Cross-sectoral policymaking, a way to achieve an energy efficient transport system? The case of Stockholm and Gothenburg

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Abstract

Public policy and more specifically cross-sectoral policymaking are considered necessary tools for the transition to an energy-efficient, non-fossil transport system. Thus, the organizational structure and working practices of involved actors are of relevance to the policy content and how it is implemented. The aim of this paper is to analyze the presence of and work with cross-sectoral regional policymaking to address its implications for the development of a more energy-efficient transport system. In Sweden growing transport volumes have made transport increasingly regional, especially in the regions containing a larger urban area. This paper, therefore, builds upon two qualitative case studies of the largest urban regions in Sweden: Stockholm and Gothenburg. Different administrative borders, organizational structures, traditions and approaches to cross-sectoral collaborations characterize the cases. The results show that cross-sectoral collaboration does not necessarily lead to cross-sectoral policymaking, which will not necessarily result in a more energy-efficient transport system. This is due to the level within which the collaboration takes place (if it is on the goal or action level), the territoriality of the collaboration, sectoral power structures and the participants' spatial embeddedness. To be successful in changing policymaking for transport towards energy efficiency, it is important to consider these aspects and take action to solve the potential problems before a cross-sectoral collaboration process is formed. This leads to transport policy based on a conventional approach to planning and limits its energy objectives.

Introduction

The development of a more energy-efficient, fossil fuel-independent transport system has multiple interdependent aspects, from technological innovations and their implementation, to behavioural changes among people and the processes for policymaking that make up the framework within which innovations and behaviour are managed (Goldman & Gorham 2006; Hickman, Hall, & Banister 2013; McCormick, Bomb, & Deurwaarder 2012). The issue of energy efficiency and replacement of fossil energy clearly connects the transport system and the energy system technologically. This connection implies that there is also a need for coordination, collaboration and integration between these sectors in policymaking (Hull 2011; Olsson, Hjalmarsson, Wikström, & Larsson 2015). In the public administration and sustainable transport literature, it is argued that complex issues and issues with connections between several policy sectors, such as energy efficient transport, need to be managed in joint processes where different perspectives and interests can be discussed and new solutions may be possible to develop (Banister 2008; Christensen, Laegreid, & Rykkja 2013; Stead, Geerlings, & Meijers 2004; Verhoest & Lagreid 2010). These sorts of cross-sectoral collaborations may also keep different policies from being contradictory and aiming for opposite goals. Hence, probable goal conflicts have been jointly discussed and thereby it has been possible to solve them during the policymaking processes (Geerlings, Shiftan, & Stead 2012; Underdal 1980).

Transportation accounts for 20 % of the total global energy usage and fossil energy carriers dominate the system (IEA, 2014). In contrast to the other heavy energy-using sectors, the housing and industry sectors, the transport sector has not been able to turn the development of increasing energy and fossil fuel use around. The transport sector therefore accounts for an increasing share of total fossil energy use (IEA 2014). This is true on both a global and national level, even in nations that are known for their work on energy efficiency and decreasing dependence on fossil fuels, such as Sweden (Jordan & Lenschow 2010; SEA 2016). This paper is based on case studies of two Swedish urban regions and how energy efficiency and fossil fuels are managed in transport policymaking.

