1 Potential

1.1 Bakgrund till projektidé

The project idea focuses on Sustainable / Circular Public Procurement and the rationale is that the Public Sector can play a pivotal role in transitioning to a circular economy (CE). More specifically, the project aims to investigate Circular Public Procurement (CPP) current dynamics and to identify activities to opening up the market for radically higher resource-efficiency through truly circular offer through Public Procurement.

Public authorities are major consumers across the world and therefore they play a pivotal role in production and consumption dynamics, including sustainable ones. However, research shows that there are a number of key issues that prevent a wider uptake of sustainable (or Green) Public Procurement (GPP) practices and they include a lack of awareness, knowledge, information and experience among public procurement authorities on sustainable principles, tools and their translation into innovative sustainable practices. Also, another key issue refers to the lack of certain products/services in the market that are designed to optimise close material loops and improve material efficiency (Alhola et al., 2017; Testa et al., 2016; Witjes and Lozano, 2016).

There is a range of toolboxes and guidelines available at a national level (Sustainable Criteria Library) and at the European level (e.g. REBus Guide, Circular Procurement Best Practice Report, Training modules on procuring Product Service Systems, Zero Waste Scotland’s Category and Commodity Guidance, MVO Nederland Circular Procurement Guide). However, it could be argued that none of them is designed to ensure a higher degree of circularity at each procurement round over time and at a sufficient speed mainly because of the lack of a clear and specific circular indicator that would track and ensure the progress on circular uptake in organisations.

By closely working with a number of organisations - including Swedish municipalities and RISE AB - that are already striving to becoming more sustainable and that have upcoming public procurement activities in their pipeline, we would like to test some specific managerial tools, formulate and implement innovative, cost-effective and compelling solutions to enable municipalities (and in the future all the public authorities in Sweden) to achieve sustainability goals. This will equip them with the required knowledge and practice in sustainable / circular procurement to empower them to become frontrunners in transitioning to a CE while contributing in placing Sweden at the forefront of such a transition at international level. Also, by fostering collaboration between public procurers and suppliers during the tendering process,
there is a high chance to realise reduction in raw materials utilisation and waste generation whilst encouraging the development of innovation of products and services and therefore of sustainable, circular business models (Witjes and Lozano, 2016).

1.2 Mål och leveranser

The goal is to enable public authorities to use CPP to proactively drive the shift to a CE. This will be achieved by establishing an effective and innovative procedure that includes circularity metrics and management standards that are well-spread (ISO 14001 on Environmental Management Systems) and prominent / promising (ISO 20400 on Sustainable Procurement). The effective procedure is co-created by one research institute (with business-oriented expertise on CE) together with the procurement departments and environmental strategists at four public authorities and the public-owned company RISE AB.

The innovative methodology aims to ensure continuous improvement in circularity between CPP rounds for each and the same offering. Also, elements of ISO 20400 framework (particularly §6 “Organising the procurement function towards sustainability” and §7 Integrating sustainability into the procurement process”) will be utilised to better frame CPP. This will be clear linked to the organisations’ environmental management systems and specifically ISO 14001 (if in place). A crucial step will consist of both diagnosing barriers to implement and use CPP and how to eliminate or mitigate them.

Then a series of analyses will be carried out. First, an analysis to identify similarities and differences between regions, municipalities and companies operating under LOU regulating CPP will be performed. Then, this will be followed by a study on challenges and solutions in the interaction between seller and buyer within the context of LOU (to understand whether there are any risks of having to reveal [to competitors] business model secrets – which are more important in PSS-based than in transaction-based business models). Thirdly, focus will be given on the sellers’ reactions and reasonings around CPP and how to meet them by considering questions such as the following: 1) Will CPP enable innovation?; 2) Will CPP create a market and trigger broader demand, i.e. from more customer segments?; 3) Will CPP improve overall circularity (i.e. not lost/reversed in the next use-phase)?

The collective analysis will inform the final “Recommendations for practitioners” that will be widely disseminated across the Swedish public sector to inspire and guide any public authorities seeking to effectively implement CPP.

