge is needed

on how suppliers currently experience SPP, in order to effectively stimulate sustainability in SPP application. This knowledge will be gathered in the proposed research.

## 1.2 Research Aim

This research will provide knowledge about the facilitators and barriers for SPP application, as experienced by the supplier-side. This is a perspective that has not been studied extensively yet (Cheng, Appolloni, D'Amato, & Zhu, 2018). A mixed-methods approach is chosen to identify barriers and facilitators, while also providing insight in the degree in which suppliers perceive these factors as important. This insight in the facilitators and barriers as experienced by suppliers should contribute to realization of successful application of SPP. It is important that the supplier's experience with SPP and their opinions are studied, because of the important role procurer-supplier interaction serves in the SPP plan of action 2015-2020. A better understanding of the supplier-side of this interaction might eventually lead to the overarching goals to make SPP as an incentive for sustainable market development more effective. It may also provide knowledge useful for the professionalization of procurement by exploring how to successfully translate sustainability ambitions to a tender. The specific research questions will be introduced in section 2.6, after the context is described in more detail.

## 1.3 Relevance

Recently, the transition to a sustainable economy has been an increasingly important theme both nationally and internationally. There is an increasing sense of urgency to protect ourselves and others against the results of our current economic activities, such as climate change, resource depletion and immoral international working conditions. With its purchasing power, public procurement also affects these issues and can significantly influence a government's transition to sustainable.

An important governmental goal for SPP is to incentivize private organisations to increase adoption and implementation of sustainability in their policies and activities (Weimar, 2015). However, in order to influence the supplier-side of public procurement, it is important to understand how SPP is received and experienced by suppliers. By analysing the supplier's perspective, the effectiveness of SPP can be evaluated and new challenges for SPP could be identified. Despite the role of the supplier in SPP and in the transition to sustainability, not much research has been done to investigate their experiences with SPP. Therefore, this study should provide valuable insights in the matter and perhaps inspire new research into the supplier's experiences.

Finally, exploring the supplier's experience with SPP is of practical relevance, since procuring organisations have previously been informed by individual comments and complaints. A comprehensive abstract with input by multiple supplying companies will be useful for understanding of the effects, chances and barriers regarding their procurement activities.

## 2. Theoretical Framework

In this theoretical framework, first the concepts embedded within SPP will be defined, along with a summary of the procurement process. Afterwards, the ambition levels will be explained and facilitators and barriers known in literature will be summarized. Finally, this study's research questions will be proposed.

### 2.1 Public Procurement

Procurement is defined as the process in which goods or services are purchased from private companies. This comprises multiple activities, such as the identification of needs, market analysis, evaluation of suppliers, selection of a supplier, and post-purchase performance evaluation (Novack & Simco, 1991). Large procurements, especially those by public bodies, often include a tender. This is a procurement method based on biddings from interested suppliers, contractors or service providers (hereafter, these will all be included in the term 'suppliers') within a set time period. Later in this chapter, the procurement process will be described in more detail.

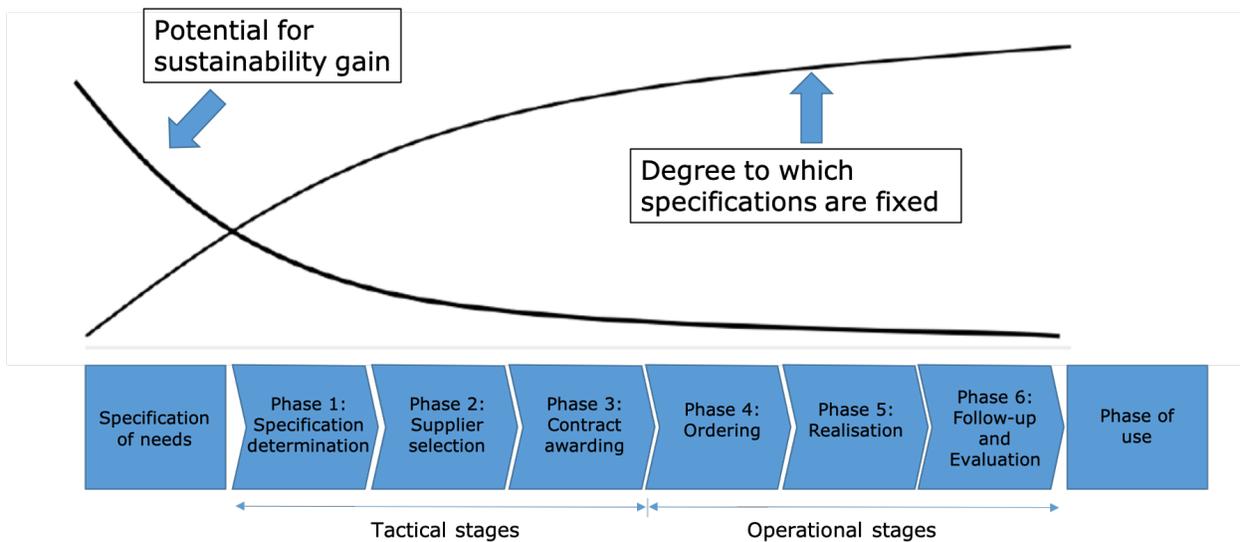
Public procurement is the acquisition of works, supplies and services by public bodies (Uyarra & Flanagan, 2010). The objectives of public procurement can be divided into primary and secondary aims. Because public procurements are funded by tax money, the primary objective is to procure efficiently, ensure a high quality of service, and secure the public interest (OECD, 2015). The secondary objectives are the achievement of social benefits, such as the development of a sustainable economy or stimulation of fair international social conditions (Rainville, 2017).

Additional to these objectives, there are other essential differences (Thai, 2001) between procurement by private organisations or by public ones. In governmental organisations, the procurement process often is bound by national and international rules. The Dutch national procurement law, for instance, obliges procuring public organisations to treat the market non-discriminatory and with equal treatment. Furthermore, the process should be transparent and criteria should be proportional to the monetary value the tender encompasses (Wettenbank-overheid, 2019). Also, when the value of a tender exceeds the European threshold, it should be published to invite the entire market of the European Union.

Within the European Union, the total government expenditures on works, products, and services (utilities excluded) in 2017 summed up to 2049.8 billion euros, which was 12.2% of the GDP (European-Commission, 2019). In the Netherlands, public procurements yearly account for approximately 60 billion euros, of which 10 billion Euros are spent by the central government and 50 billion by decentralized governments (Rijksoverheid, 2015; Van Weert, Boneschansker, Geurts, & Lopulalan, 2016). These Dutch data are based on 2015 and counted for approximately 9% of the national GDP (CBS, 2016). Over time, governments, such as the Dutch, have increasingly used this purchase power to reach desired results in society (Jolien Grandia & Meehan, 2017; Rolfstam, 2015). This way, public procurement could be used as a policy instrument to contribute to public objectives.

## 2.2 Procurement process

A common model for describing the procurement process was presented by Van Weele (2009). Although this model was designed around procurement in general, it is applicable for public procurement as well (J Grandia, 2015). Figure 1 shows an adaptation of Van Weele's model that will be applied in this research. Additionally, the figure shows the relation between potential sustainability gain in a tender compared to the degree to which tender specifications are fixed as described by the Dutch government (Rijksoverheid, 2015). In Van Weele's model (Van Weele, 2009), procurement is represented in six stages, of which the first three are considered 'tactical stages' and the last three are 'operational'. However in practise, this distinction is not always sharply defined and phases can overlap. Because in the tactical stages the potential sustainability gain is highest, this study will focus on these first stages. These phases of procurement are described individually in the following section.



**Figure 1.** A representation of the relation between the potential sustainability gain and the degree to which tender specifications are fixed (Ministry of Infrastructure and Water Management, 2015), combined with the graphical illustration of the stages in the procurement process based on the work of Van Weele (2009).

Prior to the start of the actual tender, it is important that the needs of the internal client are specified. Dependent on the client's needs, a tender strategy can be formulated. The careful formulation of a strategy is important, because this phase of procurement design and preparation allows for the biggest opportunities in sustainability (Figure 1). One main reason for this potential sustainability gain is the chance to prioritise functional criteria over technical ones, offering a level of flexibility in the tender criteria and allowing for creative, innovative solutions to the client's need (Rainville, 2017). Another major factor for the sustainability gain is the opportunity for market consultations. A market consultation could be very useful to inform the procurer about the possibilities and barriers in their product category, as the suppliers usually have much more product knowledge in their specific field.

The first formal phase of a tender is the specification determination. This is the phase in which specific requirements are formulated into tender criteria. These criteria are often divided in 'cost' and 'quality' criteria. With the cost-criteria, the procurer ensures responsible

expenditure of public money, while the quality-criteria are necessary for the procurement of a product (or work, or service) that fits the needs of the internal client. As stated in the previous section, these criteria can be based on functionality. Criteria can also indicate the exact properties the product (or work, or service) should have. These are the technical criteria. The criteria this research will focus on are the sustainability, or SPP-criteria. These criteria include the use of (eco)-labels, certifications and other standards (Rainville, 2017). Phase two, supplier selection, could also be called the 'tender phase'. During this phase, suppliers are invited to participate in the tender and submit an offer. These offers are assessed by the internal client, advised by the procurement officer. In this assessment, the importance of tender criteria is included by means of classification of criteria. Qualifying criteria state the minimal quality asked from the supplier, while award criteria could be met to increase the supplier's chances of being awarded the contract (Caldwell & Bakker, 2008). When award criteria are formulated, contracts are not just awarded to the supplier that offers the lowest price, but an analysis will be performed to determine which supplier offers the best value for money. Moreover, criteria can be assigned a different weight for the analysis of offers, depending on their importance (J Grandia, 2015). This weight represents the degree to which the criterion influences the decision of awarding the tender. The weight of criteria should also be shared in the tender documents, so competition among suppliers remains impartial.

In the third phase, the supplier that either offers the lowest price or the best value for money is awarded a contract. The contract draws up different agreements, such as price and payment agreements or insurance. After the awarding of the contract, the order can be placed, followed by the realization phase in which the product (, work or service) is delivered or produced. Evaluations need to occur on whether the contract is realized well and whether quality features are up to standards (J Grandia, 2015). In the final phase, the entire procurement process is evaluated in order to improve.

## 2.3 Sustainable public procurement

To explain the concept of sustainable public procurement, a description of the concept sustainability is in order. The original definition of sustainability formulated by the Brundtland commission (1987; p54) is "*development that meets the needs of the present without compromising the ability of future generations to meet their own needs*". The prevalent theoretical model describing 'sustainability' as the result of three pillars advocates that most important aspects of sustainability are the society, environment and economy (people, planet, profit). The concept was developed gradually with input of social, environmental, and economic sciences. However, there is no standard theoretical description of the three pillars and the relations between them. Therefore, this tripartite of sustainability has several variations depending on the way relations between the 'pillars' are illustrated. Consequently, to the absence of a standard description and the varying relational models, 'sustainability' is an open concept with multiple interpretations and context specific understanding. This makes it difficult to operationalise 'sustainability' (Purvis, Mao, & Robinson, 2019).

In this research, 'sustainability' will be regarded as the positive effects on society, ecology and economy, induced by public procurement. 'Sustainable public procurement' will be handled per definition formulated by the UK Social Procurement task force: "*a process whereby organizations meet their needs for goods, services, works and utilities in a way that achieves value for money on a whole life basis in terms of generating benefits not only to the organization, but also to society and the economy, whilst minimizing damage to the environment*" (DEFRA, 2006). This definition was chosen because it is used by the Dutch government itself. Moreover, the definition for SPP is widespread and also used within other

governments such as in the US, the UK, Germany, France, Japan, and South Korea (Walker & Brammer, 2009; Wang, Liu, & Ju, 2018).

Another type of Sustainable Public Procurement common in literature is Green Public Procurement (GPP). GPP is defined as public procurement in which environmental impacts are reduced throughout product or service life cycles (Rainville, 2017) compared to what would otherwise be procured. The contrast between SPP and GPP is found in the exclusively focus of GPP on the environmental 'pillar' of sustainability, while SPP also encompasses the societal and economic pillar (Cheng et al., 2018).

The governmental definition of SPP is based around seven central themes (Rijksoverheid, 2015): international social conditions, social return on investment, environmentally friendly, bio based, circular, innovation oriented, and SME-friendly procuring. The first two themes are society based, the following three are environment based, and the final two are economy-oriented. Below, the themes are described briefly, based on the definitions provided by PIANOo, the Dutch Public Procurement Expertise Centre.

### International Social Conditions

The theme International Social Conditions (ISC) refers to all international norms with a social purpose, such as human rights and labour standards. However, the Dutch Procurement Law and the European guidelines do not contain a definition for ISC (Vogel, 2018). The Procurement Law (Wettenbank-overheid, 2012; articles 2.81-2.84) does oblige procuring organisations to have tender participants declare that they have taken ISC into account while writing their offer (Vogel, 2018). Moreover, a procurer can choose to formulate additional criteria such as quality marks or conditions for implementation (Vogel, 2018). A procurement officer can be informed risks for international social conditions by consulting risk assessments per sector or per country (KPMG, 2014; MVO-Nederland, 2019).

### Social Return On Investment

Social Return On Investment (SROI) is an approach to create employment opportunities for people who are disadvantaged within the labour market (PIANOo, n.d. a). With SROI, the supplier can be stimulated or obliged to involve more vulnerable employees. An example of SROI in a tender is given by the province of Friesland (SROI-Coordinatiepunt, 2019). In this tender they demanded that a minimum of 2% of the total value of the tender is used in the context of SROI.

### Environmentally friendly

Environmentally friendly procurement is a broad concept, in which several subthemes can be distinguished. Important environmental themes are Energy and climate conscious procurement, use of environmentally friendly materials and resources, economical with water and soil, and attention for the living environment, nature, biodiversity, and animal welfare (PIANOo, n.d. b). The focus of a tender can be dependent on the type of product (or work, or service) that is being procured (Rijksoverheid, 2019b). For 45 product categories with significant impact on the environment, mandatory criteria have been determined for the central government (PIANOo, n.d. c). Additionally, other criteria can be applied.

## Bio based

Bio based procuring focuses on the replacement of fossil resources by renewables made from biomass (PIANOo, ca. 2018). In a tender, this could be requested by criteria asking a certain percentage of bio based material in their product or work (Sarmiento, Dammer, & Partanen, 2016). The inclusion of the theme bio based is optional for procurers (PIANOo, ca. 2018).

## Circular

Circular procurement is based on minimising resource wastage and value loss, and maximising the re-usability of product and materials (PIANOo, ca. 2016). Circularity can be included in different ways, therefore the focus for circularity can vary according to preferences. Focus could for instance lie on extension of product life by improving ease of repair and maintenance, high-quality re-use of existing materials, or a clear end-of-use destination for the product. This type of procurement may require new revenue models, such as pay-per-use, product rental, buy-rebuy or lease (PIANOo, 2019).

## Innovation oriented

With innovation-oriented procurement the procurer wants to stimulate suppliers to invent innovative, new solutions (PIANOo, n.d. d). This approach requires a specific process instead of technical criteria, with an emphasis on dialogue with the supplier, functional demand formulation and an innovative procurement method (PIANOo, n.d. e). Innovation oriented procurement can be approached in two manners: (1) The government challenges the supplier-side to develop a new solution for a problem, or (2) the government can provide opportunity to the supplier-side to offer a formerly developed innovation (PIANOo, n.d. e).

## SME-friendly

The goal of SME-friendly procuring is to improve the accessibility of tender for Small and Medium sized Enterprises (SMEs) (PIANOo, n.d. f). This can for instance be done by dividing the tender in smaller plots, or by decreasing the administrative load related to the tender. Rules about dividing the tender in plots and are implemented in the Dutch procurement law (Wettenbank-overheid, 2019).

## 2.4 SPP ambition

According to a report by Ecorys (Koppert et al., 2013), Dutch governments are aware of the national ambitions and policy goals for SPP, and qualifying sustainability criteria are applied widely. The realisation however, was considered to be inconsequential and causes governments to struggle with commitment to SPP (Van Pelt, 2017) (Van Pelt, 2017). The National Monitor Sustainable Municipalities published by TELOS (2018) concluded that municipalities have a lot of attention for SPP in their policies, but emphasized the necessity for the actual realization of these goals. TELOS stated that the last three years, the sustainability score of municipalities had increased. This could be related to the recent economic growth. However, the scores for the ecological aspect seems to have stagnated over the last two years. This could be a negative consequence from the economic growth. The report also demonstrates a lot of variation in sustainability scores between municipalities. This indicates that variation in the success with which municipalities realize their sustainability ambitions can be expected.

Additionally, considering the effects on the environment, SPP criteria do not have optimal effect for about half of the product groups. This is a result of

the rate to which these criteria become outdated due to EU legislation and quick developments in the market (Zijp & de Zwart, 2013).