To integrate energy efficiency objectives in transport policy is not obvious in relation to traditional logics and values that form transport planning. Transport planning is traditionally connected to development of labour markets and industrial establishments rather than energy issues (Banister 2008; Button 2010; Nunen, Huijbregts, & Rietveld 2011). However, several authors have argued that for a change towards a sustainable society and to be able to solve climate problems, there is a need to put energy in focus for transport development (Hickman et al. 2013; Hull 2011). This shift in focus is described by transport researchers as a shift in approach to transport planning, from a conventional approach to a sustainable mobility approach (Banister 2008; Isaksson, Antonson, & Eriksson 2017). The conventional approach is based on a predict-and-provide perspective on transport development; it focuses on traffic, understood as the private car; builds economic evaluations which connect transport development to economic development; and views travel primarily as a derived demand. The sustainable mobility approach is primarily derived from the work of David Banister (2008) and his sustainable mobility paradigm. It means a shift in major focus from private cars to other modes of transport such as public transport, walking and cycling, a reduced need to travel, reduced trip lengths and a greater efficiency in the entire transport system. It also means that it is important to build denser to make public transport, walking and cycling more attractive transport modes in contrast to the private car (Banister 2008; Isaksson et al. 2017; Næss, Hansson, Richardson, & Tennøy 2013). One way for policymakers to achieve this shift in transport planning, is to work for more coordinated and integrated policies in cross-sectoral collaborations consisting of several actors (Banister 2008; Hull, 2011; Stead et al. 2004).

Cities and urban areas that aim for sustainability, focus their attention on developing innovative solutions to create an energy-efficient, non-fossil transport system. Transport on a day-to-day basis is often regionally situated with an urban centre and commuting from other nodes within the region (Storbjörk, Lähteenmäki-Smith, & Hilding-Rydevik 2009). Urban areas are equipped with characteristics that make them possible places for old and new transport solutions that require a dense population for them to work. Stockholm and Gothenburg are Sweden's two largest urban areas, both with energy efficiency and decreasing fossil fuel use as objectives for their development. Transportation is a central issue for both urban areas and they both work to solve issues of congestion, fossil fuel use and planning.

Since cross-sectoral collaborations are considered central to the development of a more energy-efficient and fossil fuel-free transport system, a study with focus on cross-sectoral collaborations is relevant for the discussion of possibilities to change the focus of transport policymaking towards energy efficiency. The aim of this paper is, therefore, to analyze the presence of and the work with cross-sectoral regional collaborations to address their implications for policymaking to achieve a more energy-efficient transport system. This aim is specified in three research questions:

- On which levels of policymaking (goal or action) do cross-sectoral collaborations take place and how does that influence urban transport development?
- How does the territoriality of the cross-sectoral collaborations and the spatial embeddedness of its members influence policymaking?
- What do the answers to the two above questions mean for which transport planning approach (conventional or sustainable) is applied in Stockholm and Gothenburg policymaking?

In this paper these issues are studied in two different urban areas where the organizational structure and tradition of cross-sectoral collaborations differ: the Stockholm and Gothenburg regions. To discuss the probable consequences for transport system development I divide the transport policy processes into goal and action levels, to put focus on which decisions work as guidelines and which ones actually govern. I also consider on which of these levels cross-sectoral collaboration are current. Transport policy covers several different issues and therefore I will concentrate the analysis and discussion to general transport policymaking and the issues of transport infrastructure and public transport. These two issues are of major relevance for the long-term development of the urban area and, public transport, it is considered the core of the urban transport system in both Gothenburg and Stockholm.

Theory

This paper draws upon a study of policymaking in two urban areas with focus on energy-efficient transport development and cross-sectoral collaboration. I consider policy in a wide perspective, not as a single decision or document, but as a long-term process that constitutes several programs, multiplicity of actors, discussions and documents (Hill 2005; Sabatier 2007). The focus in this paper is transport policymaking in the urban regions Gothenburg and Stockholm, including the issues of infrastructure and public transport. These issues are part of the same policy sector, but in practice are often divided into completely separate processes. This is something that has implications for the possibilities to integrate energy efficiency in transport policy.

Cross-sectoral collaborations in policymaking are often studied within the framework of policy integration (Hull 2008; Stead et al. 2004; Underdal 1980) or policy coordination (Bouckaert, Peters, & Verhoest 2010; Verhoest & Lagreid 2010). Within the field of policy integration, Briassoulis (2004) provides a framework for understanding the relationships between two or more policy sectors. She emphasises the relationships between the different parts of the policy processes: the policy object, the goals and objectives, the actors and actor networks,

the procedures and the instruments (Briassoulis 2004). Important for my analysis is a distinction on which levels and which authority certain policy decisions have. I therefore use her relationship approach to discuss the relation between different levels of policymaking to put focus on which processes lead to goals and which to actions. I use the terms 'goal level' and 'action level' to distinguish between policy decisions that serve as guides for development of urban transport and those policy decisions that are implemented and have authority to rule the actual development of urban transport.