It is important noting that since sustainable / circular procurement appears to have a significant untapped potential to catalyse green development, the project will significantly contribute to achieving the National Agenda 2030 for Sustainable Development as per the UN Sustainable Development Goals. Specifically, two goals will be addressed as follows:

**SDG 12** (Responsible consumption and production) with focus on two indicators: 1) 12.7 - Promote public procurement practices that are sustainable, in accordance with national policies and priorities; and 2) 12.8 - By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature;

**SDG 17** (Partnership for the goals) with focus on two indicators: 1) 17.16 - Enhance the Global Partnership for Sustainable Development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the Sustainable Development Goals in all countries, in particular developing countries; and 2) 17.17 - Encourage and promote effective public, public private and civil society partnerships, building on the experience and resourcing strategies of partnerships.
1.3 Omvärldsanalys

Public procurement is a key economic activity in governments (Brammer and Walker, 2011). The EU Action Plan for the Circular Economy (2015) has recognised public procurement as a main driver to a transition to a CE since it can support public sector buyers in adopting a more holistic approach to sustainability while also gaining potential savings (EC & ICLEI, 2018). Since EU and Swedish public authorities are major consumers, they can use their purchasing power to choose environmentally friendly goods, services and works and give an important contribution to sustainable consumption and production, i.e. GPP (EC & ICLEI, 2018). In Sweden the total value of purchase covered by public procurement regulations is estimated (2016) at 684 million SEK which equates to nearly 18% share of GDP at fixed price (Konkurrensverket, 2018).

Sweden applies the EU Regulations as reflected in its National Public Procurement Strategy (NPPS) which tries to address the main societal challenge of funnelling expenditures to sustainable, circular products and services. The NPPS contains seven objectives, one of which is GPP. CPP is part of GPP and can be considered as a means to achieve sustainability aiming at resource optimisation, value creation and retention through resource closed-loop systems.

Although Sweden’s NPPS provides guidance to contracting authorities and entities to develop their own strategic work on public procurement and GPP, CPP is not currently well developed (Alhola et al., 2017) as it still relies on a top-down approach and with no clear framework. Although ISO 20400 is the most prominent and recent released guidance on Sustainable Procurement, it has not widely been tested and it is not normative in such a way that it drives a transition to a CE. Therefore, CPP needs some innovative solutions to play a pivotal role in addressing global resource issues and driving sustainable development.

It is envisaged that GPP practices can support sustainable development at both local and global level only if a different rationale is adopted that requires substantial cultural, managerial and operational changes within organisations. A circular procurement approach entails going beyond the price and actually including a broader set of criteria such as circularity aspects (that are measurable) and quality (EC & ICLEI, 2018). Therefore, a successful GPP approach is dependent on the ability of the authorities to raise awareness, spread information, provide adequate training with a strong support from leadership. Moreover, a mature Environmental Management System would further leverage such a change (Testa et al., 2016).

1.4 Jämställdhetsintegrering

Svar: Ja

The project aims to ensure a nice balance of female and male participation in the activities since this is likely to increase the chances of achieving the project outcomes. This perspective is grounded in several economic, sociological and environmental studies. McKinsey (2018) indicates that inclusion and diversity appear to be crucial factors to unlock organisational competitiveness and growth. Also, large organisations in the top quartile for gender diversity on boards are 21% more likely to outperform in terms of EBIT margin than those in the bottom-quartile as well as 27% more likely to outperform them on long-term value creation metrics including economic profit (McKinsey, 2017).

According to IEMA (2018) public, governmental and private organisations with greater female representation are more inclined to seriously consider and act on environmental issues such climate change. This is corroborated by a study conducted by the University of Adelaide,  

1 https://www.vinnova.se/m/jamstalld-innovation/
Australia (2018) arguing that - based on gender socialisation and ethics theories - women are more likely to enhance environmental decision-making and seek for expert advice (especially if they are in executive roles). Moreover, a study by Global Commission on the Economy and Climate (GCEC, 2018) adds that women are uniquely well placed to identify and contribute delivering sustainable solutions. Therefore, it is vital to empower them in leadership positions so that the environment and the global economy can benefit.