In international context, SPP and related practises such as Green Public Procurement, Public Procurement for Innovation and Circular Procurement are given attention globally (Trindade, Antunes, & Partidário, 2017). Cheng et al. (2018) found that GPP was endorsed in many countries and regions, especially in the EU. The majority of research too, has been focused on developed countries (Delmonico et al., 2018). Within Europe, countries apply different approaches to sustainable procurement. The UK and Finland for instance, followed the basics of the European law, while Spain and Portugal applied a broader definition including social and environmental aspects (Mendoza Jiménez, Hernández López, & Franco Escobar, 2019). Authorities, especially at local level, seem to have trouble with implementation of such green procurement policies (Cheng and others 2018). The challenges of implementation are described in the following section. Additionally, studies on SPP adoption in developing countries showed that these countries require additional motivation, such as organization efficiency, direct incentives and pressure from stakeholders (Cheng et al., 2018; Delmonico et al., 2018).

Moreover, the implementation of SPP is strongly dependent on adopted standards, which differ between countries. Use of these different standards could obstruct the effectiveness of SPP criteria (Cheng et al., 2018). Actual measurements of the environmental or climate effects of SPP have been performed in a very limited amount of studies, for instance in Norway and The Netherlands (Alvarez & Rubio, 2015; Larsen & Hertwich, 2010; Rietbergen, van Rheede, & Blok, 2015).

## 2.5 Facilitators and barriers

### Internal factors

A fair amount of research has been done to identify facilitators and barriers for realization of SPP (and related practises) from the perspective the procuring organisation. Those are considered the internal factors. These factors could be categorized into four aspects: (1) devotion & commitment, (2) knowledge, tools & skills, (3) costs, and (4) policy & politic priorities.

#### *Commitment*

In a thesis by J Grandia (2015) the inclusion of sustainability is considered to be a process of organisational change in which existing routines of relevant actors need to adopt sustainability. However, organisations/actors often show resistance towards change (J Grandia, 2015; Sourani & Sohail, 2011). Important in facilitating this change is the commitment of top management in terms of overall ambition and support, but also for making a financial budget available (Ageron, Gunasekaran, & Spalanzani, 2012; Sourani & Sohail, 2011). Another important facilitator for SPP is personal commitment to sustainability. Personal commitment among employees supports the degree to which sustainability is included in procurement and decision making (Brammer & Walker, 2011; Thomson & Jackson, 2007; Van Pelt, 2017). Additionally, studies have shown that a positive attitude to change and personal affection with sustainability relate to the application of sustainable initiatives and practises (Walker, Di Sisto, & McBain, 2008).

#### *Knowledge, tools & skills*

Other factors important for the inclusion of sustainability are the procurer's knowledge, tools and skills. Knowledge is mentioned in many researches as a condition for the realisation of SPP (Brammer & Walker, 2011; Günther & Scheibe, 2006; Sourani & Sohail, 2011; Testa et al., 2012). Not only product knowledge and understanding are needed to apply relevant SPP criteria, but knowledge about sustainability is also necessary. Sourani and Sohail (2011) found sustainability issues were sometimes perceived to be confusing. This was due to vague definitions regarding sustainability and their potential to be interpreted in different ways. Additionally, SPP criteria can counteract with other sustainability goals, forcing the procurer to choose a certain focus. This lack of clarity could cause disinterest for sustainability among actors.

The development of tools to aid the procurer is argued to be necessary for the implementation of SPP (Brammer & Walker, 2011; Günther & Scheibe, 2006). However, a large number of tools without proper knowledge on when and how to use them is also seen to cause confusion (Sourani & Sohail, 2011). Therefore, it is important that these tools are simple and provide clear instructions.

A third factor that contributes to the procurer's ability to realize SPP is their level of skill in the organisation of a tender (Lauesen & Vium, 2005; Rigby, 2013). For instance, a skilled procurement advisor understands how to cooperate with the market and its potential suppliers in order to formulate both realistic and ambitious criteria for a tender. Furthermore, the role of the procurement advisor to formulate tender documents is of significant importance for the success of the implementation of SPP because vagueness in the tender goal or criteria will lead to suboptimal tender results. The procurement staff determines the weights of criteria and the degree to which they are fixed or open to innovative solutions.

### *Costs*

Another significant hurdle towards SPP is the cost aspect. Studies mention the lack of budget, restrictions on expenditure and reluctance towards higher initial costs. SPP is often associated with higher costs, while this isn't always necessary (Sourani & Sohail, 2011). However, the procurement's goals to handle tax money economically and to contribute to policy goals do conflict each other regularly. In such cases, procurers are often inclined to award the offer with the lowest initial price (Koppert et al., 2013). This tendency could be due to a procurer's risk avoiding attitude (Brammer & Walker, 2011).

### *Politics*

Finally, implementation of SPP is also influenced by the organisation's policies and political priorities. Organisations do not always prioritise sustainability and therefore avoid time being spent on it (Bos-Brouwers, 2010). Sourani and Sohail (2011) and Melissen and Reinders (2012) also mentioned that policies and regulations are sometimes ineffective for the successful realisation of SPP. Some regulations are seen to obstruct a long-term vision and sustainable investments. In order to succeed in the realisation of SPP, sustainable goals and their implementation should be aligned and policy should be operationalised well (Rolfstam, 2015; Thomson & Jackson, 2007).

### **External factors**

The external factors influencing the government's SPP realisation have not been given much attention, although they could be considered to be a big influence on SPP practise (Crespin-Mazet & Dontenwill, 2012). External factors can be categorised into four types: the legal environment, the political environment, the market environment, and the social, economic and other environment (Thai, 2001). As this research studies the facilitators and barriers considered by the supplier-side, it will be focused on both the internal factors in the procuring organisation and the factors within the supplying organisations.

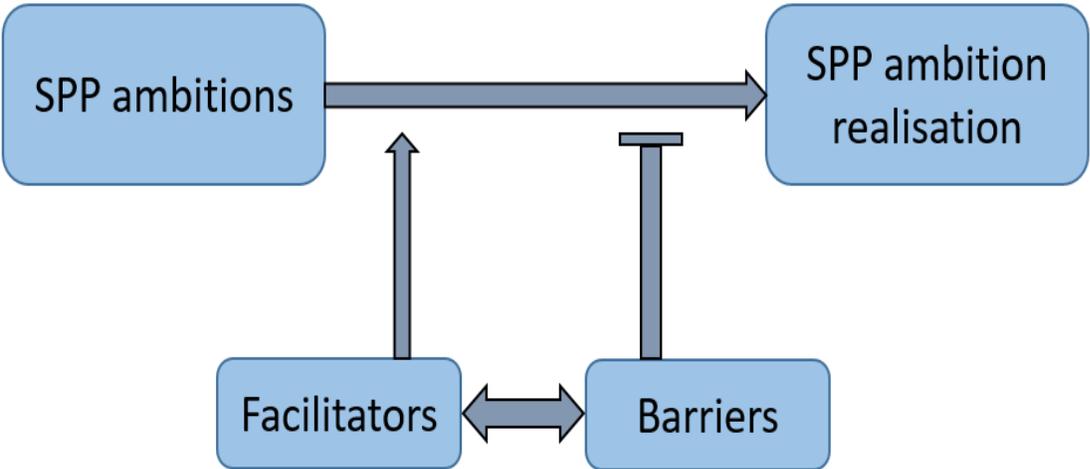
Not much research has focused on the supplier's experience with public tenders. The supplier is unaware of most of the internal factors of a procuring organisation and is probably mainly focused on the tender documents and criteria. A complaint expressed regularly is the capacity of labour needed to participate in a tender, due to the many criteria included. To participate in a tender, not just absolute capacity is needed, but it also needs staff with a diversity of experience and expertise. It also takes some experience to write offers that give a good impression and agree well with the procurer's goals. Sourani and Sohail (2011) mentioned that the lack of capacity might also cause the supplier to be focused on the short-term, while sustainability is mainly a long-term solution. The absence of a long-term vision could eventually place smaller suppliers in a disadvantage as they might not be able to keep up with sustainability requirements.

## 2.6 Research Questions

### Main Research Question

*From the perspective of the supplier, which factors influence the realization of Sustainable Public Procurement by the Dutch ministries?*

A graphical model based on this main research question is given in figure 2. The general assumption is that SPP ambition leads to SPP realisation, however, this transformation is influenced by facilitators and barriers. As noted in the previous section, this study focused on the organisation's internal factors and all four categories considered during this study. Each aspect could either be a facilitator or a barrier towards successful application of SPP, as these are two sides of the same coin. For instance, commitment to SPP is considered to be a factor that influences SPP realisation. In case sufficient commitment is present, this would be a facilitator, while a lack of commitment would be a barrier. Therefore, this study primarily speaks of 'aspects' or 'factors' rather than 'facilitators and barriers'. In addition, a quantitative survey will provide supporting data on the importance of the factors identified.



**Figure 2.** A graphical model of the relations between ambition realization and its facilitators/barriers.

## Sub-questions

To provide context for understanding the supplier's perspective, several sub-questions were formulated. Sub-question 1 was formulated in order to investigate what opinion suppliers have on the concept of SPP, as opposed to traditional procurement. A cynical view of the SPP concept, for instance, could influence their arguments given in response to application-oriented questions. Sub-question 1 helps to divide the opinion on the SPP concept and on SPP application, and could additionally provide useful feedback about the perceived effectiveness of SPP policy.

Sub-question 2 provides context to the respondent's story and can be used as feedback on past SPP policy. Moreover, answers to this open-ended question may suggest at what priorities the supplier has, regarding SPP.

As opposed to sub-question 2, sub-question 3 focused on recent experiences with SPP. With sub-question 3, an assessment is made of all factors involved and connections between those factors are explored.

- 1. How do suppliers feel about the government's aim for transition to sustainable by means of SPP?*
- 2. What effects of SPP do suppliers experience within procurement, their company, and in the market?*
- 3. What experiences do suppliers have with tenders and their processes, and which factors are vital for successful application of SPP?*

## 3. Methods

### 3.1 Research strategy

As this study is mostly of exploratory nature, it relied mainly on qualitative data. These data were collected by means of interviews. Additionally, a small, quantitative survey was held to support the qualitative data and discover trends among a wider range of suppliers. The reason for this mixed-methods approach is that on one hand, this study is aimed at identification of new facilitators and barriers, while on the other hand it tries to provide insight in the degree in which suppliers perceive these factors as important. Therefore, the research questions will be answered by integration of both types of data. Assumptions and expectations used while collecting data were largely formed by prior research and knowledge. However, as this study explored a new perspective on SPP, the survey and interviews were designed to also consider new findings.

### 3.2 Operationalisation

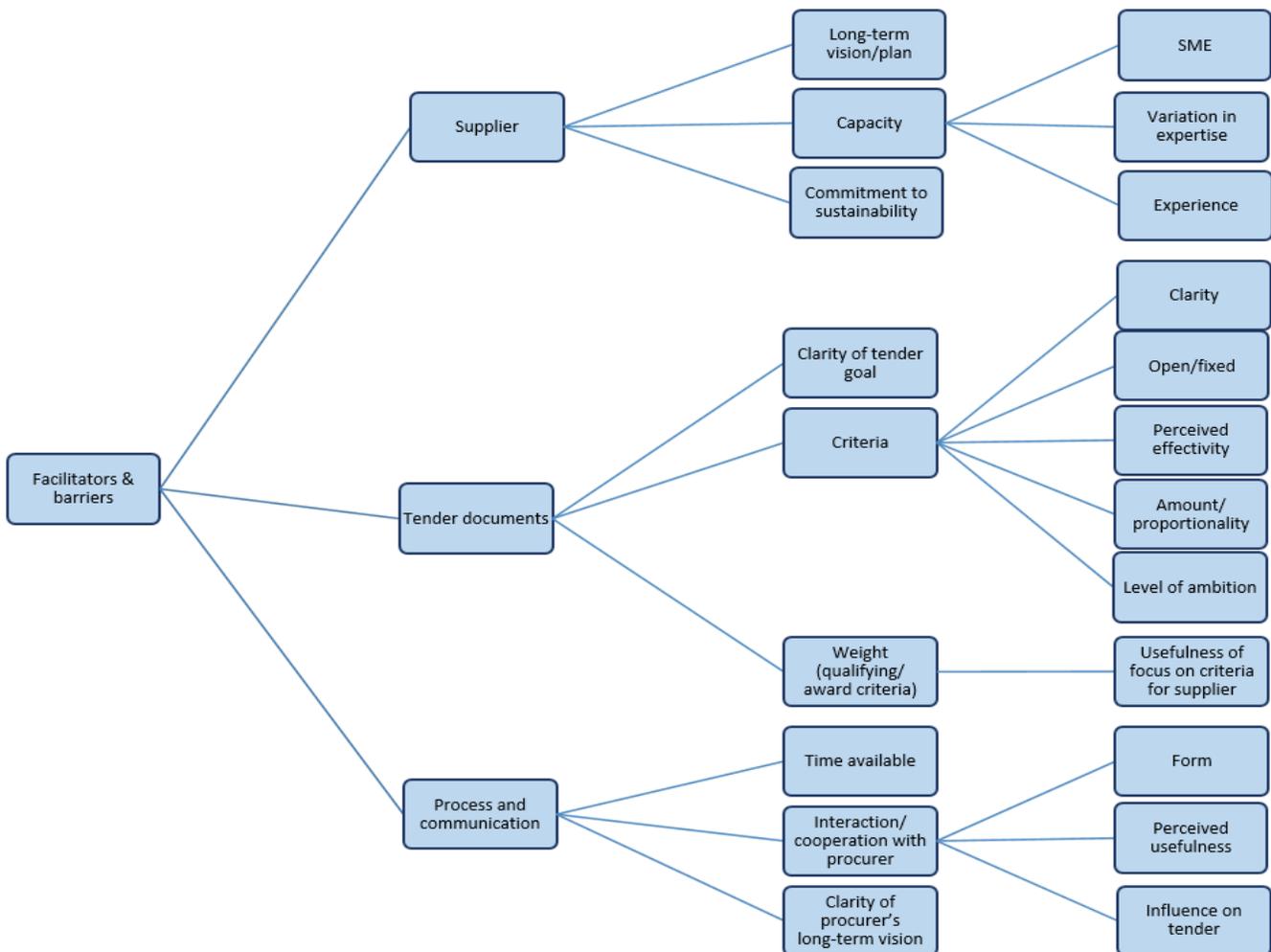
Several previously found factors have been described in the theoretical framework (section 2.5, facilitators and barriers). This framework was adjusted to fit the way suppliers experience the tender process, and is less focused on the procuring organisation's internal factors. Instead, focus is laid on their own internal factors and the tender. The operationalisation framework is based on data from scientific literature, supplemented with the results of exploratory conversations with organisations that participate in the SPP focus group hosted by the ministry of Infrastructure and Water Management. These organisations are: MVO Nederland (CSR Netherlands), NEVI, PIANOo, Social-Enterprise, and Unie van Waterschappen (Dutch Water Authorities).

As shown in figure 3, the potential facilitators and barriers can be organised into three categories. Factors that lie within the supplier's organisation, factors the supplier encounters in tender documents, and the ones they encounter during the tender process.

As scientific knowledge on the supplier's perspective is still lacking, the framework for the facilitators and barriers within the supplier's company relies on information provided by the focus group organisations. Within the supplier's organisation, the most important facilitators for SPP are expected to be: having a long-term vision, commitment to sustainability, and the capacity to participate in tenders (Sourani & Sohail, 2011). Capacity was divided into three dimensions: size of the company based on the national definition of an SME, the variation in expertise needed for tenders and the experience the supplier has with tenders.

The second category focused on the available information in the tender documents. Clarity of the tender goal was expected to influence the success of SPP (Sourani & Sohail, 2011). The exact SPP criteria could be even more influential. Aspects of the criteria that were given attention are: clarity of criteria (Sourani & Sohail, 2011), the degree to which they are open to innovation or fixed (Lauesen & Vium, 2005), the degree to which the supplier perceives them as effective, the number of criteria and their required labour, and the level of ambition regarding SPP (Lauesen & Vium, 2005; Melissen & Reinders, 2012; Rigby, 2013). Additionally, the suppliers were asked about their opinions on the weights or obligatory versus voluntary nature respective to the SPP criteria. Especially when SPP criteria would be prioritised too little, it could be too ineffective for a supplier to focus on these criteria.

Finally, this study focused on the tender process and the interaction between the procuring organisation and the supplier. The first aspect of the tender process is the time available to undertake necessary actions and write the offer. The second aspect focused on the interaction and cooperation between the supplier and the procuring organisation. The suppliers were asked in what forms they cooperated with the procuring organisation and whether they perceived it as useful and influential to the tender. The last aspect regarding the process and communication focused on whether the procuring organisation had a long-term vision or plan and to which degree this was communicated to the suppliers. Knowledge of the procurer's long-term plan might be important for determining the supplier's strategies regarding sustainability investments.



**Figure 3.** The expected facilitators and barriers experienced by suppliers, plotted in dimensions.

### 3.3 Data sources

#### Interview respondents

Professionals were interviewed from eleven companies that had experience with tenders in which SPP criteria were applied. These companies were mainly found via the networks of MVO Nederland (CSR Netherlands). To achieve a broad view of the varied population of supplying companies and their customers, interviewees were selected on being from different sectors and company sizes. Details on the interviews are shown in table 1.