Goal level policy and action level policy are not necessarily in a hierarchical relationship even if they both consider the same landscape. The actors participating in the policy decisions might be the same on both levels, but it does not mean that the decisions will be the same or even point in the same direction. In this paper I deal with this by following the decisions taken and then interviewing the involved stakeholders to get a sense of the situation and what considerations different actions are based on. The levels of policymaking are useful for the understanding of how cross-sectoral collaborations influence implementation and development.

To put focus on the relevance for policymaking that there often is a divergence between administrative borders and the geographical transport system as well as a difference between different levels of policymaking and the geographical transport system, in this paper I use a few concepts from human geography: transport landscape, territoriality, and spatial embeddedness (Bridge, Bouzarovski, Bradshaw, & Eyre 2013). The concept of transport landscape describes the physical infrastructure with a certain characteristic, as in the cases described here, urban transport infrastructure characterized by congestion, well-developed public transport and commuting. The concept of territoriality describes the geographical area over which a certain political structure has jurisdiction. It thus describes the geography of administrative borders, which are not always the same as the transport landscape. The concept of spatial embeddedness emphasizes that a certain place has certain economic, material and cultural specifics that are inherent to its location. For example, a city has different economic, material and cultural aspects than a rural area (Bridge et al., 2013). The urban transport landscape of Gothenburg and Stockholm defines the transport system studied in this paper. To discuss policymaking for these urban systems the public organizations with the same or different territoriality than the transport landscape, but with jurisdiction over the landscape in question, are in focus for policymaking in this paper.

Data and methods

This paper builds on two qualitative case studies of two different regions in Sweden concerning transport policymaking for sustainability and energy efficiency, with specific focus on cross-sectoral collaborations. The case studies Stockholm and Gothenburg both represent cases of policymaking processes of transport development within an urban transport landscape. They differ concerning traditions and structures of policymaking in the context of collaboration, which makes them interesting cases for a joint analysis of cross-sectoral collaboration (Flyvbjerg 2001). In Gothenburg, cross-sectoral collaborations are current in formal structures, while in Stockholm there are temporary structures for such processes.

The case studies consist of interviews and analysis of policy documents and official minutes from meetings. I collected the material for the Stockholm case study during 2011 and for the Gothenburg case study, which was part of a larger case study of the Västra Götaland region, in 2012–2013. In total the case studies are based on 26 interviews with regional and local politicians, officials serving national, regional and local authorities and with a few officials at private companies involved in regional transport policymaking. The interviews were semi-structured and based on an interview guide focusing on collaborations within and between organisations in the policymaking process (Kvale & Brinkmann 2009). The interviews were performed by the author, lasted for about 30–90 minutes and were all transcribed. The policy documents consider transport development issues both entirely and partly. In this paper, the Regional Development Plan, the transport infrastructure plan and public transport plans in Stockholm, and the structural picture of Gothenburg land-use development, the transport infrastructure plan of Västra Götaland and public transport plans are specifically in focus for the analysis. Minutes are primarily used concerning the political committee that manages the transport infrastructure plan in Västra Götaland, as a complement to the interview statements about the working process within the committee. The interviews and documents are referred to in the results section in the text, but no quotes are used.

I have analysed both interviews and documents with focus on their content (Kvale & Brinkmann 2009). Taken together the content of interviews and documents make up an interdependent stock of arguments, intentions and descriptions, which represents the story of policymaking in Stockholm and Gothenburg (George & Bennett 2005). In this paper these two different stories are analysed both separately, to pick out the specific details, and jointly, to compare the policymaking processes in both places to be able to analyse cross-sectoral collaborations in different settings and from different perspectives.