In that respect, Sweden is well placed since women outperform men in higher education with nearly two-thirds of all university degrees awarded to women and equal numbers of women and men now taking part in postgraduate and doctoral studies (Swedish Institute, 2018).

Also, among the OECD countries, female labour participation in the public sector is the second-highest after Finland (72% in 2015), significantly above the OECD’s average of 58%. Further statistics by the Statistics Sweden’s bi-annual report on gender equality shows that in 2016 across private and public sectors 37% of managers were women, compared with 62% for the public sector.

By involving over 50% of women both from the start (as part of the consortium) and as interested parties (e.g. in workshops, dissemination and communication) the project will contribute and support gender mainstreaming as the main strategy for achieving targets within the equality policy in Sweden.

2 Aktörer

2.1 Projektparter

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Roll i projektet</th>
<th>Antal timmar: uppskattat för hela projekttiden</th>
</tr>
</thead>
<tbody>
<tr>
<td>RISE - Viktoria (Sustainable Business Application Area)</td>
<td>Project management &amp; research organisation</td>
<td>868</td>
</tr>
<tr>
<td>RISE AB</td>
<td>Consortium party to co-create, test/evaluate CPP in practice</td>
<td>120</td>
</tr>
<tr>
<td>Helsingborgs stad</td>
<td>Consortium party to co-create, test/evaluate CPP in practice</td>
<td>120</td>
</tr>
<tr>
<td>Jönköping kommun</td>
<td>Consortium party to co-create, test/evaluate CPP in practice</td>
<td>120</td>
</tr>
<tr>
<td>Luleå kommun</td>
<td>Consortium party to co-create, test/evaluate CPP in practice</td>
<td>120</td>
</tr>
<tr>
<td>Växjö kommun</td>
<td>Consortium party to co-create, test/evaluate CPP in practice</td>
<td>120</td>
</tr>
</tbody>
</table>
2.2 Övriga aktörer

The project consortium will benefit from the support of a reference group including Sveriges Ekokommuner (SEKOM). This is an association gathering over 100 public authorities that are actively engaged in achieving sustainability goals. The purpose of SEKOM is to encourage development for a more sustainable society, with a sound environment and a high quality of life. SEKOM will be represented by its Coordinator, Kenneth Gyllenstig.

Interested parties:
During the project we plan to reach out other public and private organisations that have expressed strong interest and that could be positively affected by the project results. They include: Bollebygd kommun (repr. Christopher Brand), Gävleborg region (repr. Love Sjögren), Halmstad kommun (repr. Sabina Hermansson), Ludvika kommun (repr. Anders Karlin), Norrtälje kommun (repr. Hanna Leife), Sundsvall kommun (repr. Linda Heikkø), SKL Kommentus (repr. Caroline Tottie), SOI (repr. Gunnar Lyckhage) and Tenelius + Holm consulting (repr. Stefan Holm).
We will also try to reach Upphandlingsmyndighet (through Joakim Thornéus) and Västra Götalandsregionen as potentially interested parties in the project results.

2.3 Projekts förankring

The project is led by RISE Viktoria Emanuela Vanacore who has deep knowledge and experience in CE, (Environmental) Management Systems and management standards. She holds a MBA on CE and previously led a project exploring whether ISO 14001 could facilitate or hinder a shift to a CE (Vinnova Diarienr. 2017-03123); she also brings business coaching expertise having worked as a Business Consultant / Coach and having coordinated business relationships in a previous CE-indicator project (Re:Source 42909-2).
RISE Viktoria Josefina Sallén will contribute as an expert in implementation of circular transition. Josefina leads the project Cirkulära Halla which aims to help companies in Halland to develop and implement circular business models. Josefina has worked as management consultant with focus on organisational change and has also worked in transition projects involving public authorities and municipalities.