**Table 1.** Overview of interview respondents.

<b>Interview</b>	<b>Date</b>	<b>Length</b>	<b>Profession</b>	<b>Organisation</b>	<b>Sector</b>
<b>1</b>	17-05-19	1:07 h	Director	Breedweer	Facility services
<b>2</b>	20-05-19	1:05 h	Marketing manager	Tarkett	Floor and wall coverings
<b>3</b>	21-05-19	1:04 h	Marketing manager and sustainability manager	Eneco	Energy
<b>4</b>	22-05-19	1:29 h	Marketing manager	Bio Bound	Concrete
<b>5</b>	22-05-19	0:52 h	Quality manager	Albron	Catering
<b>6</b>	27-05-19	0:38 h	Director	Havep	Workwear
<b>7</b>	29-05-19	1:09 h	Director	Modulo Milieustraten	Garbage and recycling stations
<b>8</b>	05-06-19	0:47 h	Director	Swink Webservices	Online services
<b>9</b>	13-06-19	1:01 h	Sustainability advisor	Heijmans	Infrastructure construction
<b>10</b>	13-06-19	1:01 h	Advisor, former director	Mondial Movers	Relocation services
<b>11</b>	21-06-19	1:21 h	Director	Upp! UpCycling Plastic	Plastic recycling

#### Survey respondents

By means of an online survey, the quantitative data were collected in support of the qualitative data. The required participants were also tender managers or similar, in companies that have experience with SPP criteria in tenders. The survey was distributed via e-mail, LinkedIn and Twitter, and was shared through the networks of MVO Nederland, the Ministry of Infrastructure and Water Management, VNO-NCW, MKB Nederland and branch organisations from several different sectors. In section 4.1, a summary is given on the demographic characteristics of the survey respondents.

## 3.4 Data collection and analysis

### Qualitative interviews

The interviews were held in a semi-structured manner so they could be directed towards the relevant research questions, but with sufficient flexibility for finding unexpected results. The interviews were prepared and held according to a topic list that was continually developed in between interviews (table 2). The length of the interviews was about one hour and was recorded using an audio recorder, after which they were transcribed literally. Using the Atlas.ti 8 software, the interviews were coded in reference to the operationalisation (section 3.2). During data analysis, new factors were added to this framework, resulting in the elaborate structure shown in App. 2.

**Table 2.** *The topic list used during qualitative interviews.*

<b>Order</b>	<b>Subject</b>
<b>1</b>	Importance of SPP.
<b>2</b>	Company's tender procedure, type of customer and parties involved.
<b>3</b>	Costs and benefits of SPP.
<b>4</b>	Company's and procurers' vision and commitment towards SPP.
<b>5</b>	Effects and usefulness of SPP.
<b>6</b>	Criteria and their weight.
<b>7</b>	Communication with procurer and company's influence on a tender.
<b>8</b>	Summary important influences on SPP and key message.

### Quantitative survey

The survey questions were closely related to the interview schedule, but simplified in order to ensure the participation of as many respondents as possible. Therefore, it mainly consisted of close ended questions like multiple choice and Likert scales (1-7). The survey was presented in Dutch (App 1). The online platform Qualtrics was used to create and share the survey, and for collecting the results. Answers to close ended questions were compared with the interview data and answers to open-ended questions were added to the results from the related interview questions.

## 4. Results

In this section a demographic summary of the online survey responses will be given, followed by the answers found to the several sub-questions. The final question on the supplier's experiences and vital influences on SPP will be answered by elaborating on the subjects and relations that appeared to be most important: procurer's ambition, procurer's conservativity, criteria weight, criteria formulation, tender flexibility and cooperation.

### 4.1 Online survey respondents

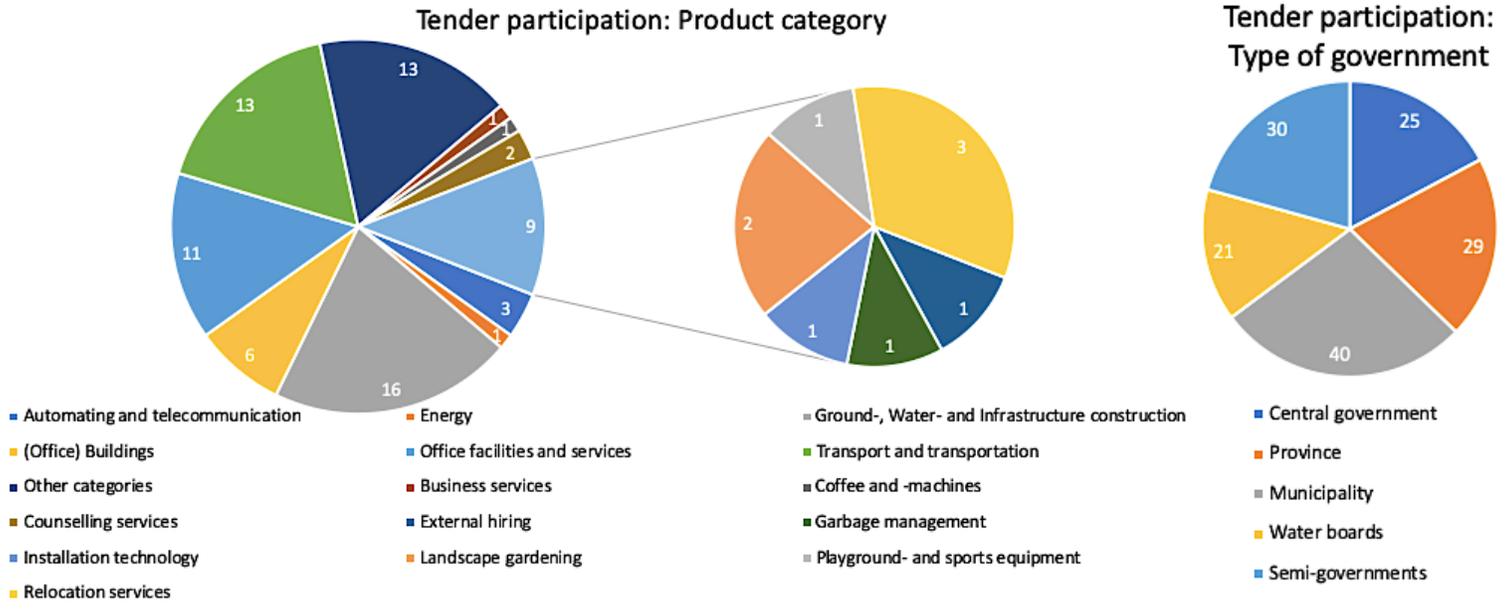
In order to understand the survey respondent's demographics, a summary of their characteristics will be given regarding company size, type of product or service, and experience with public tenders. This knowledge provides context for nuanced interpretation of the survey results.

The company size was determined by whether the company is a small or medium-sized enterprise (SME), according to the following definition: 'a company with a maximum of 250 employees with additionally a yearly revenue of maximally 50 million Euros and/or a yearly balance sheet total lower than or equal to 43 million Euros' (RVO, 2004). In this online survey 33 out of 43 companies were small or medium-sized enterprises.

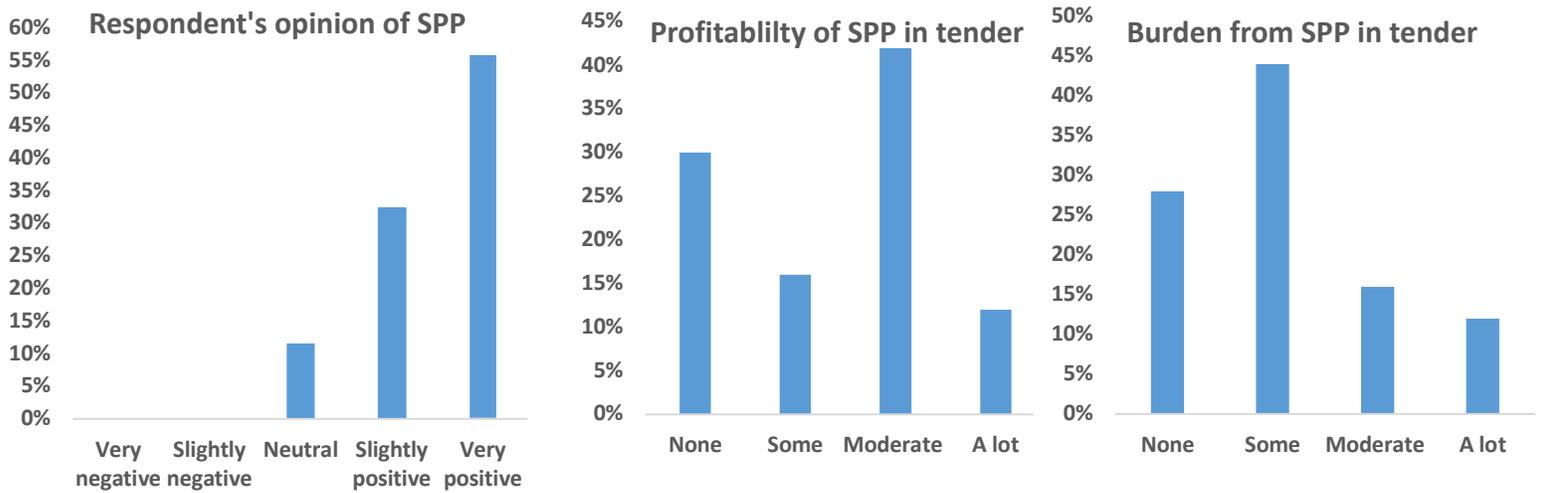
Respondents were also asked in which product categories their company participates in public tenders. As figure 4 describes, the online survey responses showed reasonable variation in this regard. The majority of respondents are active in Ground-, water-, and infrastructure construction (count: 16), Transport and transportation (count: 13), and office facilities and -services (count: 11).

Furthermore, respondents were asked how often their company generally participates in public tenders on a yearly basis. 12% of respondents reported not to participate in tenders, 24% participates once or twice per year, 16% reported three to five times, 12% participates five to ten times and 22% of respondents participates in a tender more than ten times a year (N=43).

The majority of respondents participates in tender from various types of government. As described in Figure 4, municipality tenders are participated in by the greatest number of participants (count: 40), followed by semi-governments, (count: 30) and provinces (count: 29). Among semi-governments all organisations are grouped that provide an important public service and receive public funding, such as institutes for education, health, energy distribution, public transport, housing companies or public media.



**Figure 4.** Product- and service categories and type of governments for which respondents participate in tenders. Respondents were able to give multiple answers (N=43).



**Figure 5.** The frequencies of responses from the online survey regarding their overall support for attention for SPP in a tender, and the profitability and burden respondents experienced through attention for SPP in a tender (N=34).

## 4.2 Sub-question 1: How do suppliers feel about the government's aim for transition to sustainable by means of SPP?

### Online survey

This first sub-question investigates whether companies generally support the practice of SPP. The online survey (N=43) indicated that 0% of respondents had a negative or moderately negative attitude towards using SPP for the transition towards a sustainable economy. Only 11.6% of respondents had a neutral opinion while 32.5% and 55.8% had moderate and very positive opinion, respectively.

Additionally, online respondents were asked whether they experienced attention for SPP in tenders as profitable or burdening to their companies. In terms of profit experienced, responses were somewhat varied: respondents experienced no profitability (30.2%), some profitability (16.3%), moderate profitability (41.9%) or a lot of profitability (11.6%). The burden that accompanies SPP does not seem to be a great problem for companies, as 27.9% of respondents did not experience a burden and 44.2% experiences it only slightly. However, a moderate burden was experienced by 16.3% and 11.6% of respondents indicated SPP to be a very heavy burden. These results are illustrated in figure 5.

### Qualitative interviews

Interview data indicates that the majority of interviewees supports SPP with the reasoning that governmental demand enables, stimulates and even forces all participants of the supply chain to move along with desired transitions. Interviewee 3, for example stated that *"the strength of SPP is that it is positioned upstream and stimulates or forces the supply chain towards sustainability"*. Interviewee 6 mentioned that ambitious SPP criteria were met with reluctance among their sector, *"but it does accelerate things. It is needed to get everyone on board."* Governmental demand is thought to be largely responsible for the supplier's course of action, as eight interviewees mentioned that this demand can change supplier's behaviour (table 3). However, the impact of governmental demand might be dependent on the fraction in which a supplier depends on it. In case a supplier also relies on private customers, investments needed for a more sustainable product might not be returned when a sustainable but more expensive product is not desired by the private market. Interviewee 6 stated this was the case regarding the process technology required: *"I'm fine with the governmental demand and developing it, but the difference in price between virgin material and what the government demands is still too big for the private sector to bridge."* On the other hand, companies that rely more heavily on their public customers seemed to be eager for the customer to adopt their technologies. Interviewee 4, for instance said: *"I think for us, the governments have the key to SPP. The market is ready and we could deliver tomorrow. The customer only needs to ask"*. Interviewee 11 stated: *"If we build a factory to process plastic into recycled products regionally, we need the government as a partner, as catalysator, as a launching customer. We are going to make products intended for them"*.

Additional reasons for SPP were given. Interviewee 1, for instance, noted *"The central government has an exemplary role and must show they are occupied with creating jobs for people with a distance to the labour market"*. Which means the government is expected to be frontrunner concerning reaching their policy goals. Furthermore, interviewee 11 stated that *"The start-up phase is the hardest to overcome and especially the government could help with it. As a launching customer or by granting a guarantee that helps us to continue"*. In this

situation the government is asked to stimulate or catalyse innovation for sustainability, for instance by means of launching customership for the support of a new concept. A final argument for SPP was the need for uniform sustainability criteria for a tender, and a less ambiguous definition of sustainability, as mentioned by interviewee 2: *“SPP has a beneficial effect on sustainability, because there is more attention for good ways to assess sustainability. The assessment of sustainability has become less ambiguous and more objective, which makes companies eager to meet the sustainability criteria”*.

The online survey demonstrated that the opinion of suppliers regarding the concept of SPP was generally positive, though some respondents reported low profitability or moderate to heavy burden. Qualitative data seem to be in accordance to the survey data about the generally positive attitude towards SPP. Moreover, the interviews provide insight in the reasons for this positive attitude and how they encountered SPP’s advantages and burdens. A summary of arguments given in response to sub-question 1 is depicted in table 3.

**Table 3.** Interviews from which arguments for sub-question 1 originate.

<b>Argument</b>	<b>Given in interview:</b>
Demand stimulates response from supply chain	1, 3, 4, 5, 6, 8, 10, 11
More attention for sustainability	3, 4, 8, 10
Government has exemplary role	1
Company/supply chain is ready	4, 11
Private customers not ready	6

## 4.3 Sub-question 2: What effects of SPP do suppliers experience within procurement, their company, and in the market?

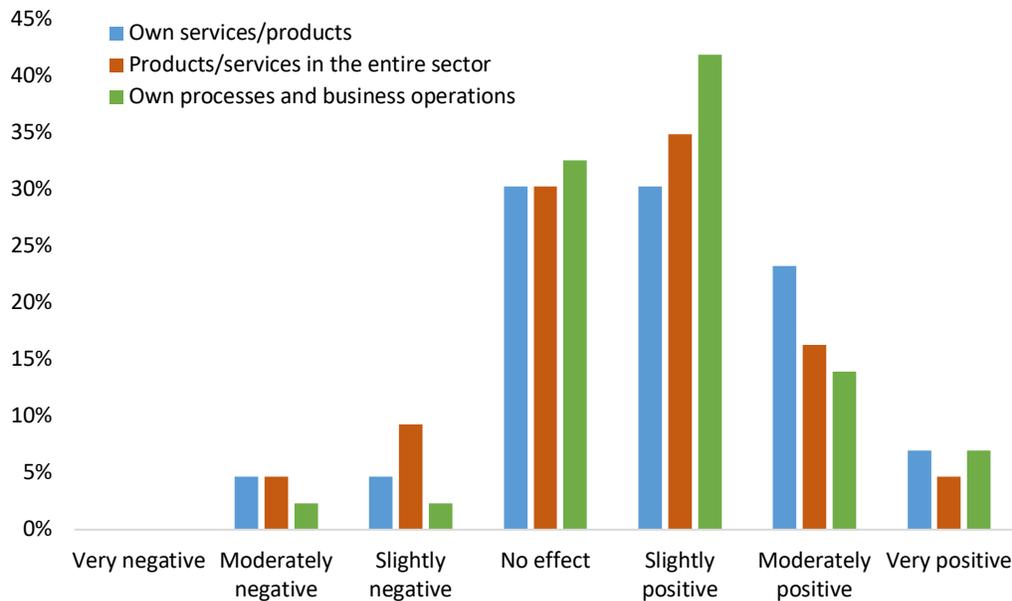
### Online survey

This second sub-question evaluates how respondents have been experiencing SPP until now. It assesses what has changed in the procurer's approach, the impact SPP has made on their own products/services and within the entire sector. Moreover, it assesses the impact SPP has made on the company's own processes and business operations. As demonstrated in figure 6, only slight variation was found between the responses to these questions. None of the online respondents thought of SPP as a very negative influence on the aspects questioned. However, 2.3 to 4.7 percent experience a moderately negative effect by SPP and 2.3 to 9.3% mentioned a little negative effect. The majority of responses experienced no effect (30.2 to 32.6%) or a little positive effect (30.2 to 41.9%). Furthermore, 14.0 to 23.3% experienced a moderately positive effect and 4.7 to 7.0% reported a very positive effect.