The Stockholm case

A BACKGROUND TO TRANSPORT POLICYMAKING IN STOCKHOLM

The future transport development in the Stockholm urban region is outlined in the Regional Development Plan. It is a guiding plan for both land use and economic development in the Stockholm urban region, covering the coming ten years. The process for the Regional Development Plan is a cross-sectoral, cross-level process that goes on for a couple of years and invites anyone whom the plan might concern (Magnusson 2013; ORP 2010). Examples of participating actors are the 26 municipalities, the County Administrative Board, the public transport company, the energy companies and other private and public organizations as well as individuals. The organization responsible for producing the plan and coordinating the cross-sectoral collaboration is the planning division within the Stockholm County Council. The idea is that this collaborative work will include several different perspectives in order to discuss different standpoints in the policymaking process and be able to incorporate solutions and new ideas in the final plan (ORP 2010; SC2). That the Regional Development Plan is guid-

ing means that the County Council does not have any authority to implement the futures outlined in the plan (Andersson, Ek, & Molina, 2008). Instead, it is up to other actors, such as the municipalities, County Administrative Board, public transport company, etc. to implement the aims of the Plan within their jurisdictions (ORP 2010). The last Regional Development Plan for Stockholm was published in 2010, covering the period until 2020 (ORP 2010).

Two specific transport development issues that are outlined in the plan are regional transport infrastructure and public transport (ORP 2010). In the case of regional transport infrastructure it is the regionally situated national authority, the County Administrative Board, which is responsible for the planning. The planning process is a negotiation between the Board and the municipalities (SCAB 2010; SC2; SC7). This results in a plan for the coming ten years about the distribution of resources among different transport infrastructure projects (SCAB 2010). In the case of public transport it is the public transport company, owned by the County Council, which holds the planning responsibility. The ownership means that goals decided by the County Council almost always are also evident for the public transport company (SPTC 2011ab; SCC 2011).

RESULTS AND DISCUSSION OF THE STOCKHOLM CASE

Goal level policymaking

The Regional Development Plan mainly contains a discussion of and solutions to how the region will manage a supposed major increase in its population and develop accessibility. At the same time one major goal is to become a resource-efficient region by 2030 (ORP 2010). The objective is thus to have a good level of mobility without increasing climate impact or energy use. The solutions presented in the plan to solve this are development of the public transport system, measures to stimulate cycling and walking, use of biofuels instead of fossil fuels and increased use of electric vehicles. However, on the other hand, the road infrastructure is planned to expand by two new large motorways and smaller complementary roads to increase mobility and regional enlargement (ORP 2010). The wide scope, which is shown in this short summary of the Plan content, shows that almost all the different interests involved in the cross-sectoral collaboration are covered and might indicate that goal conflicts have not been dealt with. Instead, everything is included.

As stated in the background, the Regional Development Plan is a guiding document, but the collaborative process behind it is appreciated among the participants. There is an opinion among several participating actors that the discussions are influential and important for them (Magnusson 2013; SC2; SC5). However, there are also those who consider the Regional Development Plan not very useful in day-to-day work and only something that actors use when it benefits them and tend to forget when it does not (SC2; SC5). The goal-level policymaking of the Regional Development Plan has thus unsettled significance for the governing decisions. It indicates that dealing with the entire transport landscape and all aspects of it, within the same process and plan, is not necessarily a success that will change transport development. What is important is how the results of the collaborative process are transferred to action-level policymaking, in this case transport infrastructure planning and public transport planning.

Action-level policymaking

Action-level policymaking does not continue the cross-sectoral collaboration that formed the Regional Development Plan. Instead, the responsibility for different aspects of the entire transport landscape is divided among different organizations and, within them, appointed to certain departments (SC2).

