

# ***STRATEGIC USE OF SUSTAINABLE PUBLIC PROCUREMENT IN THE BUS SECTOR: CHALLENGES AND OPPORTUNITIES***

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## **Overview**

Transport systems today are fraught with many problems and cannot be considered sustainable. Transport is dependent on fossil fuels and a large contributor to greenhouse gas emissions while other problems include local pollution, noise, accidents and resource depletion. Although new technologies and renewable fuels have existed for some time, and are starting to emerge, we are still far from a large-scale introduction. One crucial question is thus how new technology and alternative fuels in the transport sector can develop and diffuse. Cities and regions can be important actors in a transition to low carbon transport systems (Banister 2011), they are for example important providers of public transport with large bus fleets. A shift would lead to both direct impacts such as reducing GHG emissions as well as indirect impacts by acting as testbeds or niche markets for new fuels and technologies. Since public transport is often carried on by private transport operators on public tenders, sustainable public procurement (SPP) is the main tool that cities and regions can use in order to promote change. Much of prior research of SPP aims to identify factors fostering or hindering sustainable choices (Bratt et al. 2013; Grandia et al. 2013; Guenther et al. 2013; Günther & Scheibe 2006; Marron 2013; von Oelreich & Philip 2013; Preuss 2007). However, there is a lack of in-depth studies of how specific regions and cities use SPP in a strategic way to promote environmental goals, and what challenges this entails. The aim of this study was to compare and analyze how two Swedish regions use public procurement to promote the diffusion of renewable fuels in their public bus transport systems. The questions we addressed were what the strategic motivations are for using public procurement to stimulate renewable fuels and what the practical challenges have been in relation to requirements, costs, size and knowledge. Skåne and Jämtland have been chosen as comparative cases because of their differences, both geographically and in choice of strategy in public transport.

## **Methods**

The method used for the study was a comparative qualitative case study analysis, based on existing policy documents and semi-structured interviews in the two regions. The interviewees were politicians, representatives of private transport operators and civil servants. We used an interview guide asking about the interviewee's background and role in the public procurement process, the public transport policy, the strategic role of public procurement, the requirements when procuring public transport, the public procurement organization, collaborations, barriers and drivers for stimulating renewable fuels in the bus sector. The interviews were recorded and transcribed. The interviews were analyzed using meaning condensation and analyzed in relation to how public procurement was perceived and used as a tool for greening the bus fleet.

## **Results**

The results are based on analysis of the use of SPP in the public transport sector in the two regions Skåne and Jämtland. The results both confirm previous research of factors fostering or hindering effective SPP as well as give an in-depth understanding of what differences there are in strategies and what effect it has on requirements, costs, cooperation, knowledge and outcome. The comparison of cases makes it clear that there have been different priorities guiding the use of public procurement for the introduction of renewable fuels in public transport. In Skåne, procurement has been used strategically as a part of a wider goal to promote the development of a regional biogas market and to push market actors to be in the frontier of the development of renewable fuels, in a way that resembles innovation procurement. In Jämtland, procurement has been used more instrumentally as a tool to replace fossil fuels and decrease emissions. This promotes two different roles for public transport in the regions, in Skåne, there has been broad political support for the strategy and there is a strong perception among key civil servants that the public sector has to be in the forefront and lead the development if they have the power to do so. In Jämtland, on the other hand, there is no regional strategy to support new fuels or push the development of technology, and according to the civil servants interviewed this is not something the region can or should do. The size was also seen to influence the choice of strategy. In Skåne politicians and civil servants express a confidence that they have quite large possibilities to affect market development, while this is not the case in Jämtland.

In the analysis of the cases we have also found that two types of requirements have been used for introducing renewable fuels: functional requirements and specific requirements. In Skåne specific requirements on the use of gas buses were employed in order to promote biogas and the development of a biogas market, and it can be argued that they filled their purpose since there has been a clear development towards gas buses and biogas in

Skåne. However, in the latest procurement there has been a shift towards functional requirements in the effort to diversify the renewable fuel portfolio and get away from the sole focus on biogas, which is increasingly seen as more of a risk than a benefit. In Jämtland, functional requirements have been used from the start stipulating that some type of renewable fuels should be used without specifying which one. The representative of the public transport authority in Jämtland argues in favour of functional requirements and against too many detailed requirements since this tends to drive up costs. This is also agreed upon by the private transport operators in Skåne as well as in Jämtland. Cost was also the factor in the literature that was identified as the most significant hurdle to SPP. A more innovative strategy, with specific requirements, needs a larger political acceptance of increased costs, which was seen in Skåne, compared to when SPP is used as an instrument to decrease the use of fossil fuels with the help of functional requirements, as in Jämtland. The need for knowledge is also perceived differently in the two cases and is partly connected to the two different ways to make requirements. In Jämtland, where the approach has been to put functional demands, the responsibility of choosing the right technology and fuel to reach the environmental targets is shifted to the bus operators, which requires less knowledge of the market and different fuels with the procurers. In Skåne, on the other hand, the biogas strategy and the specific requirements on biogas in procurement have demanded a high level of knowledge and information gathering.

## Conclusions

By comparing the two in-depth studies with each other and with previous literature the main conclusion that can be drawn about the challenges and opportunities with SPP, is that every case is unique and complex, what is “right” in one region might not be the answer in another region. Our study identified two different strategic approaches to SPP which gave rise to different opportunities and challenges. In the case when procurement is used in a strategic way to create a local market for biofuels, it required greater demands on political backing, information and knowledge and acceptance of increased costs. However, specific requirements, or very detailed functional requirements, might be necessary if the public wants to push for a specific renewable fuel or new technology. In the other case, procurement is used instrumentally to increase the share of biofuels in a cost-effective way which provides scope for more flexibility, reduces the demands on the procurers and leaves the choice of technology to the operators. However, the lower costs and less responsibility for the procurers can be seen to go hand-in-hand with a less far-reaching use of SPP. These findings add to previous research by an in-depth and qualitative analysis of how the factors play out in specific cases. This highlights the importance of context when assessing sustainable procurement schemes and the influence of factors on success or failure. Our study also opened for new research questions and a need for further case studies of SPP in different contexts. To complement the findings of this study, a systematic study of all Swedish regions just started. With the aim to investigate the importance of context and choice of approach as well as the need for complementing policies to support the transition towards new fuels and technologies.

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