Online survey responses that were negative about the effects by SPP did not really describe what negative effects were seen, apart from one notion of increase in paperwork. Several did mention their reasons for this opinion, being: a lack of implementation of SPP criteria and lack of enforcement of sustainability. Regarding social return, respondents mentioned the criteria were 'unrealistic and infeasible'. Online respondents that reported 'no effect' in at least two aspects stated that SPP is ineffective due to the formerly mentioned shortcomings, and added: a lack of financial investments by governments, insufficient assessment weight of SPP criteria, and low possibility to distinguish their company in a tender.

Positive effects reported were: awareness of sustainability issues accompanied by a sense of urgency, innovation, and increased attention for sustainability in projects. Some respondents also mentioned they received positive attention for their company or a position as market leader.

Among the online respondents that regarded the effects of SPP as slightly to very positive, a point of criticism was the low margin of profit and a higher cost to meet sustainability criteria. Positive effects of SPP this group mentioned are encouragement of awareness and sustainability ambitions in the sector. Additionally, SPP stimulates continuous investments in sustainable developments. Within the company SPP can lead to better awareness and higher ambitions as well, along with inclusion of sustainable entrepreneurship in the organisation. Another respondent mentioned their company keeps up with the state of the art and that SPP lead them to think and act differently. Within a tender, respondents reported they had the advantage to get awarded and the chance for the company to distinguish itself and be a market leader or pioneer.



**Figure 6.** The responses from the online survey regarding the effects of SPP seen in their own product/service, products/services in the entire sector and in their own processes and business operations (N=34).

## Qualitative interviews

Data from the qualitative interviews were categorized into the changes seen within the procuring government, and the effects of SPP within the company and in the sector. Summaries of the effects found are given in Tables 4, 5 and 6.

### Effects in procurement

In most interviews (table 4) the government was reported to be asking for sustainability more often), Governments are perceived to recognize the value of sustainable, circular and social return. This can also be seen in tenders: Local governments are seen to cooperate and cluster more often and the use of flexible tender methods such as those based on Total Cost of Ownership or construction teams are used more frequently. Examples of such tenders are the circular viaduct of Rijkswaterstaat (Van Oeveren & Valk, 2019) or the procurement cluster for Provinciale Telefonie 2017 (PIANOo, 2018). Interviewees also noted more frequent communication between the procuring organisation and their companies. Interviewee 1: *“The market consultation is a way to explore the state of the market regarding sustainability and its social component. Luckily, I increasingly come across market consultations”*. Interviewee 9 noted that *“written inquiry rounds have become more common, although in-person communication is preferred for the alignment of expectations between both organisations.”* Another important change reported is a small weight shift from lowest price towards sustainability criteria. Interviewee 5, for example stated: *“The assessment weight of lowest price is shifting a little. Price used to account for 80%, but nowadays its weight is smaller”*.

However, six interviewees reported that this transition to sustainable is occurring very slowly, despite the attention it receives. One explanation mentioned was that legislation significantly slows down this process. Interviewee 11 stated: *“In politics the plans are big,*

but work floor implementation always stays behind. Those people are stuck with rules they have to follow.". Interviewee 7 stated: "We miss a win-win situation. As market leaders and entrepreneurs, we keep sharing information, but governments cannot start a collaborative project. I think that is because of the procurement law and legislation". A more specific explanation was given by interviewee 5: "By law we are obligated to throw away food residues two hours after preparation. It is therefore impossible to recycle and raise the value of the residues." Besides legislation, other factors that counteract SPP could be a conservative attitude within the procuring organisation or contradictive tender criteria. Regarding these, interviewee 4 mentioned that "a municipality employs public space managers. These managers start to shift their attention towards sustainability, however, they are often experienced and may already have had issues with former innovation experiments. They aren't always open to experiments." This adds a new perspective to the dominant assumption that government demand can promote the transition to sustainable, as conservativity among public officers might also slow it down. Finally, the example by interviewee 8 agreed with the online survey responses (saying the criteria for social return were unrealistic and unfeasible). This interviewee stated: "In a tender, they'll ask you to hire people registered as having a distance to the labour market. However, the work that needs to be done is so complex that you can hardly ever find such an employee."

**Table 4.** Overview of the effects on public procurement, mentioned in the interviews.

<b>Changes in public procurement office</b>	<b>Given in interview:</b>
More (frequently) attention and demand for sustainability.	1, 2, 3, 4, 7, 8, 9, 10
More frequently governments cluster for a tender.	3, 7
Flexible tender methods more frequent.	3, 4
Market consultations and written inquiry rounds more frequent.	1, 9
Weight of price decreased.	1, 5
<b>No / slow change</b>	<b>4, 5, 7, 8, 9, 11</b>
Rules hinder implementation.	5, 7, 11
Entrepreneur may not profit.	11
Conservativity among public officers.	4
Infeasibility of criteria.	8

## Effects on company

Regarding the effects of SPP on the company (table 5), interviewee 9 stated that SPP had been the start of their company’s sustainability strategy: *“In 2010 I started with the Circular Performance Ladder. We did not do that on our own initiative. Now I see the company aligns its strategy with our most important client, the government. 100% circularity, we added that to our strategy”*. Other interviewees claimed their company’s sustainability ambitions had not been initiated by SPP. However, some of their own sustainability strategies were confirmed by SPP. Interviewee 6 mentioned: *“We already had sustainability in our DNA, but the governmental demand with SPP might have had an influence. It’s a confirmation that we have chosen the right path and communicates the message to our customers, employees and suppliers that the Dutch government supports our activities. It doesn’t really matter who was first, but government and company reinforce each other”*.

Beside the effect on company strategy, SPP also seems to have effect on company activities. Interviewee 8 noted about SPP: *“the effect on us is very positive, of course. If we can get an order for 50,000 euros, we can hire another employee.”* In this case, SPP positively influences company size and in the following example SPP is said to have some influence. Interviewee 3 reported: *“It’s easy to obtain direct effects with SPP. When a large municipality asks for 100 GW of Dutch wind energy we’ll reserve the energy in advance, from an available wind park. This way they stimulate our activities”*.

**Table 5.** Overview of the effects on supplier’s company, mentioned in the interviews.

<b>Effects on company</b>	<b>Given in interview:</b>
Sustainability strategy incentivised.	9
Sustainability strategy confirmed & sends message to partners.	2, 6
Company size influenced.	8
Investments influenced.	3

## Effects in industry

On an industrial scale, the demand for sustainable solutions has reached most of the sectors investigated (table 6). Interviewees 9 for instance, noted that construction companies are cautiously starting to cooperate on sustainable projects. Interviewee 5 explained one of their activities to make their supply chain more sustainable: *“For our sustainability consortium, we pick several products with a big impact and together with producers and scientists from Wageningen University we look into the hotspots in the supply chain and we discuss how to improve on it.”*

Nonetheless, interviewees were divided on whether sectoral changes were caused by governmental demand or rather by other societal influences. As previously noted, one interviewee was incentivised to work with sustainability because of SPP and interviewee 6 said it had an accelerating effect and pulled other companies on board. Interviewees 5 and 8, however, were sceptical about the contribution of SPP, stating: *“We see development in the market, not because of government demand, but because of all kinds of circumstances which*

together form society and the world we live in. Those influence the road we take.” and “The subject of social return is definitely gaining interest and customers are starting to choose for us because we are a social enterprise, but SPP, I notice relatively little of that”.

Several interviewees noted that ambiguity in the definition of sustainable and the difference in approach combined with a lack of enforcement by governments creates the opportunity for greenwashing: the widespread practise of using advertising to falsely portray environmental responsibility (Jones, 2019). This greenwashing could slow down the sector’s transition to sustainable, as it disrupts the level playing field between competitors. These effects by greenwashing will be described further in a later section. Another cause for slow sectoral change could be conservatism in the sector, for instance due to big companies for which change is disadvantageous. This is what interviewee 11 came across: “Established companies have their own interests and have already made large investments that they want to earn back. They are not eager to change their actions and they lobby with governments, too”. Besides the garbage management industry, the construction sector was reported by interviewees 4 and 9 to have a conservative attitude as well.

**Table 6.** Overview of the effects on supplier’s sector, mentioned in the interviews.

<b>Effects on sector</b>	<b>Given in interview:</b>
Cooperation between companies	5, 8, 9, 11
Sustainability strategy in other companies incentivised.	6
Risk: greenwashing and dishonest competition	2, 6
<b>No / slow change</b>	
Change might be due to the changed society instead of spp.	5, 11
Conservativity among sector.	4, 9

## In summary

Survey respondents were then asked how they perceived the effects of SPP. Less than 10% of survey respondents reported a negative effect from SPP, while about 30% reported no or neutral effect and 34 to 48% of survey respondents experienced positive effects from SPP. As the survey respondent’s arguments against SPP effectiveness could be seen as ‘barriers’, these are further investigated in sub-question 3 (section 4.4). The positive effects mentioned by survey respondents, awareness, innovation and attention for sustainability also seemed present in the interview data, as these data report increased frequency in innovative or sustainability oriented tender methods.

Moreover, interviewees reported that attention for sustainability and well-designed SPP tenders were seen more frequently and the weight of price in tenders decreased. In their own company, interviewees saw their sustainability strategy being incentivised or confirmed and they noted that their company’s size and investments could be influenced by SPP. Interviewees also mentioned that cooperation between companies occurred more frequently, in order to achieve sustainable development.

#### 4.4 Sub-question 3: What experiences do suppliers have with tenders and their processes, and which factors are vital for successful application of SPP?

In comparison to the factors expected, illustrated in the theoretical framework (figure 3-Theoretical framework), the interviews have brought up many more aspects of SPP. These were structured in a two-page diagram in the Appendix (App 2). The most important features of this diagram are summarised below, in figure 7.

##### Findings compared to the theoretical framework

Compared to the expectations stated in the theoretical framework, the dimension of the procuring organisation and its procurement staff turned out to be an important factor. Important influences on a tender seemed to be the prevailing attitude within the procuring organisation, their knowledge-base, and organisational aspects. These factors will be elaborated on later in the sections 'ambition' and 'progressive attitude'.

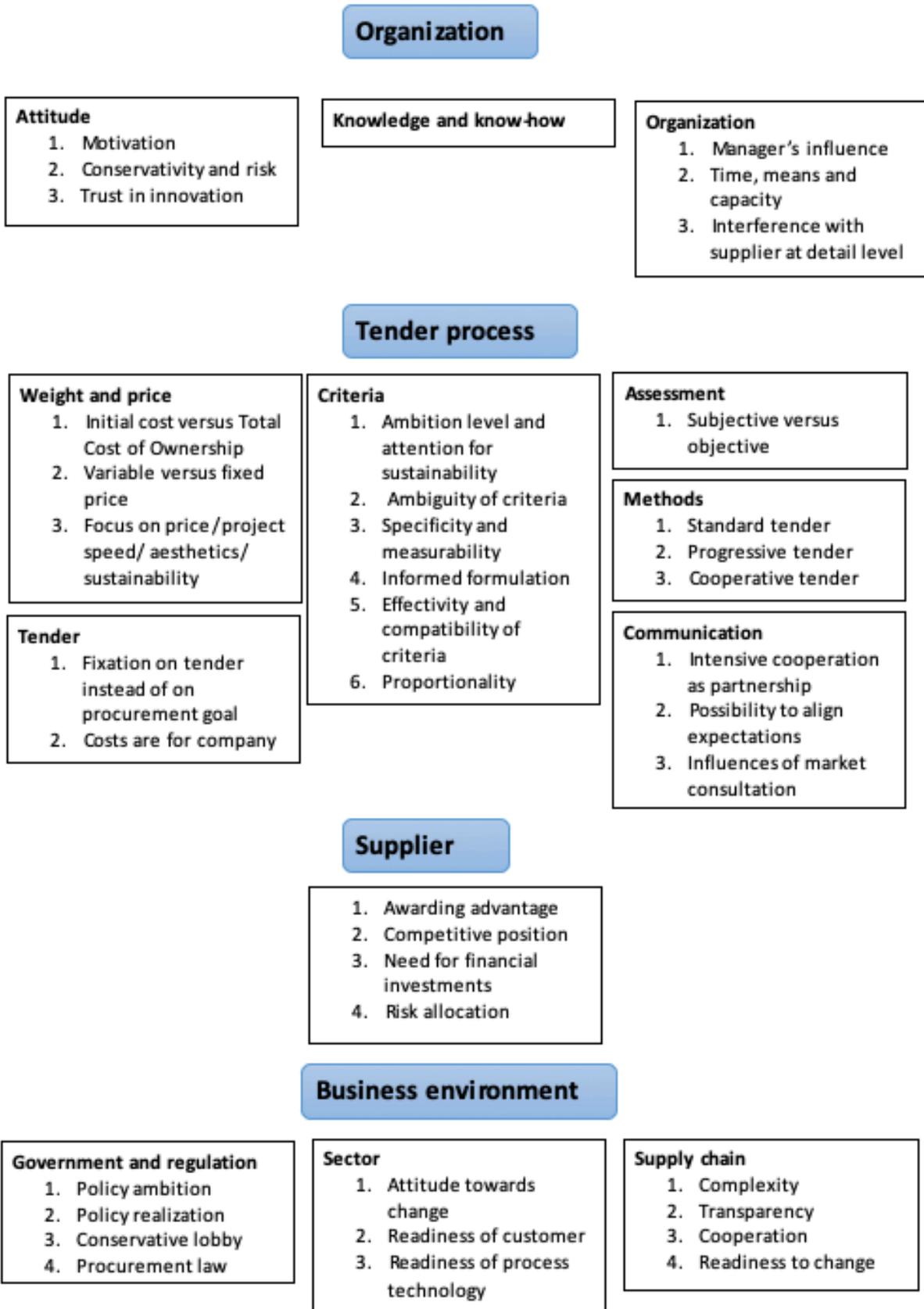
Regarding the tender documents, many of the influences considering the criteria were found to be consistent with those given in the theoretical framework. Additionally, not just criteria weight, but the assessment was said to be important as well. Unlike expected initially, the clarity of the tender goal did not seem to be an issue. Clarity of the SPP criteria was not mentioned either, however, three interviewees did mention the effects of ambiguous criteria. In the sections 'weight of criteria' and 'specific criteria', the aspects regarding tender documents are described in more detail.

In tender process and communication, interviewees tended to put more emphasis on the tender methods than on communication. As communication occurred mostly not during a tender, it might be somewhat less important for influencing SPP than the tender itself. Though, as the section 'partnership' will describe, there are cooperative tender methods in which communication is more important than in other methods. Finally, regarding the tender process, the clarity of the procurer's long-term vision did not seem to cause problems to the interviewees, as none of them mentioned it and when asked they were generally aware of the courses their customers were on.

Furthermore, two additional branches were added, compared to the graph in the theoretical framework: the company itself and the business environment. For the company, several aspects influence the sustainability level it can offer. Interviewees agreed that innovation usually requires an investment, which comes with costs and risks. Companies strive towards the best competitive position.

Finally, the company's environment seemed to be an important factor which includes the influences from government and regulation, the sector and competitors, and the supply chain. As sustainability is a widespread challenge that cannot be faced individually and could be approached differently by different organisations, cooperation and alignment of these approaches are necessary to make the transition to sustainable. Therefore, other organisations in the company's environment influence the company's actions.

As so many influences were found, sub-question 3 will be answered through leading themes that will be explored: Ambition, conservative versus progressive procurement, criteria weight, and criteria formulation, which will elaborate into three main tender approaches.



**Figure 7.** Main dimensions found during qualitative interviews.

## Ambition

A high political ambition was reported during four interviews (1, 4, 7, and 11). However, interviewees were sceptical about the actual realization of policy goals. Interviewee 9 noted: *"The government wants to be 100% circular in 2050. If they don't abandon the principle that aesthetics are most important, we'll never reach that goal"*. Moreover, interviewee 8 stated: *"Ministries are lagging behind on employing people with a distance to the labour market"*. Successful application of SPP by the procurement offices is conditional in order to reach these policy goals. The application of SPP is greatly influenced by the criteria in tenders, and therefore, by the procuring office's ambitions.

The level of ambition differs greatly between governmental organisations. Interviewee 3 for instance noted: *"Ambition changes as you sink into governmental layers. The central government and Rijkswaterstaat often set a good example, G4 municipalities have things in order, the average municipality though, tends to procure by default and does not show much ambition"*. Generally, most positive examples of SPP originate from the central government and big local governments such as the bigger municipalities. Within smaller municipalities a drive could also be seen to procure more progressively, however SPP criteria are often absent in tenders by this group as well. Two interviewees would not participate in such tenders. Interviewee 3 mentioned that the price of energy is too unpredictable over time to compete over it, and interviewee 1 said: *"When a tender does not fit our company we part with it. When a tender does not meet SPP requirements at all we report to the code committee for responsible market behaviour for withdrawal of the tender."*

Some interviewees advocated to standardize implementation of SPP for all tenders. Interviewees, 1, 2, 3, 4 and 8 noted that qualitative sustainability criteria were often far from ambitious. This means that low ambition is found in several sectors and aspects of sustainability, as these respondents are active in different fields: social return, energy, building interior and concrete products. Interviewee 2 noted that the reason for this opinion is that *"currently, procurement officers often look at labels that inadequately describe how sustainable a product really is"*. Interviewee 3 stated that *"they want to finish the tender quickly and without juridical conflicts. That is why 80% is determined by price and 20% by qualitative criteria that anyone can meet"*. Interviews 2 and 9 underlined the importance of regarding sustainability as a starting point for which no concessions are made, in order to publish a truly ambitious tender.