In the case of regional transport infrastructure planning it is only the aspect of railway and road infrastructure development that is in focus. Both the final plan and respondents clearly stated that energy issues, for example increasing CO_2 emissions from highway projects, what fuels the vehicles may use or a valuation of different transport infrastructures based on their energy efficiency are not considered in this planning process (SCAB 2010; SC4; SC5; SC7). The result is a transport infrastructure plan without any reflections on energy or fossil use; these are in fact issues argued to be better managed within other policy frameworks. This shows that even if the infrastructure plan is a negotiation with other actors, primarily the municipalities, it does not consider other aspects of transport infrastructure as is done in the Regional Development Plan or within a sustainable mobility approach to transport planning. However, the broadness of the Regional Development Plan gives room for this sort of strict sectoral policymaking. The involvement of municipalities in this process has not changed that, probably because their focus is on their population's mobility possibilities in relation to new regional infrastructure. Their spatial embeddedness (Bridge et al., 2013) and traditional objectives of economic development and the strict sectoral process of infrastructure planning thus seem to be two major reasons why a more conventional approach to transport planning is practiced.

In the case of public transport the company's responsibility is also the entire transport landscape, but one sectoral aspect. Due to an expected increasing population in the coming years the company's objectives are primarily to be able to meet the increasing demand for public transport services. It has no goal of influencing people to change from other means of transport to public transport and thereby increase the public transport share of total travelling (SPTC 2010; 2011a). Energy objectives are, however, integrated in the sectoral planning by the focus on non-fossil fuel alternatives and biogas for buses. The public transport company has a goal to increase renewable fuel use in general and biogas in particular (SPTC 2011b; SCC 2012). The company has also agreed to follow the County Council's decision to become fossil fuel free by 2025 (SCC 2011; SPTC 2011b). In the case of biogas, the municipalities and their wastewater companies that produce biogas have increased the supply considerably, most of which is reserved for the public transport buses (SC1; SC3). The problem is that the public transport company has not increased the amount of biogas buses following the increasing supply, for which reason much of the biogas produced in Stockholm is not used for transportation, but in combined heat and power plants (SC1; SC3; SC6). This implies that there is a lack of coordination between the producers and the public transport company, which shows that the public transport policymaking is a sectoral process with limited possibility to manage

Table 1. Stockholm transport policymaking.

	Goal-level policymaking	Action level: transport infrastructure	Action level: public transport
Policy goals	To maintain and develop mobility without increasing energy use	To maintain and develop mobility	To respond to an increasing demand for public transport services due to an increasing population To stop the use of fossil fuels in 2025
Policy actors	Public and private actors from several different policy sectors within the region	The County Administrative Board, municipalities	The County Council (owner of the public transport company) and the public transport company
Policy structures and procedures	Cross-sectoral	Sectoral	Sectoral
Policy instruments	Guiding	Financial	Financial

the integration of other objectives. The results from goal- and action-level policymaking are summarized in table 1.

Summary: cross-sectoral collaboration and transport development in Stockholm

To conclude, in the Stockholm case the cross-sectoral collaboration for goal-level policymaking is not adopted at the action level. There policymaking is instead divided among different organizations with different jurisdictions over certain aspects of the transport system. Considering the energy objectives of the Regional Development Plan it seems like they are lost at the action level. The reasons for that could be traced to the broadness of the Plan and the failure to deal with goal conflicts and in the sectoral processes of both regional infrastructure planning and public transport policy. These results both question the meaning of the cross-sectoral collaboration at the goal level and the lack of it at the action level. Would energy efficient transport development benefit from more or less cross-sectoral collaboration?

The Gothenburg case

A BACKGROUND TO TRANSPORT POLICYMAKING IN GOTHENBURG

In Gothenburg the goal-level policymaking is developed within Gothenburg Region Association of Local Authorities (GRALA), consisting of the 13 municipalities that cover the urban transport landscape. Action-level policymaking such as transport infrastructure and public transport, on the other hand, is developed by an organization with a much larger territoriality than the Gothenburg transport landscape, i.e., the Region Västra Götaland (RVG). However, Gothenburg is the self-evident center of the Västra Götaland region, as it is the second largest city in Sweden and has a large labour market, Scandinavia's largest seaport and an international airport.