In regards to the project consortium, the decision to participate and represent their organisations in the project has been taken by the Chef Koncerninköp at RISE AB Anna Brandt (who will be supported by the Upphandlingsjurist Anders Post); the Teamchef Verksamhetsstöd och hållbarhet at Helsingborgs stad Camilla Alfredsson; the Inköpschef at Luleå kommun Emma Breheim (who will be supported by Strateg Marianne Lundberg); the Miljöledare at Jönköping kommun Caroline Sundvall; the Upphandlingschef at Växjö kommun David Braic. They all represent the intersection of strategy and operations in their organisations.
The project as such has its major focus on “operation - test and adjust” approach based on practical usefulness and results, while the project results are of strategic and political relevance.
2.4 Jämställdhetsintegrering

Tabell 2. Sammanställning arbetsfördelning mellan män och kvinnor i projektet

<table>
<thead>
<tr>
<th>Känd</th>
<th>Antal män respektive kvinnor som arbetar i projektet, 1 %</th>
<th>Andel av arbetet (timmar) som utförs av män respektive kvinnor, 1 %</th>
<th>Andel män respektive kvinnor i beslutsfattande position i projektet, 1 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Män</td>
<td>22 %</td>
<td>12 %</td>
<td>17 %</td>
</tr>
<tr>
<td>Kvinnor</td>
<td>78 %</td>
<td>88 %</td>
<td>83 %</td>
</tr>
<tr>
<td>Ot</td>
<td>100 %</td>
<td>100 %</td>
<td>100 %</td>
</tr>
</tbody>
</table>

3 Genomförande

3.1 Projektplan

Arbetspaket / Work Packages

WP 1 Literature review elaboration: Create a CPP management toolbox

*In this phase a thorough literature review of relevant publications on key themes of the project (such as public procurement, circular procurement, procurement standards, circular business models and circular indicators) is coupled with an in-depth scrutiny of the most recent case studies and best practices in sustainable / circular procurement and with the practices in use in the participating organisations. The main findings will be compiled and combined with a set of management tools (e.g. ISO 20400, ISO 14001, the RISE Viktoria product-based circularity indicator) to provide a structured toolbox to tailor-make in WP 2, apply and potentially adjust in WP3.*

Leverable
Managed toolbox for CPP

WP 2 – Assessment of CPP practice

*This WP together with WP3 is the core of the project where WP2 will lay the foundations of WP3. First, the project participants will familiarise with themselves, the main concepts and tools will be introduced and discussed at a collective level (in a joint workshop) and at the individual level (via personalised coaching sessions). Then, in a true spirit of co-creation, individual assessments of current public procurement activities (consisting of identification of needs, creation of tenders, procurements, evaluations, repeated procurement rounds, etc.) will be jointly assessed by the research team and the public authorities and tailor-made individual action plans will be designed. The topics will be addressed by the project team jointly - where possible - and individually between the research institute and each public authority - where necessary. Guidance and discussions in this phase will be provided by the research team and standards experts (e.g. Raul Carlsson from RISE Swerea) if required, with particular focus on advising authorities on how to select the most preferable* tender criteria.*

*“Preferable” is a multifaceted concept that, in addition to the degree of circularity, also includes environmental, financial, organisational aspects and so forth.*

Leverable
Individual and collective SWOT analyses on CE public procurement deriving from the proposed project methodology.
2 collective workshops,
4-6 individual coaching sessions with each public authority.

WP 3 – Trial of CPP

*This WP constitutes the test-and-validation phase of the project. At this point, the participating public authorities will use the results from WP2 on their individual ongoing public procurement activities (identification of needs, creation of tenders, procurements, evaluations, repeated procurement rounds, etc.) to test the results’ practical usefulness, identify unforeseen problems and adjust accordingly so that the project goal (i.e. to enable public authorities to use circular public procurement to proactively drive the shift to a CE) is reached.*
Principles, layout and structure of ISO 20400 will be used, with emphasis on circular procurement and continuous improvement, including the systematic increase in circularity, for each round of procurement. Knowledge and tools developed at RISE Viktoria - Sustainable Business Application Area (and elsewhere) from previous research, such as a value-based circularity metric, the characteristics of truly circular business models, the long-term business consequences of continuously higher degrees of circularity, etc. will also be utilised.