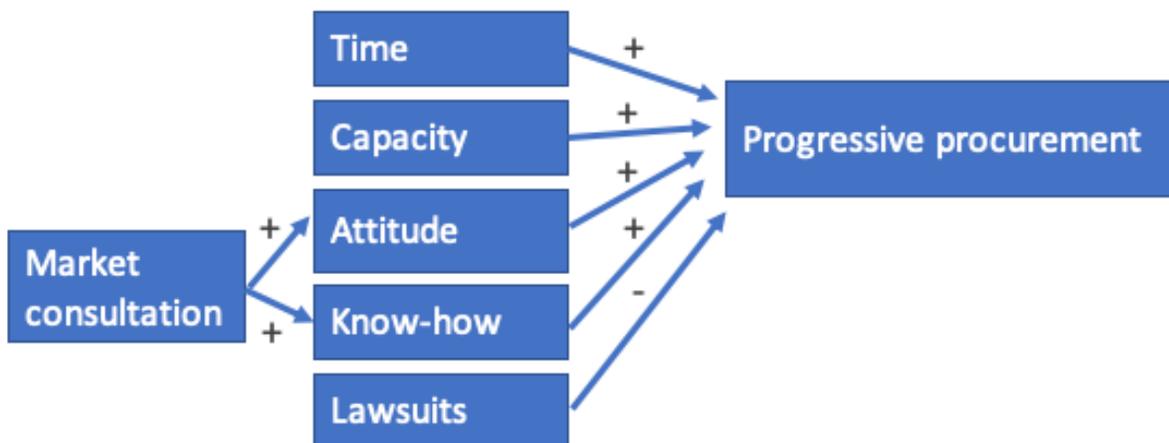
The personal motivation of procurement officers was reported to be important in order to publish ambitious SPP tenders. Some interviewees felt that SPP was often imposed by higher management instead of by personal motivation. Interviewee 1 for instance said: *"The sustainable ambitions don't always come from personal motivation, it is imposed by the mayor and municipal executives"*. The participating company, contractor and architect could have an activating role to spark enthusiasm or convince for the use of SPP. For promotion of SPP towards the internal client the procurement officer was also mentioned.

## Conservative/progressive procurement

Procurement officers were mentioned to tend to work according to standard formats. Interviewee 1 mentioned: “*Procurement officers and facility are often very conservative and don’t trust idealistic approaches. They fall back on the model they know*”. Often, they have standard criteria for their product categories and moreover they must follow the European Procurement Law. A purpose of this law is the conservation of equal opportunities for the entire European market, which could complicate the procurement of innovative products or services because the procurement officer has to set criteria that could be met by a sufficient number of companies. When the Procurement Law is not followed correctly, the procurement officer risks consequences such as fines or lawsuits. This causes a risk averse attitude which gets in the way of application of qualitative criteria, or giving it sufficient weight for the assessment. Interviewee 4, for example, said: “*In the circular procurement academy people were really afraid of the laws and rules. They were afraid to look for the edges of the Procurement Law*”. For successful application of SPP the procurement officer often has to cope with the procurement law creatively and find new tender methods. The most important factors concerning the publishing of a progressive tender seemed to be the time, budget and capacity available to the procurement officer, and their attitude and knowledge. These aspects are illustrated in figure 8.

### Capacity

Most interviewees reported that procurement offices are greatly limited by time and manpower. This often causes them to focus the tender on lowest price instead of on sustainability, and may also cause the procurement officer to be more risk averse as problems such as failed innovations or lawsuits cost a lot of time and money.



**Figure 8.** Illustration of the aspects that influence the progressiveness of the procurement, found in this study.

### Attitude

The importance of personal commitment and attitude was mentioned often, and seen as especially helpful when commitment was found with the procurement manager, the internal client or policy makers, as they determine the focus of the tender.

Interest in the topic and an open attitude towards suppliers lead to a broader knowledge of the current possibilities and the state of the art in the market. Interviewee 11

mentioned that *“currently, the procurement office strongly tried to hold on to the idea of comparing similar products in order to choose one”*. For some innovations or patented products however, this approach does not suffice as no similar product, service or concept could be offered. In this situation a tender might not be the best method to reach the procurement goals.

Additionally, it could be important to keep communicating about sustainability. With an open attitude, more opportunities might be seized to better include sustainability, even after the tender. However, this might take courage. This is another frequently mentioned feature to procure progressively, as interviewees stated the urgency to change methods and start to take actions in order to reach policy goals. The chance of failure is inevitable when it comes to innovation, so risks need to be taken in order to make progress. As interviewee 9 noted: *“Innovations can be successful or they can fail. We want to move forward and that means both parties should take a certain margin of risk. Beforehand, agreements should be made about these risks”*. Discussing the risks with the supplier beforehand, requires an open attitude.

### *Know-how*

The final element capable of stimulating progressive procurement is expertise, or know-how, about best practices and the latest developments in the market. Interviewee 10 found it important that the procurement officer is aware of procurement’s potential to make sustainable impact and many respondents greatly valued expertise of the procurement officer and assessor, so they could make an informed decision. Additionally, knowledge about sustainable entrepreneurship and about private partner’s processes are essential for cooperation along the entire supply chain, according to interviewee 5. Finally, some interviewees often see procurement officers with the wish to procure with attention to Social Return On Investment, though they do not know how. Interviewee 8 felt like the procurement officers are often unaware of the methods available. Interviewees stated that good methods to improve know-how would be market consultation, trainings and congresses. Interviewee 1 additionally thought of market consultations as a good method to spark enthusiasm among procurement officers.

## Weight of criteria

The weight of SPP criteria during the assessment is of great importance for the effect of these criteria, as insufficient weight can cancel all sustainability criteria. Interviewee 10 mentioned that sometimes sustainability is included in the tender, though no weight would be assigned to it. The interviewee added that sometimes the weight is so low that the criteria are not worth the effort. Additionally, interviewee 2 said: *“The price is so important that it can make all sustainability criteria disappear”*. From the online survey, the majority of respondents also thought SPP criteria weight is usually too low. The factors found in this research that contribute to the weight of SPP criteria are illustrated in figure 9

For almost all participants tender documents are generally clear about the weights assigned to the respective criteria. However, interviewee 6 mentioned that for recycled textiles it can be difficult to estimate which balance between the price and the percentage of recycled content would score best. *“We’ll offer this percentage of recycled material and a competitor would offer a little less recycled content for somewhat cheaper. The question is which one will be awarded. We don’t have much insight into that”*.

### Lowest price

Almost all participants mentioned that price is of great importance in most tenders and the search for the lowest price is often difficult to combine with sustainability. Interviewees mentioned that subsidies or fictional discounts are sometimes essential for choosing a sustainable product. As interviewee 6 said: "On a previous project, we needed the subsidy to finance the extra costs". Furthermore, interviewee 4 mentioned: "Fictional discounts really are essential. Contractors sometimes need to be enforced to choose for sustainability with these discounts or with the chance to distinguish themselves".

Interviewees saw an increase in sustainability criteria, however, in the end price usually still predominates. Interviewee 3 mentioned that "governments are not allowed by the procurement law to assess purely based on price, except if they can explain why they choose to do so. In energy some might say electricity is electricity, gas is gas and that is why we assess on price". This way to avoid qualitative criteria would be too easy.



**Figure 9.** Illustration of the aspects that influence weight of SPP criteria, found in this study.

### *Examples from the construction sector*

Regarding price, both progressive and conservative tender examples can be found in the construction industry. A predominant contract form in the ground, water and road construction in the Netherlands is the 'RAW' systematic, which abbreviates from Rationalization and Automation of Ground, Water and Road Construction. In this method every detail of the construction project is fixed and price is the only assessment criterion. This is in contrast with a tender in which the contractor was free to make the design. In this tender, contractors could submit their own design and qualitative scores were assessed. About such a tender, interviewee 9 said: *"The cycling bridge had to be 100% circular and we had freedom of design. From the aspect of sustainability, we'd never had such a positive assessment"*.

Another price related issue in construction is that procurement usually only focuses on the price for building the project instead of the total cost of ownership. In many cases innovation is more expensive in the building stage. However, it is possible these innovations save money on a longer term. In order to stimulate innovation, it would be useful to determine price based on the total cost of ownership.

Additionally, in road construction governments tend to offer a fictional discount when the project is executed quicker. This added weight to project speed stimulates the contractor to take bigger risks in the safety of their employees. With regard to social conditions, the weight of project speed versus safety should be discussed, according to interviewee 9.

Finally, the weight for SPP criteria in construction works are heavily influenced by the architect's aesthetic goals. Both interviewee 2 and 9 mentioned examples in which the architect left such a heavy mark on the design that the use of sustainable materials was blocked. It might be useful to agree on sustainability goals before the architect designs the project, this way aesthetics could not dominate over sustainability.

### *Assessment*

One reason to procure based on the lowest price could be avoiding the risk of lawsuits as price is an objective, juridically covered criterion. Furthermore, interviewees felt like procurement officers are directed to focus on using money efficiently and save on procurement. These are the main goals and quality and sustainability are regarded as bonuses. Interviewee 1 said about this: *"They want the best offer and the best party to implement it. Sustainability and social return are underappreciated"*. Interviewee 8 mentioned: *"A commonly heard phenomenon is that the government assesses their procurement officers on lowest price. So, quality or sustainability are third wheels"*.

Another reason to focus on the lowest price could be a lack of knowledge. When products (services, works) have different criteria, lack of knowledge makes them very difficult to compare. Price, on the other hand, is well understood by procurement officers and can be assessed objectively. The availability of ready-to-use knowledge and standard criteria might be effective in shifting the focus from price towards sustainability.

Setting a fixed price for a tender also enforces the assessment to be based on quality and sustainability, as there will be no price differences in the offers. A good example of such a method, given by interviewee 1, is Rapid Impact Contracting (RIC), which focuses entirely on value creation instead of competition on price. This value creation in RIC is assessed the offer's interpretation of the UN's Sustainable Development Goals. It favours companies that dare to set ambitious Key Performance Indicators and to address more SDGs. This procurement method is a good example of using SPP as a starting point. Several interviewees mentioned the importance of using sustainability as a precondition for tenders. About a good tender example given by interviewee 2 was said: *"A competitor was awarded, but we were*

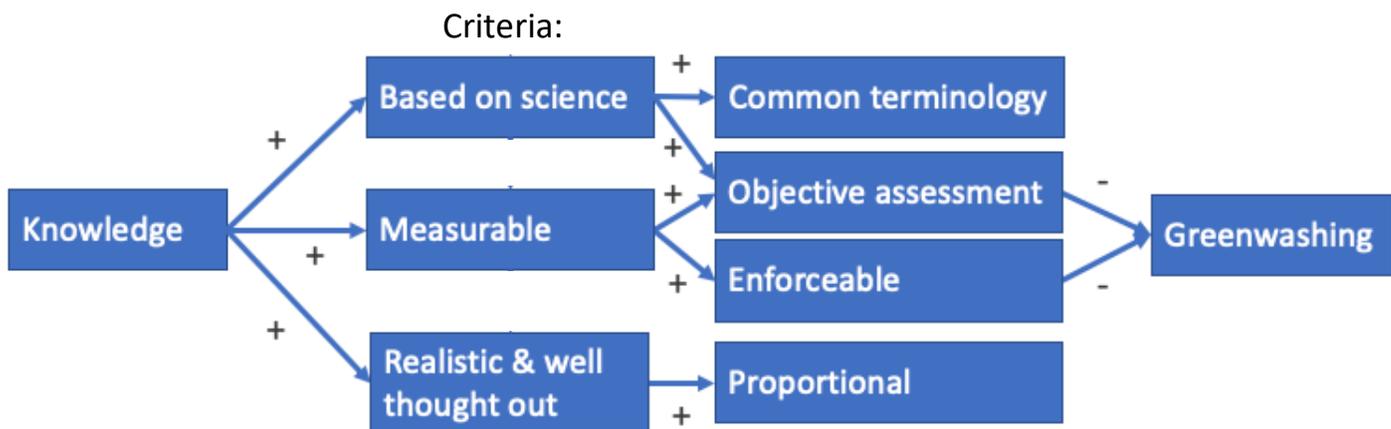
happy that we competed on price and aesthetics, because the sustainability conditions were cast in stone. Sustainability was the framework". When sustainable impact is a fixed goal and allows for no concessions, companies are enabled to base their designs and offers on it.

## Formulation of criteria

Regarding the SPP criteria specifically, three preferences were mentioned often: The preference for specific, measurable criteria, the demand for a flexible request in which the company can distinguish itself from competitors, and for a partnership-based approach. These three approaches will be discussed in the following sections.

### a. Specific criteria

A common way to formulate SPP in a tender is by specific criteria such as labels or other sustainability indicators. In order to ensure a positive impact, three conditions for these criteria were reported: a scientific basis, measurability, and realism (figure 10).



**Figure 10.** Illustration of the factors concerning fixed and specific SPP criteria. The conditions for these criteria mentioned in this study are displayed, along with their respective influences.

#### Based on science

According to interviewee 2, criteria should be formulated based on science, or common, scientifically proven knowledge. This could be useful to aid both the use of common terminologies and the pursuit of objective measurements for sustainable impact because it is based on true sustainability impact instead of on marketing language.

The first aspect concerns the use of common terminology. Interviewee 5 noted that terminology can be subjective, ambiguous and susceptible to frequent changes, especially within the circularity aspect of sustainability. Interviewee 5 said "Circularity for food and energy is impossible if you take it literally. You can call it what you want, but everyone has started to get accustomed to the terms and suddenly it is 'use' and 're-use'. Terminology." and "It would help a great deal if solid definitions would lie behind the tender criteria".

Subjective terminology is unlikely to result in the formulation of specific criteria, as all parties involved should have the same understanding of their definitions. As in the experiences of interviewee 5, terms can be used interchangeably and new expressions are invented frequently, causing terminology to distort the formulation of specific criteria and keep the assessment subjective as well. Formulation of a solid terminology might result in less ambiguous communication.

Moreover, use of terminology for sustainability or circularity does not per definition make a tender more sustainable. Interviewees hinted at the importance of considering all sustainability aspects together, as single sustainability measures might have adverse effects on another aspect of sustainability. Interviewee 6: *“Viewing sustainability in a broad sense is a condition for a sustainable tender. If you only focus on one facet you’ll get a bit of a greenwashing story. We try to keep our environmental costs at a minimum, but the facets communicate. Affecting one facet can disturb another and there’ll be no effect”*. Therefore, it is important to consider all environmental aspects of a product, as total environmental impact might be counteracted by sustainability measures. As this calls for complex comparisons, understanding of the environment and the impact of actions and measures is needed for the parties involved.

### Measurability

An important way to make the comparisons between sustainability aspects and measures easier is by the use or development of measurable criteria and calculation methods. A benefit of measurable criteria is that it results in a more objective assessment in a tender, therefore, making a qualitative comparison between products easier. Minimization of subjectivity in the assessment could for instance be achieved through criteria formulated with the SMART method.

Ultimately, use of an objective assessment could prevent greenwashing, because when criteria are measurable, they are able to be enforced. The necessity for enforcement was emphasised by both online respondents as well as interviewees. Interviewee 5: *“If you don’t do anything with the criteria asked, we’re investing money for nothing. We set up expensive systems and need employees for SPP, so when there’s no monitoring competitors could say yes and act no, while others that say yes and act so, they have a lot more costs”*. When companies take sustainability measures or attempt to innovate, this often requires substantial financial investments. As interviewee 5 noted: When SPP criteria are demanded without monitoring, companies could dishonestly say they meet these criteria while making no true investments. This way, unfair companies can offer low prices and outcompete the honest companies and investing in sustainability becomes unfavourable.

### Labels

There are several methods to quantify sustainability in a tender, such as the use of metrics, key performance indicators, calculation methods or labels. While labels are often used for assessing qualitative traits, respondents were divided about the use of labels. On one hand, a fair number of respondents mentioned the use of labels when asked about SPP aspects with which they were satisfied. Some online respondents and interviewees even stated that existing labels are used too sporadically. Labels for which this was the case are for instance BRL SVMS-007 for the demolition sector, and the SROI label PSO30+, which distinguishes companies that apply to article 2.82 of the procurement law (CCDS, 2017; PSO, 2016; Wettenbank-overheid, 2012, 2019).