GRALA serves as a collaboration platform for the municipalities on a number of issues, of which sustainable development is one. Within the framework of sustainable development several different processes aiming for specific objectives have been performed. For the matter of transport development the agreement of the long-term spatial development for the urban region and the so-called K2020 process for public transport long-term development are important (GRALA 2008; 2009). The policymaking processes included several working groups mainly involving representatives of the municipalities, the RVG and the public transport company, but also a few representatives from other regional and national organizations. Both policies were then established by GRALA aiming to inspire and guide the actors in their planning (GRALA 2008; 2009).

Regional transport infrastructure and public transport decisions are however not taken by the GRALA, but by the RVG, at the Västra Götaland level (RVG 2010; Västtrafik 2010a). The RVG is a regional parliamentary authority with responsibility for economic and transport development and is the owner of the regional public transport company. The final decisions concerning these issues are taken by the RVG, but the opinions of the municipalities in the region are considered important (GC1-16; SDDC 2010). The RVG therefore has a formal structure for municipal involvement. In the case of transport infrastructure there is a political advisory committee of municipal representatives and RVG representatives from different sectoral committees (SDDC Notes 2011-2013). It is called the Sustainable Development Drafting Committee (SDDC). The municipal representatives are appointed by the four sub-regions, of which GRALA is the sub-region representing Gothenburg. Each sub-region has four representatives in the SDDC (SDDC Instructions 2010). The SDDC does not formally take any decisions, just gives advice to the RVG on how to decide (SDDC Instructions 2010), but in practice the RVG always follows the advice from SDDC (GC1-16; SDDC Notes 2011–2013). Thus, informally SDDC is the place where decisions are established. The SDDC is supposed to be a cross-sectoral collaboration committee with sustainable development as its main aim (SDDC Instructions 2010).

Within the RVG it is the Regional Development Committee and its administration that run the regional transport planning and allocate the financial resources for it (RVG 2010). The representatives of the Regional Development Committee are therefore active in the SDDC discussions (GC 10-11). The Environmental Committee, which has the task to work for energy efficiency and alternative fuels, also has representatives on the SDDC (SDDC Instructions 2010).

Public transport is not an issue for the SDDC, since the RVG Public Transport Committee does not have any representatives

there (GC2; GC15). Instead, public transport has its own policymaking process, similar to the SDDC, to which the municipalities and their sub-regions, as GRALA, are invited to take part in negotiations with the RVG committee and the public transport company. The public transport company is owned by the RVG and managed through the committee (GC15; Västtrafik 2010a).

RESULTS AND DISCUSSION OF THE GOTHENBURG CASE

Goal-level policymaking

In Gothenburg the goal-level policymaking is carried out within separate policy processes for transport infrastructure and for public transport, but within the same framework of sustainability (GRALA 2008; 2009). Even if several actors are included, the processes seem to be based on cross-level collaborations within one profession rather than cross-sectoral collaborations (Polk, 2010). However, the focus on sustainability for the goal-level policy processes seems to have put focus on issues of energy efficiency. Examples of that are a major railway focus, dense building, emphasis on walking and cycling as preferable transport modes (GRALA 2008) and the goal of increasing the public transport share of total travel to 40 % by 2025 (GRALA 2009). The joint framework of sustainability and the joint responsibility for the two processes of GRALA may explain why the two goal-level policymaking processes are coordinated and express the same objectives. The focus on the same urban transport landscape and the similar spatial embeddedness (Bridge et al., 2013) among the participating municipalities may also be one reason why the goal-level policies are coordinated and point towards a more sustainable transport planning approach.