Since several different phases (activities) in a general purchasing process are affected in CPP (such as identification of needs, creation of tenders, procurements, evaluations, repeated procurement rounds, etc.) and need to be assessed and developed accordingly, the project will dig into several ongoing public procurements at different phases in the process, follow and influence the progress of each of them over the project period. The earlier the phase will take place, the higher the impact can the project have however, the higher the risk that actual impact will arrive after the project has ended. The later the phase, the less immediate impact is possible, but the higher the probability that impact will be within the project time period.

Leverabler
A set of concepts, guidelines and suggestions per phase of the purchasing process on how to apply circular purchasing including suitable adjustments on ISO 14001 environmental management systems, use of ISO 20400, and circular economy additions (e.g. a product-based circularity index) to enable proactive CPP.

WP 4 – Analysis, Dissemination and Communication
This crucial WP will focus on collating relevant results of the project in a pamphlet including Recommendations for public procurers. Also, a plan to disseminate the results will be produced and executed so that a wider range of public bodies and other stakeholders (industry, commercial actors, policymakers, etc.) will become aware of the project results and possibly influenced by them to such an extent that they will adopt them. The results will be also communicated through strategic and targeted measures to reach wider audiences for instance through newspapers, industry and professional magazines. The research team will also support the public authorities in producing their marketing material (e.g. factsheets on CE public procurement and its benefits on reaching sustainability targets).

Leverabler
Recommendations for public procurers.
Dissemination Plan.
1-2 opinion papers.
1 piece of marketing material for each public authority.

WP 5 – Project Management
This WP will ensure that all the activities in the project will be planned and carried out in an efficient and effective manner in consideration of the time and budget constraints. Also, it will be ensured that all the project activities will be safely and carefully compiled and stored and that an adequate and transparent communication flow between all the parties involved (e.g. research team, public authorities, reference group and interested parties) will be maintained.

Leverabler
Timely production of the required project documentation.

Budget
SEK 1.25 M

3.2 Spridning av resultat
The deliverables from WP 4 will consist of three types of information material:
1. The “Recommendations for public procurers” will provide detailed information on setup, organisation, process and set of criteria for CPP.
   a. This will be spread to public procurers through SEKOM, RISE and potentially SKL Kommentus, SOI and Upphandlingsmyndigheten.
2. 1-2 opinion paper(s) will be disseminated to raise awareness among the general public and politicians.
3. The marketing material for public authorities will provide arguments for why the public sector should consider CPP and how it can benefit not only their organisations, supply chain and the society at both local and National level, but also the realisation of environmental sustainability.
a. This will be spread to municipalities through SEKOM, RISE and potentially SKL Kommentus, SOI and Upphandlingsmyndighet.

### 3.3 Jämställdhetsintegrering

The project has been designed in such a way to include the findings described in section 1.4. Hence women from large organisations (RISE, Helsingborg, Jönköping and Luleå) in leading positions in their daily job and in the planned project activities will be actively involved. Also, it is foreseen that such a configuration, which is made of a diverse background and nationalities (Swedish and Italian), will secure both the effective implementation of the activities, any development of the project results within the individual organisations of the project consortium and the diffusion of outcomes to a wider audience.

Also, the research team will ensure that all project outcomes, in terms of outputs, reports, analyses, guidelines, workshops, etc. consider the perspective of women and men. This will be achieved by taking into consideration at least a 40/60 ratio between women and men in interviews, workshops and other activities whenever possible. This is likely to be easily achieved since the project female actors outnumber the male actors. The research team will also try to reach a gender and diversity studies professional for further expertise and support in such an important organisational matter.

### 4 Budget

The hourly rate and OH at RISE Viktoria is according to the what has been agreed between Vinnova and RISE.

<table>
<thead>
<tr>
<th></th>
<th>RISE - Viktoria</th>
<th>Konsortiet</th>
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<td><strong>Budget</strong></td>
<td>Tidsuppskattning</td>
<td>Tid m. resekostn</td>
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<tr>
<td><strong>WP1</strong></td>
<td>90</td>
<td>87 WP1</td>
</tr>
<tr>
<td><strong>WP2</strong></td>
<td>224</td>
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</tr>
<tr>
<td><strong>WP3</strong></td>
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<td><strong>WP5 (PI)</strong></td>
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<td><strong>Total</strong></td>
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