However, other participants were more sceptical regarding labels. Criticism towards labels is aimed at their presumed impact, financial cost and inflexibility. When labels, for

instance, are used to quantify complex projects, they might be inadequate when assessing specific components. Interviewee 2: *“Interior has been a section in a chapter. The major labels in construction inadequately accounted for the impact of interior. Luckily, there’s a new indicator that zooms in on interior now, but it is only two weeks old and hasn’t been used in tenders yet.”* Additionally, interviewee 2 described a certification in which the burning of a product at the end-of-life was counted as a recycling phase and was assessed almost as good as recovery of materials by disassembly of the product. Therefore, labels seem to be very susceptible to ambiguous terminology as well. Interviewee 6 noted that setting up a label is very accessible and their impact is therefore debatable as they differ in sustainability standards and in services offered. In many cases the money could be spent more effectively when used to improve own processes, the interviewee argued.

The financial costs of certification are a problem particularly for some businesses. Companies are responsible for the costs prior to a tender and for some, the long timespan between certification and a potential pay-out is a financial burden. Interviewee 4 mentioned: *“When a municipality wants to build something, it takes a very long time. This bothers us because we have our costs now, such as life cycle assessments and norms the municipality will ask for in the tender. It’s about a lot of money and this can be problematic.”*

A third drawback mentioned by interviewee 5 is the inflexibility associated with labels. When in a product or service the goal is to make continual progress towards sustainability, label use could be too static, since certificates do not change along with the goals of procurer and company. Moreover, the interviewee noted that some labels can be very rigid. When the product differs slightly from their optimum it easily results in a bad assessment score.

## Realism

The third condition for effective SPP criteria is realism. Respondents mentioned that criteria sometimes are unrealistic. This could be due to the use of inappropriate standard criteria, disproportionality or contradictive criteria. An online respondent argued that the criteria were disproportional, especially for SMEs: *“For employees of an SME, it’s impossible to keep up with the quickly changing criteria. It costs a lot of time and requires financial investments which are disproportional to the tender’s revenue”*. Proportionality seemed to be influenced by workload, alteration in demand and financial investments needed. Several respondents mentioned that writing an offer requires a vast amount of writing, and a big workload. Additionally, it requires more work, and potentially, financial investments, when criteria are altered.

Another counteractive influence to realism is the use of contradictive criteria. For example, both an interviewee and an online respondent stated that the social return criteria are contradictive. Interviewee 8 explained that on one hand, the procuring officer asked for employees with a distance to the labour market, though on the other hand the work had to be done by employees from a certain salary scale. In this case, the SROI criterion contradicted another functional criterion.

## Knowledge

In all three conditions for specific criteria, knowledge is an important requirement. As mentioned by interviewee 11, knowledge about measuring and calculation methods was would generally be the company’s responsibility instead of the government’s, causing a lack of knowledge among procurement officers. Lack of knowledge was recognised by respondents by immeasurable, unmonitorable, unrealistic or short-sighted criteria.

An important method to acquire the knowledge needed and to synchronise with the private companies is the use of market consultation. This was said to make the tender criteria

more specific and impact more sustainable. Some interviewees were very positive about market consultations. Interviewee 1: *"As soon as they do a market consultation, the criteria change. They become much more specific. A market consultation should be part of SPP"*. However, as they cost a lot of time and money, a few other interviewees did not believe in their effectivity that much.

Several interviewees mentioned the influence of tender consultants on the formulation of criteria. Interviewee 2 once experienced that such a consultancy worked with faulty information, which stresses the importance of knowledge to also reach these parties.

### Disadvantages of specific criteria

The characteristics previously stated are the most important to formulate specific criteria. However, this approach has the drawbacks that it requires a lot of work to write an offer, and specific questions do not offer the possibility to get a good feeling about the possible cooperation, to provide extra information, or distinguish from competitors. Moreover, interviewee 6 mentioned that specific criteria forced their company into a certain direction while the required technology is not always ready yet. To tackle these disadvantages, it might be useful to procure for sustainability in a more flexible manner.

### b. Flexible approach

Several interviewees mentioned for a more flexible method of formulating tender criteria by asking the company open questions or an essay on how they approach sustainability. Such an essay could be focused on a particular subject. This way procurement can effectively be combined with policy or sustainability goals, according to interviewee 3. However, this approach leads to a more subjective assessment from the procuring organization

Via a flexible approach such as an essay, companies are better enabled to tell their story and distinguish themselves from competitors. Interviewee 6 said about this: *"The advantage of a broad view on sustainability is that there's room for our whole own story. Everyone is able to bring in their uniqueness. Of course, it is difficult to determine how to compare social versus environmental impact."* An online respondent mentioned that specific criteria lacked space to distinguish themselves, because the criteria are not ambitious enough and therefore no difference could be made in terms of sustainability ambition.

### c. Partnership

Among the interviewees, two in particular stressed the importance of partnerships over tenders. Both interviewee 5 and 9 noted that regarding sustainability, all parties should develop together, which requires a different, partnership-based approach. Prescribing all specifics beforehand, in a tender, would be ineffective for instance due to potential unforeseen circumstances and the workload that comes with writing a predetermined tender offer.

The partnership centres around cooperation between the procuring organization and supplying company. In this case, a tender is designed in order to choose a partner company instead of a product. After the tender, both parties can continually be challenged and develop together as common goals will be formulated together. Interviewee 5: *"Making progress together is essential for a tender and for the entire transition to sustainable in the Netherlands. Cooperation and taking steps together, during both the tender formulation and during implementation"*.

An example of a partnership given by interviewees 4 and 9 is the use of construction teams. In a construction team the procuring party and the contractor cooperate, and set and pursue common goals as partners. This approach requires continual communication and open attitudes. Only urgent conditions are described in a contract and the design and its specifications are developed together. Moreover, agreements are made about the risks of innovations and unforeseen problems. With a construction team such unforeseen problems should be discussed instead of disputed when they are not covered by the contract. Interviewee 9: *"If the costs are lower than expected, we share the benefit and when costs are higher procurer and contractor share the costs. We use open bookkeeping to gain trust and enhance the project speed. Closed bookkeeping on the other hand, inspire dispute and lawsuits, slowing down the project."*

A partnership seems most useful for long term projects or services, as these will benefit most from healthy cooperation and flexible contracts. Besides the tender itself, it is very important in a partnership to remain in conversation about sustainable advancement. As the purpose of a partnership is to develop continually, this development should be led by common goals rather than based off static labels or quality marks. A condition stated by interviewee 5 is that among both parties, knowledge is required about each other's processes. This is in line with the open attitude mentioned in a previous section. However, interviewee 5 noted that procurers often took this so far as to interfere with the company, prescribing far too many details. When such details are prescribed too strictly, freedom of design and operation are compromised, which leads to decreased possibilities to incorporate innovation and sustainable applications. As innovation always comes with the risk of failure, risks should be explored and discussed thoroughly prior to the project.

Disadvantages of the partnership mentioned by the interviewees were the amount of time needed, as it is a process rather than a tender, and the amount of attention needed from the procuring party. Of course, different approaches for tendering could also be combined, for example with holding interviews about the company's views on sustainability in person, as a preselection.

## In Summary

In sub question 3, five main challenges were identified: ambition among smaller local governments, a conservative and risk averse attitude of the procurer, the competition for lowest price versus sustainable impact, the need for sustainability impact measurement and assessment tools, and optimisation of criteria formulation and tender method.

The main aspects that influence the application of SPP are the procurer's ambition, their attitude, the weight SPP criteria have in tenders, and the methods used for tendering and for formulation of the SPP criteria. Interviewees said that often political ambitions were high, especially among central governments and big municipalities. However, interviewees noted that attention to sustainability was often lacking among smaller local governments. Moreover, high ambition does not always seem to lead to successful application, as the transition to application seemed to be a bigger challenge.

The procurer's conservative attitude seems to be a result of risk averse tendering. To procure with progressive attitude, the procurer requires sufficient time and/or capacity and know-how.

Furthermore, the weight of SPP criteria should be of sufficient value. The main competitors for SPP in terms of assessment weight are aesthetics (in construction) and lowest

price. The choice for aesthetics was usually influenced by an architect and the choice for lowest price seemed influenced by the procurer's management and serves as a safe criterion for avoiding lawsuits. The use of lowest price could be caused by a lack of knowledge about sustainability and SPP.

For criteria formulation, three main methods were identified in this study: specific criteria, a flexible approach, and a partnership. Interviewees were divided on their preferences regarding these methods. Specific criteria are common in SPP. However, these should be well developed and meet three requirements: criteria should be based on science, measurable and realistic. When assessment is objective and criteria are enforceable, greenwashing can be avoided, and therefore the supplier's competitive position can be protected against dishonest competitors. The disadvantages of specific criteria are the inability to provide extra information of to distinguish from competitors.

To tackle these disadvantages, a flexible approach could be more useful. In this approach suppliers can answer to the sustainability demand more flexibly by means of open questions or an essay on how they approach sustainability. This method involves a more subjective assessment and therefore the procurer requires knowledge on how to compare such offers.

A final tender method recommended by respondents is the use of cooperative partnerships between procurer and supplier. In this case, a tender is designed for choosing a partner company instead of a product. This can be especially useful for long term projects or services, as these need healthy cooperation and a flexible contract. With a partner, sustainable development is pursued based on common goals instead of static criteria or labels. An open and confiding attitude is essential for successful cooperation.

## 5. Conclusion

This study was designed to serve as an evaluation of the ministry's previous activities regarding SPP, and to aid in the development of a new plan of action. Both an online survey and eleven interviews have been conducted in order to identify new factors while also providing insight in the degree in which suppliers perceive these factors as important. Then, a predominantly qualitative analysis was conducted to find the answer to the main research question: *From the perspective of the supplier, which factors influence the realization of Sustainable Public Procurement by the Dutch ministries?*

To provide context for understanding the supplier's perspective, the sub-questions are answered first.

1. *How do suppliers feel about the government's aim for transition to sustainable by means of SPP?*

Both the online survey and the interview demonstrated that the majority of suppliers support the concept of SPP. None of the online survey respondents had a negative opinion on SPP, while 11.6% of survey respondents answered neutral and 88.4% answered they had a positive opinion about the concept. Many interviewees stated that public demand has great potential to influence the supplier's course of action.

2. *What effects of SPP do suppliers experience within procurement, their company, and in the market?*

Survey respondents were asked how they perceived the effects of SPP. Less than 10% of survey respondents reported a negative effect from SPP, while about 30% reported no or neutral effect and 34 to 48% of survey respondents experienced positive effects from SPP. Negative responses were mostly based around a lack of implementation of SPP or monitoring and enforcement of the criteria. Positive effects included the encouragement of awareness and sustainability ambitions in the company and the industry, and financial stimulation of sustainable innovations. These effects were also mentioned in the interviews. Moreover, interviewees reported that attention for sustainability and well-designed SPP tenders were seen more frequently and the weight of price in tenders decreased. In their own company, interviewees saw their sustainability strategy being incentivised or confirmed and they noted that their company's size and investments could be influenced by SPP. Interviewees also mentioned that cooperation between companies occurred more frequently, in order to achieve sustainable development.

3. *What experiences do suppliers have with tenders and their processes, and which factors are vital for successful application of SPP?*

A detailed description of these factors and their relations is given in section 4.4. In short, suppliers often noted that SPP in a tender is becoming more common and procurers seem to pay more attention to the transition to sustainability. According to many respondents, this has been a welcome development. However, a lot of variation can be seen between procuring organisations in terms of ambition, attitude towards SPP and/or the application of SPP in a tender. Ambition and progressiveness in the procuring organisation could therefore be seen as vital factors for SPP and the supplier's general advice to them was to be brave and aim at sustainable tender results.

In tenders, the attention for SPP varies as well, and seems to compete with the aim for lowest price. This criterion often dominates and is able to cancel out sustainability criteria, depending on the weight of both aspects. Since the supplier is usually responsible for the financial costs of innovations and certifications, competition on lowest price could be at the expense of sustainability and innovation. This is especially the case when results are not monitored or enforced, as suppliers seemed afraid a dishonest competitor would practise upon this lack of monitoring. Thus, in a tender, vital aspects seem to be: the focus/commitment to SPP, the weight of lowest price, the company's financial costs and risks regarding innovation, and their competitive position.

Opinions varied on the subject of specific versus openly formulated criteria, and therefore the wish for objectivity or subjectivity of assessment also varied. However, it seems that usually a procurer formulates specific criteria. Several interviewees often experienced those criteria to be way too specific, giving the supplier little space for their own input or for innovation. Sometimes criteria would even contradict each other, making it impossible to realise both. It is therefore important that the true impact of criteria can be assessed in order to formulate realistic and effective criteria. Regarding the criteria, vital factors would be: fixed versus open criteria, objective versus subjective assessment, true impact, and realism and effectiveness of criteria.

The main research question was aimed at identifying the factors that influence SPP realization. These factors have been described in the answer to sub question 3 (section 4.4). A main overview of the factors found is given in figure 4, while figures 5, 6 and 7 illustrate the most important factors and their relations. Finally, a detailed overview is given in app 2.

Results indicate that the majority of suppliers regard the concept of SPP as a positive development. However, adoption and application must still be improved upon. The five main challenges found were: ambition among smaller local governments, a conservative and risk averse attitude of the procurer, the competition for lowest price versus sustainable impact, the need for sustainability impact measurement and assessment tools, and optimisation of criteria formulation and tender method.

## Practical recommendations

Based on the results from this study, some practical recommendations can be made in order to overcome the challenges found and to improve on the practical application of SPP. First, recommendations will be given about SPP in general, followed by recommendations on how to improve the practise in procuring governments and finally, recommendations will be given for tender method and criteria formulation.

Generally, respondents were happy about SPP and seemed to look forward to further development of SPP in tenders. Therefore, the first recommendation is to keep up the good work regarding encouragement of adoption of SPP through the SPP Manifesto (Rijksoverheid, 2016) and the green deals (Rijksoverheid, 2018), development of common SPP criteria and measuring methods, and facilitating the sharing of knowledge and experiences through PIANOo and through conferences. It is recommended to keep giving attention to SPP and to optimise application of it. As small and middle-sized governments and semi-governments such as schools seem to lag behind in terms of SPP policy and application, both policy ambition and application of SPP should be expanded upon in these smaller organisations. These might have little capacity and knowledge about SPP, so providing this group with knowledge and best practises and stimulating them to share knowledge and experience could be beneficial.

In terms of attitude, some fear exists among both the procurers and suppliers. The procurer has to abide to the Procurement Law and often seems to procure in a conservative way, as they risk fines, redoing the tender, and lawsuits. Especially in some sectors, lawsuits between procurer and supplier were said to be common. Organisations that want to tender progressively can be hindered by these risks and therefore, it would be beneficial if the start of lawsuits could be discouraged. In a tender, lawsuits could be avoided by transparency and objectivity. The procuring organisation should be clear about their tender goal, how they wish sustainability will be applied, and their assessment method. For avoiding lawsuits, objective and measurable criteria should be applied. These criteria best lead to an objective assessment. In case a contract between government and supplier has already been established, a way to avoid conflict is a focus on healthy a partnership (section 4.4). This includes continuous communication about common goals and problem solving, and an open and trusting attitude towards one another, for example with open bookkeeping.

On the other hand, suppliers showed concern about their position among competitors regarding investing in sustainable innovation. Such investments come with a financial risk when competitors are dishonest about their tender offer. To protect the competitive position of suppliers, dishonesty should be discouraged, for instance by formulating specific criteria and in combination with the monitoring and enforcing of it. Furthermore, criteria should be ambitious enough for the supplier to distinguish themselves and these criteria should be assigned appropriate weight in the assessment.

A recommendation specifically for the procuring organisation is to prioritise SPP in a tender. Suppliers mentioned that for instance the weight of lowest price, the preferences of an architect or the procurer's confidence in innovative products cause the procurer to award offers with little regard to SPP. There are even tenders in which SPP was not an internal design of the tender, but added afterwards. This can lead to ineffective practise of SPP as the sustainability effects might not be considered well. Especially within the circularity theme, tender and demand should be designed with sustainability in mind. Examples of best practises mentioned in the interviews shared that no concessions were made in terms of sustainability criteria.

Another advice to procurers is to supply their employees with know-how on procuring progressively within the boundaries of the procurement law. This could aid in the adoption of SPP by smaller organizations, avoidance of conflicting or unambitious tender criteria, and stimulation of a progressive approach to SPP.

With sufficient know-how, tenders can become more ambitious in terms of SPP and fear of lawsuits or fines might decrease. Besides, employees should be provided with sufficient knowledge and tools to properly assess the impact of SPP. Sustainability works in a complex and interactive manner, and with sufficient knowledge, the assessment of SPP offers should become more objective and thus better contribute to sustainability goals.

Actively sharing knowledge, know-how and best practices among other procurers is an important factor for improving the successful application of SPP as it tackles multiple issues at once. Information sharing could cause procurers to approach SPP in a more uniform way which could decrease the work load for a procurer. Methods and criteria do not have to be reinvented, which is a complaint made by several interviewees. Additionally, sharing experience could go even further in the form of collaborations or clustered tendering. This decreases work load for the governments individually, while the quality of SPP criteria could still be retained. A more uniform SPP approach is especially useful within individual sectors, as a supplier does not have to invest in multiple methods to comply with SPP criteria, nor do

they have to rebuild their systems, as needed when SPP demand varies much between individual organisations.

For the tender method, it is important that the tender is aligned well with the state of the art regarding the technological and industrial possibilities for sustainability. This market knowledge could for instance be improved by holding a market consultation.