Action-level policymaking

The action-level policymaking for both transport infrastructure and public transport considers a larger and more diversified transport landscape than Gothenburg, since it aims for the entire Västra Götaland region (RVG 2010; Västtrafik 2010; 2005). The RVG's territoriality thus not only considers the urban transport landscape of Gothenburg, but also three other more rural sub-regions. In the case of both transport infrastructure and public transport the main aim is increased accessibility and mobility within the entire Västra Götaland region to make the region more connected in order to create larger labour regions (GC 1–16; RVG 2010; Västtrafik 2010). In the case of transport infrastructure the SDDC is supposed to be a cross-sectoral and cross-level collaboration platform (SDDC Instructions 2010). However, except for the order of priority, which puts railway infrastructure on top, energy objectives are not discussed within the SDDC in relation to transport infrastructure planning (GC 1; 2: 9; 10; 11; SDDC Notes 2011–2013). Instead transport planning takes a more conventional approach, with economic and labour market development as the main aim of transport.

Three major reasons for this are current. First, in the founding guidelines for the committee the prescription is that the RVG sectoral committees should not represent their sectoral interests in the committee, but rather a common "regional" interest (SDDC Instructions 2010). Even if one of the ideas with the committee was to create cross-sectoral discussions (GC 1–16; SDDC Instructions 2010), they seem thus to be formally unwanted. Second, the Regional Development Committee holds the entire budget for the transport infrastructure investments and thus other resources in the form of knowledge, administrators and experience (GC 11; 13; RVG 2010). This makes the Regional Development committee and its administration "own" the question of transport infrastructure, since they have the power to decide and the expertise to manage the issue. The other sectoral committees in the SDDC such as the Environmental Committee thus have limited possibility to influence the SDDC discussions (GC 2; 4-6; 9-11). Within the Regional Development department energy issues have a low priority, rather transport is connected to mobility and accessibility, important for the labour market and industry development (GC 2; 4; 6; 10; 13). This makes the conventional approach to transport planning central to that committee and also to its actions in the SDDC. Third, the influence and participation of the municipalities in the SDDC is considered one of the most important issues for the committee, since the RVG legitimacy builds upon the municipal collaborations (GC 1–7; 9–16; RVG 2005). Thus, the municipalities are supposed to have much influence in the SDDC discussions. The character of the transport landscape matters for the transport infrastructure planning since municipalities situated in different transport landscapes have different spatial embeddedness (Bridge et al., 2013). Economic, material and cultural aspects are embedded in the spatiality of a certain municipality, whether it has urban, or rural characteristics, or if it is dependent on railway or highway commuting, etc. (GC 3; 7; 8; 12) This makes the municipal opinions of transport infrastructure development differ according to this spatial embeddedness; transport is only an issue of mobility and accessibility for the sub-regions and for those outside Gothenburg an issue of being an attractive place to live and/or work in (GC1-16). The conventional approach to transport planning is thus in focus for most municipalities.

According to Gothenburg representatives, having the same number of municipal representatives for each sub-region is part of this problem (GC8). Gothenburg has four and the rest have 12 representatives combined, even if this does not reflect the differences in population in the sub-regions (Gothenburg has half of the total population). This leads the SDDC to focus most on solving transport problems in the rural parts of the region, instead of urban transport problems, evident primarily for Gothenburg (GC6; 7; 8). Walking, cycling and public transport as modes of transport are the interests of Gothenburg, but for the other sub-regions regional connections with cities and nodes inside or outside the municipality are the focus (GC 3; 6; 7; 12). The territoriality (Bridge et al., 2013) of the cross-sectoral collaboration in the SDDC that covers the entire Västra Götaland region, thus makes the urban transport issues and more sustainable approaches to transport planning be of minor importance to the discussions.

The case of public transport shows a cross-level sectoral negotiation process between the RVG Committee for public transport, the public transport company and the four different sub-regions (GC 15). It is held separately from the SDDC structure and transport infrastructure planning. The major reason given for this division is that public transport needed to be a major focus for policymaking, and politicians and officials feared that it would be marginalized if it was included in the SDDC (GC 1; 2; 14–16). Hence this division shows a sectorisation of different transport system parts covering the same territory. This might result in two parallel processes resulting

in contradictory policies. By the time of the Gothenburg case study, however, this potential problem was solved informally by a politician being part of the presidium of the SDDC and also the chairman of the public transport company (GC 1; 14–16).