Another advice is to use a tender method that minimizes the influence of price, such as proposing a set price for all offers and assessing based more on qualitative criteria. Moreover, a pitfall could be the tendency to prescribe the demands in too much detail. A number of interviewees noted that the level of detail could obstruct the adoption of innovation. Some degree of freedom in designing an offer would enable the supplier to incorporate more sustainable innovations than when criteria are fixed. These interviewees preferred to tackle sustainability questions in the form of a cooperative partnership with the procurer. A partnership in which both organisations have the same goal and show an open and trustworthy attitude towards each other, might speed up the transition to a sustainable economy significantly.

The final recommendations concern SPP criteria: In order to procure in a more uniform way, it is important that terminology is and remains consistent. Moreover, basing criteria on scientific knowledge is another way to reach uniform SPP demands, while also ensuring a more subjective assessment and measurable, monitorable criteria. However, as interviewees were divided on broad and subjective versus specific, measurable and objective criteria, it is recommended to search for an optimum approach for the given tender situation. The last recommendation is that the criteria for social return are evaluated and adapted, as many complaints mentioned that they often are incompatible with the tender. Several interviewees noted that the SPO30+ certificate was worth looking into.

## 6. Discussion

As described earlier and concluded in the literature study by Cheng et al. (2018), not much is currently known about the supplier's experience, regarding SPP. Therefore, this research is a first step towards filling this knowledge gap. Moreover, several studies such as Mendoza Jiménez et al. (2019), Rainville (2017) and Testa et al. (2012) have researched a narrower spectrum of sustainability aspects. As this study, this study concerns one of the broadest approaches to SPP. Additionally, by exclusively electing suppliers as respondents, this study has focused more specifically on the supplier's preferences towards tender methods and SPP criteria than found in other studies.

The five conclusions from this comparison were (1) the importance of the procuring organization and its -often risk avoiding- procurement culture, (2) the procurer's knowledge and know-how might be a more important aspect than previously thought, since these contribute to progressive procurement attitude and well-designed tenders and criteria, and (3) the procurer's assessment methods need to be developed further, as they are not currently designed to assess environmental and social aspects. This recommendation was also made by Cheng et al. (2018). (4) The supplier's perspective added the aspects of their own business and of the business environment. Especially the financial risks of innovation and their competitive position seemed important for the supplier. (5) Public and private organisations need to approach sustainability cooperatively in order to effectively develop sustainability measures.

A study conducted by Mendoza Jiménez et al. (2019) has focused also on the supplier's experiences with public procurement. However, this study was limited to the social aspect of sustainability, as their research targeted social enterprises exclusively. Interestingly, similarities were found between the findings of both studies. Mendoza Jiménez et al. (2019) also concluded that the status quo in procurement is an obstacle to overcome. They found that suppliers and procurers said there were a lack of training and knowledge, and internal resistance to change within procuring organisations. The study stated that a procurer's lack of knowledge stops procurers from introducing new criteria because of juridical insecurity, and therefore, poses a barrier to sustainable development. Moreover, the social enterprises mentioned problems with competing for offers when prices offered are extremely low. These barriers mentioned in the study by Mendoza Jiménez et al. (2019) largely align with the findings from this research, even though it was limited to social enterprises. Moreover, Jolien Grandia (2016) also found that knowledge of SPP is thought to improved application of SPP. These similar findings emphasize the importance of procurement culture and knowledge.

### Limitations and suggestions for further research

A possible bias could be present in this study as most interview respondents were found via the network of CSR Netherlands. This might mean interviewees are selected with bigger commitment to sustainability than the average population of Dutch suppliers. Therefore, support for SPP might be overestimated. Although the online survey had decent sample size and its respondents were gathered from more different sources and still found respondents support SPP, it would be interesting to expand research and study a bigger variety of Dutch businesses in order to improve external validity. Moreover, as the main focus of this research was qualitative, the survey results have not been statistically tested. Future studies might

benefit from a more quantitative approach, in order to increase the validity of data. Further research into individual sectors is recommended, in order to gain deeper understanding necessary for communication and regulation targeted at specific sectors. Moreover, as the data collected are rather generalized due to the broad research design, they can mainly be usable for determining focal points in policy. For actual application, the relations mentioned in this research should be studied in order to find the best methods to tackle the aspects that serve as a barrier against SPP application.

Another limitation present in this study is that it was based on the supplier's experiences and therefore the match with causal relations found and causality in practical reality has not been focused on.

The definitions of facilitators and barriers were previously stated as the influencing factors to the realization of SPP, in which facilitators and barriers can be seen as two sides of the same coin. The data measured could be defined as the supplier's opinions regarding such factors, based on their own experiences. Regarding the construct validity in this research, qualitative data could be coloured by personal or organisational goals and visions and are therefore somewhat subjective representations of the construct. As 'influencing aspects' were defined very broadly, most of the factors mentioned were accepted as data.

In this analysis attention was paid to the credibility of arguments and relations. However, as this analysis was mainly qualitative analysis, credibility in this research was a subjective matter. The quantitative data have not been tested statistically, as these were predominantly used for finding trends rather than on drawing significant conclusions.

The results from this study are likely to apply in the context of other EU countries as well since these are all bound to the same EU Procurement law. Transferability of these results to countries in other states of development and with other SPP regulation and organisation are yet to be studied.

In the private sector, these data only apply to a certain extent as private organisations are not obliged to go through the tender process and are subjected to less procurement rules. Therefore, a private organisation will be less pressured to avoid risks and it could be easier to achieve a progressive procurement attitude. Moreover, a private company's incentive to be sustainable or pursuit other policy goals might be smaller as private companies are not obligated to, compared to public organisations.

Despite the growing number of studies on SPP, several knowledge gaps still exist on which future research should focus (Cheng et al., 2018). An important gap is found in our understanding of the effectiveness of sustainability criteria and their environmental and social impacts. Criteria and assessments were often said to be subjective and not sufficiently measurable and monitored. As 'sustainability' has a multi-faceted nature and its definitions can be ambiguous, understanding the absolute effects of SPP activities can prove to be a challenge. Additionally, understanding of true impact should be used to improve the procurer's assessment tools, since these are needed especially in smaller procuring organizations in which labour capacity seems to inhibit SPP adoption. Furthermore, as cooperation is needed to realize sustainable impact, public tools could aid in aligning SPP strategies and facilitating cooperation. The relation between application of SPP and sustainable impact is expected become stronger when criteria and assessments will be developed further.

Another interesting study would be to find what determines the supplier's preference for either a tender with fixed criteria or an essay-based assessment. This knowledge could aid in effective SPP tender design so sustainability goals can be reached while also meeting the supplier in their needs.

And finally, the social aspects of sustainability seem underexposed. Criteria for social return were often criticized to be unrealistic, suggesting that the respective procurer may lack knowledge and/or commitment, and that these criteria are still underdeveloped. Additionally, not much is known about the sustainability aspect of international social conditions. Tackling this aspect might be a big challenge, as it relies heavily on supply chain transparency and international cooperation. Therefore, it is important to study measurement and implementation of this aspect.

Because of the potential social and environmental impact of SPP, the number of studies on the subject has increased during the previous years. However, in order to develop the practise of SPP, continued effort is needed among both the parties that actively apply SPP, and among theoretical research.

## 7. References

- Ageron, B., Gunasekaran, A., & Spalanzani, A. (2012). Sustainable supply management: An empirical study. *International journal of production economics*, 140(1), 168-182.
- Alvarez, S., & Rubio, A. (2015). Carbon footprint in Green Public Procurement: a case study in the services sector. *Journal of Cleaner Production*, 93, 159-166. doi:<https://doi.org/10.1016/j.jclepro.2015.01.048>
- Bos-Brouwers, H. E. J. (2010). Corporate sustainability and innovation in SMEs: evidence of themes and activities in practice. *Business strategy and the environment*, 19(7), 417-435.
- Brammer, S., & Walker, H. (2011). Sustainable procurement in the public sector: an international comparative study. *International Journal of Operations & Production Management*, 31(4), 452-476.
- Brundtland, G., Khalid, M., Agnelli, S., Al-Athel, S., Chidzero, B., Fadika, L., . . . MORINO DE BOTERO, M. (1987). Our Common Future ('Brundtland report'): Oxford University Press. In (pp. 54): USA.
- Caldwell, N., & Bakker, E. (2008). Procurement process in the public sector: an international perspective. *International handbook of public procurement*, 427-441.
- CBS. (2016). *Nederland in 2015*. Retrieved from <https://www.cbs.nl/nl-nl/publicatie/2016/11/nederland-in-2015>
- CCDS. (2017). *Beoordelingsrichtlijn veilig en milieukundig slopen* (BRL SVMS-007). Retrieved from <https://www.veiligislopen.nl/nl/documenten/brl-svms-007/>
- Cheng, W., Appolloni, A., D'Amato, A., & Zhu, Q. (2018). Green Public Procurement, missing concepts and future trends—A critical review. *Journal of Cleaner Production*, 176, 770-784.
- Crespin-Mazet, F., & Dontenwill, E. (2012). Sustainable procurement: Building legitimacy in the supply network. *Journal of Purchasing and Supply Management*, 18(4), 207-217.
- DEFRA. (2006). *Procuring the Future - The Sustainable Procurement Task Force National Action Plan*. Retrieved from London: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/69417/pb11710-procuring-the-future-060607.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/69417/pb11710-procuring-the-future-060607.pdf)
- Delmonico, D., Jabbour, C. J. C., Pereira, S. C. F., de Sousa Jabbour, A. B. L., Renwick, D. W. S., & Thomé, A. M. T. (2018). Unveiling barriers to sustainable public procurement in emerging economies: Evidence from a leading sustainable supply chain initiative in Latin America. *Resources, Conservation and Recycling*, 134, 70-79.
- Dijkma. (2017). Stand van zaken maatschappelijk verantwoord inkopen [Press release]. Retrieved from <https://www.rijksoverheid.nl/documenten/kamerstukken/2017/07/06/stand-van-zaken-maatschappelijk-verantwoord-inkopen>
- European-Comission. (2019). *Public Procurement Indicators 2017*. Retrieved from Brussels: <http://ec.europa.eu/DocsRoom/documents/20679/attachments/1/translations/en/renditions/native>
- Grandia, J. (2015). *Implementing sustainable public procurement: An organisational change perspective (Doctoral dissertation)*. [SI: sn],
- Grandia, J. (2016). Finding the missing link: examining the mediating role of sustainable public procurement behaviour. *Journal of Cleaner Production*, 124, 183-190.
- Grandia, J., & Meehan, J. (2017). Public procurement as a policy tool: using procurement to reach desired outcomes in society. *International Journal of Public Sector Management*, 30(4), 302-309.
- Günther, E., & Scheibe, L. (2006). The hurdle analysis. A self-evaluation tool for municipalities to identify, analyse and overcome hurdles to green procurement. *Corporate Social Responsibility and Environmental Management*, 13(2), 61-77.
- Jones, E. (2019). Rethinking Greenwashing: Corporate Discourse, Unethical Practice, and the Unmet Potential of Ethical Consumerism. *Sociological Perspectives*, 0731121419849095.
- Koppert, S., ter Heegde, H., Hulsker, W., Meindert, L., Meurs, E., & van der Wagt, M. (2013). *Ex post beleidsevaluatie duurzaam inkopen*. Retrieved from Rotterdam: <https://zoek.officielebekendmakingen.nl/blg-290001.pdf>
- KPMG. (2014). *MVO Sector Risico Analyse*. Retrieved from <https://www.rijksoverheid.nl/documenten/rapporten/2014/09/01/mvo-sector-risico-analyse>
- Larsen, H. N., & Hertwich, E. G. (2010). Implementing Carbon-Footprint-Based Calculation Tools in Municipal Greenhouse Gas Inventories. *Journal of Industrial Ecology*, 14(6), 965-977. doi:10.1111/j.1530-9290.2010.00295.x

- Lauesen, S., & Vium, J. P. (2005). Communication gaps in a tender process. *Requirements Engineering*, 10(4), 247-261.
- Melissen, F., & Reinders, H. (2012). A reflection on the Dutch sustainable public procurement programme. *Journal of Integrative Environmental Sciences*, 9(1), 27-36.
- Mendoza Jiménez, J., Hernández López, M., & Franco Escobar, S. E. (2019). Sustainable Public Procurement: From Law to Practice. *Sustainability*, 11(22), 6388.
- MVO-Nederland. (2019). MVO Risico Checker. Retrieved from <https://www.mvorisicochecker.nl/nl/wereldkaart>  
Retrieved April 2019
- Novack, R. A., & Simco, S. W. (1991). The industrial procurement process: a supply chain perspective. *Journal of Business Logistics*, 12(1), 145.
- OECD. (2015). *Government at a Glance in 2015*. Retrieved from Paris: [http://dx.doi.org/10.1787/gov\\_glance-2015-en](http://dx.doi.org/10.1787/gov_glance-2015-en)
- PIANOO. (2018). Submission for Koopwijsprijs 2018 by Flevoland Province. Retrieved from <https://www.pianoo.nl/sites/default/files/media/documents/KoopWijsprijs-Flevoland-PT2017.pdf>
- PIANOO. (2019). Circulaire verdienmodellen: praktische handvatten voor ondernemers. Retrieved from <https://www.pianoo.nl/sites/default/files/media/documents/Circulaire-Verdienmodellen-handvatten-voor-ondernemers-sep2019.pdf>
- PIANOO. (ca. 2016). Circulair Inkopen Toegelicht. *MVI Thema's*. Retrieved from <https://www.pianoo.nl/nl/themas/maatschappelijk-verantwoord-inkopen-duurzaam-inkopen/mvi-themas/circulair-inkopen/circulair>
- PIANOO. (ca. 2018). Biobased Inkopen Toegelicht. *MVI thema's*. Retrieved from <https://www.pianoo.nl/nl/themas/maatschappelijk-verantwoord-inkopen-mvi-duurzaam-inkopen/mvi-thema-s/biobased-inkopen/biobased-inkopen-toegelicht>
- PIANOO. (n.d. a). Social Return On Investment (SROI). Retrieved from <https://www.pianoo.nl/en/sustainable-public-procurement/spp-themes/social-return-investment-sroi>
- PIANOO. (n.d. b). Milieuvriendelijk Inkopen Toegelicht. *MVI Thema's*. Retrieved from <https://www.pianoo.nl/nl/themas/maatschappelijk-verantwoord-inkopen-mvi-duurzaam-inkopen/mvi-thema-s/milieuvriendelijk-inkopen/milieuvriendelijk-inkopen>
- PIANOO. (n.d. c). Productgroepen en MVI-criteria. Retrieved from <https://www.pianoo.nl/nl/themas/maatschappelijk-verantwoord-inkopen-mvi-duurzaam-inkopen/productgroepen>
- PIANOO. (n.d. d). Innovatiegericht inkopen. Retrieved from <https://www.pianoo.nl/nl/themas/innovatiegericht-inkopen>
- PIANOO. (n.d. e). Innovatiegericht inkopen toegelicht. *MVI Thema's*. Retrieved from <https://www.pianoo.nl/nl/themas/innovatiegericht-inkopen/innovatiegericht-inkopen-toegelicht>
- PIANOO. (n.d. f). Aan de slag met MKB-vriendelijk inkopen. Retrieved from <https://www.pianoo.nl/nl/themas/mkb-vriendelijk-inkopen/aan-de-slag-met-mkb-vriendelijk-inkopen>
- PSO. (2016). PSO30+. Retrieved from <https://www.pso-nederland.nl/over-de-pso/ps0-30-abw-certificaat>
- Purvis, B., Mao, Y., & Robinson, D. (2019). Three pillars of sustainability: in search of conceptual origins. *Sustainability Science*, 14(3), 681-695.
- Rainville, A. (2017). Standards in green public procurement—A framework to enhance innovation. *Journal of Cleaner Production*, 167, 1029-1037.
- Rietbergen, M. G., van Rheede, A., & Blok, K. (2015). The target-setting process in the CO2 Performance Ladder: does it lead to ambitious goals for carbon dioxide emission reduction? *Journal of Cleaner Production*, 103, 549-561. doi:<https://doi.org/10.1016/j.jclepro.2014.09.046>
- Rigby, J. (2013). Review of pre-commercial procurement approaches and effects on innovation. *Manchester Institute of Innovation Research, Manchester Business School, University of Manchester*.
- Rijksoverheid. (2015). *Plan van Aanpak Maatschappelijk Verantwoord Inkopen*. Retrieved from <https://www.rijksoverheid.nl/documenten/kamerstukken/2015/09/11/plan-van-aanpak-maatschappelijk-verantwoord-inkopen-2015-2020>

- Rijksoverheid. (2016). Manifest Maatschappelijk Verantwoord Inkopen. Retrieved from <https://www.pianoo.nl/sites/default/files/documents/documents/manifest-maatschappelijk-verantwoord-inkopen-2016-2020.pdf>
- Rijksoverheid. (2018). Green Deal Circulair Inkopen 2.0 - van pilot naar opschaling. Retrieved from <https://www.greendeals.nl/sites/default/files/downloads/GD223-dealtekst-Circulair-Inkopen-2.0.pdf>
- Rijksoverheid. (2019a). *Kamerbrief. Voortgangsbrief maatschappelijk verantwoord inkopen*. Den Haag
- Rijksoverheid. (2019b). SPP Criteria. Retrieved from <https://www.mvicriteria.nl/nl>
- Rolfstam, M. (2015). Public procurement of innovation for a better world: a consolidation or a new beginning? In: Taylor & Francis.
- RVO. (2004). Definitie van kleine en middelgrote ondernemingen. Retrieved from <https://www.rvo.nl/sites/default/files/bijlagen/Bijlage%20bij%20MKB-toets.pdf>
- Sarmiento, L., Dammer, L., & Partanen, A. (2016). Forum for Bio-Based Innovation in Public Procurement Retrieved from [https://www.biobasedconsultancy.com/uploads/files/16-05-31\\_InnProBio\\_D3.2\\_public.pdf](https://www.biobasedconsultancy.com/uploads/files/16-05-31_InnProBio_D3.2_public.pdf)
- Sourani, A., & Sohail, M. (2011). *Barriers to addressing sustainable construction in public procurement strategies*. Paper presented at the Proceedings of the Institution of Civil Engineers-Engineering Sustainability.
- SROI-Coördinatiepunt. (2019). *Social Return Paragraaf Friesland*. Retrieved from <https://socialreturninderegio.nl/aangesloten-regio-s/friesland/sroi-beleid-friesland>
- TELOS. (2018). *Nationale Monitor Duurzame Gemeenten 2018*. Retrieved from <http://www.telos.nl/Publicaties/PublicatiesRapporten/handlerdownloadfiles.ashx?idnv=1416514>
- Testa, F., Iraldo, F., Frey, M., & Daddi, T. (2012). What factors influence the uptake of GPP (green public procurement) practices? New evidence from an Italian survey. *Ecological Economics*, 82, 88-96.
- Thai, K. V. (2001). Public procurement re-examined. *Journal of public procurement*, 1(1), 9-50.
- Thomson, J., & Jackson, T. (2007). Sustainable procurement in practice: lessons from local government. *Journal of Environmental Planning and Management*, 50(3), 421-444.
- Trindade, P. C., Antunes, P., & Partidário, P. (2017). SPP toolbox: Supporting sustainable public procurement in the context of socio-technical transitions. *Sustainability*, 10(1), 1-26.
- Uyarra, E., & Flanagan, K. (2010). Understanding the innovation impacts of public procurement. *European planning studies*, 18(1), 123-143.
- Van Oeveren, M., & Valk, R. (2019). Update prototype circulair viaduct Retrieved from [https://debouwcampus.nl/images/Vernieuwingsopgaven/leeromgeving-civi/Presentatie\\_prototypeCirculairViaduct\\_Menno-en-Rob\\_23052019.pdf](https://debouwcampus.nl/images/Vernieuwingsopgaven/leeromgeving-civi/Presentatie_prototypeCirculairViaduct_Menno-en-Rob_23052019.pdf)
- Van Pelt, M. (2017). *De ontwikkeling van duurzaam inkopen binnen gemeenten (Master's thesis)*.
- Van Weele, A. J. (2009). *Purchasing and supply chain management: Analysis, strategy, planning and practice*: Cengage Learning EMEA.
- Van Weert, R., Boneschansker, N., Geurts, B., & Lopulalan, N. (2016 ). *Inkoopvolume Overheid 2015*. Retrieved from <https://www.pianoo.nl/sites/default/files/documents/documents/inkoopvolume-van-nederlandse-overheid-september2016.pdf>
- Vogel, M. (2018). Introductie internationale sociale voorwaarden . Retrieved from <https://www.pianoo.nl/nl/introductie-internationale-sociale-voorwaarden>
- Walker, H., & Brammer, S. (2009). Sustainable procurement in the United Kingdom public sector. *Supply Chain Management: An International Journal*, 14(2), 128-137.
- Walker, H., Di Sisto, L., & McBain, D. (2008). Drivers and barriers to environmental supply chain management practices: Lessons from the public and private sectors. *Journal of purchasing and supply management*, 14(1), 69-85.
- Wang, X., Liu, Y., & Ju, Y. (2018). Sustainable Public Procurement Policies on Promoting Scientific and Technological Innovation in China: Comparisons with the US, the UK, Japan, Germany, France, and South Korea. *Sustainability*, 10(7), 2134.
- Weimar, A. (2015). Rijksinkoop wil de markt prikkelen [Press release]. Retrieved from <https://www.rijksoverheid.nl/documenten/rapporten/2015/12/17/rijksinkoop-wil-de-markt-prikkelen>
- Procurement law, Article 2.82 2.82 C.F.R. (2012).
- Wettenbank-overheid. (2019). Procurement Law 2012. Retrieved from <https://wetten.overheid.nl/BWBR0032203/2019-01-01>.

Zijp, M. C., & de Zwart, D. (2013). *Milieuwinst van Duurzaam Inkopen. Een quick-scan van de minimumeisen* (RIVM rapport 250005001/2013). Retrieved from <https://www.rivm.nl/bibliotheek/rapporten/250005001.pdf>

## 9. Appendix

### App. 1: Online survey in Dutch

# MVI door overheid: Ervaringen van marktpartijen

---

#### Start of Block: 1 Introductie

Q32 Beste deelnemer, Deze anonieme enquête is onderdeel van mijn afstudeeronderzoek naar Maatschappelijk Verantwoord Inkopen (MVI) door overheden. Hiermee ga ik de kansen en barrières in kaart brengen die de leverancier, aannemer of dienstverlener ervaart bij MVI door overheden. Het doel is om de resultaten geanalyseerd en anoniem terug te koppelen naar aanbestedende diensten om MVI door overheden te evalueren en de dialoog over duurzaamheid tussen aanbestedende dienst en leverancier te faciliteren. Deze enquête is gericht aan medewerkers van bedrijven, die ervaring hebben met publieke aanbestedingen waarin MVI eisen zijn uitgevraagd. Dit kan bijvoorbeeld een tender manager of duurzaamheidsmanager zijn. Dit onderzoek is een samenwerking tussen MVO Nederland, het ministerie van Infrastructuur en Waterstaat en de Radboud Universiteit. Invullen van de enquête kost ongeveer 10-15 minuten en gaat me enorm helpen met mijn onderzoek! Vriendelijke groet, Else Edwards [else.edwards@minienw.nl](mailto:else.edwards@minienw.nl)  
[e.edwards@mvonederland.nl](mailto:e.edwards@mvonederland.nl) Mobiel: 06-11153378

#### End of Block: 1 Introductie

---

#### Start of Block: 2 Algemene informatie

Q2 Voor welke organisatie werkt u? De resultaten worden anoniem verwerkt. De naam van uw organisatie wordt gevraagd voor analytische doeleinden.

---

Q3 Is uw organisatie een MKB? Een MKB heeft maximaal 250 werknemers en daarnaast een jaarlijkse omzet van maximaal 50 miljoen

Euro of een jaarlijks balanstotaal van minder dan of gelijk aan 43 miljoen Euro.

- Ja (1)
  - Nee (2)
- 

Q4 Wat is uw functie in de organisatie?

---

Q5 Hoe vaak per jaar neemt uw organisatie gemiddeld deel aan MVI-aanbestedingen of MVI-inkopen door de overheid?

- Niet (1)
  - één of twee keer (2)
  - Drie tot vijf keer (3)
  - Vijf tot tien keer (4)
  - Meer dan tien keer (5)
- 

Q6 In welke productcategorieën neemt uw organisatie deel aan aanbestedingen en inkopen door de overheid? Er zijn meerdere antwoorden mogelijk.

1. Automatisering en telecommunicatie (1)
  2. Energie (2)
  3. Grond-, weg- en waterbouw (3)
  4. Kantoorfaciliteiten en diensten (o.a. meubilair, schoonmaak, catering, etc.) (4)
  5. (Kantoor)gebouwen (5)
  6. Transport en vervoer (6)
  7. Anders namelijk (7)
- 

Q7 Bij welk soort overheden neemt uw organisatie deel aan aanbestedingen en inkopen?

Er zijn meerdere antwoorden mogelijk.

8. Rijksoverheid (1)
9. Provincies (2)
10. Gemeenten (3)
11. Waterschappen (4)
12. Semi-overheden (5)

End of Block: 2 Algemene informatie

---

Start of Block: 3 Visie op MVI

Q8 In welke mate is uw bedrijf toegewijd aan duurzaamheid?

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	
Zeer weinig toewijding	•	•	•	•	•	Zeer toegewijd

Q9 Heeft uw bedrijf lange-termijnplannen voor duurzaamheid?

- Ja (1)
- Nee (2)
- Weet ik niet (3)

Q10 Bent u over het algemeen bekend met de lange-termijnplannen voor duurzaamheid van de aanbestedende dienst?

- Ja (1)
- Nee (2)

Display This Question:

If Heeft uw bedrijf lange-termijnplannen voor duurzaamheid? = Ja

And Bent u over het algemeen bekend met de lange-termijnplannen voor duurzaamheid van de aanbestedend... = Ja

Q11 In welke mate zijn de lange-termijnplannen van uw bedrijf en de aanbestedende dienst verenigbaar?

	(1)	(2)	(3)	(4)	(5)	
Visies zijn enorm tegengesteld	•	•	•	•	•	Visies zijn goed verenigbaar

Q12 In hoeverre leidt MVI door de overheid tot verduurzaming van de markt en producten of diensten in uw organisatie? En in de gehele sector?

Denk bij duurzaamheid aan thema's als klimaat, verminderen van grondstoffenverbruik en afval, aandacht voor internationale arbeidsomstandigheden en werkgelegenheid voor mensen met een afstand

tot de arbeidsmarkt.

	Zeer veel negatief effect (1)	(2)	(3)	Geen effect (4)	(5)	(6)	Zeer veel positief effect (7)
Ervaren effect van MVI op duurzaamheid van eigen producten of diensten (1)	•	•	•	•	•	•	•
... op duurzaamheid van producten en diensten in de gehele sector (3)	•	•	•	•	•	•	•

Q45 In hoeverre leidt MVI door de overheid ook tot verduurzaming van uw eigen processen en bedrijfsvoering?

Denk bij duurzaamheid aan thema's als klimaat, verminderen van grondstoffenverbruik en afval, aandacht voor internationale arbeidsomstandigheden en werkgelegenheid voor mensen met een afstand tot de arbeidsmarkt.

	Zeer veel negatief effect (1)	(2)	(3)	Geen effect (4)	(5)	(6)	Zeer veel positief effect (7)
Ervaren effect van MVI op duurzaamheid van eigen bedrijfsvoering en processen (1)	•	•	•	•	•	•	•

Q40 Wat zijn de meest prominente effecten van MVI door overheden voor uw organisatie? Bijvoorbeeld: positie als koploper, aandacht voor duurzaamheid, etc.

Q41 Hoeveel profijt heeft uw organisatie in het algemeen van aandacht voor MVI in een aanbesteding?

	1 (1)	(2)	(3)	4 (4)	
Geen profijt	•	•	•	•	Zeer veel profijt

Q42 Hoeveel last ondervindt uw organisatie in het algemeen van aandacht voor MVI in een aanbesteding?

	1 (1)	2 (2)	3 (3)	4 (4)	
Geen last	•	•	•	•	Zeer veel last

Q13 In hoeverre staat u achter het idee om MVI door overheden in te zetten om de transitie naar duurzaamheid te ondersteunen?

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	
Daar sta ik niet achter	•	•	•	•	•	Daar sta ik achter

**End of Block: 3 Visie op MVI**

**Start of Block: 4 Aanbestedingsdocumenten**

Q35 De volgende vragen gaan specifiek over de aanbestedingsdocumenten van de inkoopende overheid.

Q14 In hoeverre komen de MVI doelen van de aanbesteding doorgaans duidelijk naar voren in de aanbestedingsdocumenten?

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	
Doelen zijn niet duidelijk	•	•	•	•	•	Doelen zijn duidelijk

Q15 Welke factoren van de MVI eisen ervaar je als belemmerend in een aanbesteding?

- 13. MVI eisen niet duidelijk (1)
  - 14. MVI eisen te breed geformuleerd (2)
  - 15. MVI eisen te specifiek (3)
  - 16. MVI eisen niet ambitieus genoeg (4)
  - 17. MVI eisen te ambitieus (5)
  - 18. Teveel eisen (6)
  - 19. MVI eisen verschillen per inkopende organisatie (9)
  - 20. Anders, namelijk (7)
- 
21. Ik ervaar geen hinder bij MVI eisen (8)
- 

Q16 Ervaart u weleens belemmeringen bij de weging van de eisen?

- 22. weging MVI eisen te licht of mvi eisen niet verplicht (1)
  - 23. weging MVI eisen te zwaar (2)
  - 24. Anders namelijk (3)
- 
25. Er wordt geen hinder ervaren (4)
- 

Q17 Wilt u toelichting geven over uw ervaringen met aanbestedingsdocumenten? \*optioneel

---

End of Block: 4 Aanbestedingsdocumenten

---

Start of Block: 5 Kosten en (Arbeids)capaciteit

---

Q34 De volgende vragen gaan specifiek over factoren waar uw bedrijf intern mee te maken kan hebben.

---

Q43 Zijn er extra financiële kosten of investeringen verbonden aan het opvolgen van MVI eisen van overheden?

	Nee (1)	Ja, soms (2)	Ja, regelmatig (3)	Ja, altijd (4)
Extra kosten door MVI (1)	•	•	•	•

---

Display This Question:

If Zijn er extra financiële kosten of investeringen verbonden aan het opvolgen van MVI eisen van ove... != Nee

Q31 Heeft uw bedrijf last van de financiële kosten of investeringen die MVI aanbestedingen van uw organisatie vereisen?

	1 (1)	2 (2)	3 (3)	4 (4)	
Geen last van	•	•	•	•	Zeer veel last van

Q44 Heeft uw organisatie weleens gunningsvoordeel doordat MVI eisen zijn gesteld?

- Ja (1)
- Nee (2)
- Weet ik niet (3)

Q18 Heeft uw organisatie weleens gebrek aan capaciteit (werknemers) bij een aanbesteding?

- Ja (1)
- Nee (2)
- Weet ik niet (3)

Display This Question:

If Heeft uw organisatie weleens gebrek aan capaciteit (werknemers) bij een aanbesteding? = Ja

Q19 Zo ja, in welke fase(n) van de aanbesteding ervaart u een gebrek aan capaciteit? Meerdere antwoorden zijn mogelijk.

26. 1. Voorafgaand aan publicatie van de aanbestedingsdocumenten (1)
27. 2. tijdens de aanbestedingsfase (2)
28. 3. na de gunning (3)
29. Weet ik niet (4)

Q20 Ondervindt uw organisatie weleens gebrek aan specifieke expertise of ervaring met aanbesteden onder de werknemers?

- Ja (1)
- Nee (2)
- Weet ik niet (3)

Q30 Hoe beïnvloedt uw eigen supply chain de duurzaamheid van uw producten of diensten?

	Grote negatieve invloed (1)	(2)	(3)	geen invloed (4)	(5)	(6)	Grote positieve invloed (7)
Op duurzaamheid heeft de supply chain: (1)	•	•	•	•	•	•	•

Q21 Wilt u toelichting geven over uw ervaringen met interne barrières bij een aanbesteding? \*optioneel

---

End of Block: 5 Kosten en (Arbeids)capaciteit

---

Start of Block: 6 Communicatie

Q36 De volgende vragen gaan specifiek over de communicatie met de aanbestedende dienst.

Q22 Hoe intensief is de communicatie met de aanbestedende dienst in de volgende fasen?

	Weinig communicatie (1)	(2)	(3)	Erg intensieve communicatie (4)
Voorafgaand aan publicatie van de aanbestedingsdocumenten (1)	•	•	•	•
Tijdens de aanbestedingsfase (2)	•	•	•	•
Na de gunning (3)	•	•	•	•

Q23 Hoe effectief voor het ophalen van benodigde informatie voor de aanbesteding vind je de communicatie met de inkoopende overheid over het algemeen?

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	
Weinig effectief	•	•	•	•	•	Erg effectief

Q24 Hoe effectief voor het beïnvloeden van de aanbesteding (bijv. eisen) vind je de communicatie met de inkoopende overheid over het algemeen?

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	
Weinig effectief	•	•	•	•	•	Erg effectief

Q25 Wilt u toelichting geven over uw ervaringen met communicatie met inkoopende overheden bij een aanbesteding? \*optioneel

---

End of Block: 6 Communicatie

Start of Block: 7 Afsluiting

Q27 Welke aspecten van MVI door overheden bent u over het algemeen tevreden over? Heeft u ervaringen waar u erg tevreden over was? \* optioneel

---

Q38 Heeft u ervaringen met MVI waar u erg tevreden over was? Kunt u deze toelichten? \* optioneel

---

Q28 Heeft u nog toevoegingen over MVI door overheden of over deze enquête? \*optioneel

---

Q29 Wilt u na afloop van het onderzoek de resultaten ontvangen?  
email-adres wordt enkel gebruikt voor het terugkoppelen van de  
resultaten.

Uw

- Nee (1)
- Ja, email adres: (2)

---

End of Block: 7 Afsluiting

---

## App. 2: Complete overview of dimensions found