The distribution of public transport throughout the region is based on a principle of nodes and major lines with fast and comfortable transport (mostly trains) that connect the nodes. The nodes are primarily cities and towns, where the local public transport should be well developed and well connected to the regional public transport network. The aim is to increase the public transport share of total travel in the entire region by making it more attractive and fast to use public transport (Västtrafik, 2010a). To save resources, bus lines with few passengers are canceled, both in Gothenburg and in other parts of Västra Götaland. However, the assessment of what "few passengers" means differs between Gothenburg and rural areas; a bus in Gothenburg need more passengers on average than a rural bus to remain in traffic. This is due to social sustainable aims of public transport and that the public transport in each sub-region has its own budget and is negotiated separately (GC 8; 13; 15; Västtrafik 2010a). This shows a regional macro perspective on public transport development, which is a result of the large territoriality of the RVG. The separate negotiating processes however ensure that spatially embedded apprehensions of public transport development are also included. The results of the goal- and action-levels are summarized in Table 2.

Summary: cross-sectoral collaboration and transport development in Gothenburg

To conclude, the Gothenburg case shows separate, but well-coordinated, processes of transport policymaking at the goal level. The similar spatial embeddedness among the participants in the urban transport landscape, the common framework of sustainability and one organization as common coordinator, may be the reason. The action-level transport infrastructure policymaking shows a formally cross-sectoral and cross-level collaboration, the SDDC. However, even though the structure is in place, cross-sectoral issues such as energy objectives in the transport infrastructure planning have not been on the agenda. The reasons are formal rules for the collaboration, the power position of the Regional Development Committee within the RVG and the support of its objectives among the majority of the municipalities. This has led to a rather conventional approach to transport infrastructure planning. The SDDC is thus rather a platform for regional-local collaboration, not for cross-sectoral discussions. Public transport is not included in the SDDC, but instead run as a separate sectoral cross-level negotiation process. Energy efficiency and decrease of fossil fuel use are central to the planning, but not the only goal; accessibility and focus on public transport in rural areas also seems to be of major importance.

Concluding discussion

COMBINING THE TWO CASES

Bringing the analysis of the Stockholm and Gothenburg cases together it is possible to see the variation in transport policymaking processes across two urban areas in Sweden. On the goal level, collaborations that include several different actors are the way to make goal-level policy in both cases. In Stockholm the collaboration is cross-sectoral, also resulting in a cross-sectoral policy, the Regional Development Plan. In Gothenburg the collaborations are cross-level and divided between two processes, but they also result in cross-sectoral policy due to their common framework, common responsible organization and the similar spatial embeddedness among the participants. One conclusion to be drawn from this is that cross-sectoral collaboration is not necessary for cross-sectoral policymaking as long as other circumstances are favourable. The circumstances in the Gothenburg case give us a hint as to what might be needed. Another conclusion is that the goal-level policymaking in both cases, even if the processes differ, seems to aim for a more sustainable approach to transport planning.

At the action level, transport infrastructure policymaking is shown to be a sectoral process in both cases. In Stockholm, it is isolated to one department at the County Administrative Board and the sectoral objectives are supported by the municipalities, due to their spatial embeddedness, in the negotiations with the Board. The conventional approach to transport planning cor-

Table 2. Gothenburg transport policymaking.

	Goal-level policymaking	Action level: transport infrastructure	Action level: public transport
Policy goals	A long-term sustainable transport structure for Gothenburg: Stimulation of public transport use with a dense centre connected by railway to other centres	To increase accessibility and mobility within the entire Västra Götaland region	To increase the market share of public transport and double the total public transport travel Biogas for buses and priority of train development to decrease the use of fossil fuels
Policy actors	GRALA and 13 municipalities	RVG sectoral committees and 4 sub-regions (GRALA and three others)	RVG, the public transport company and the four sub-regions
Policy structures and procedures	Cross-level collaboration in two parallel processes	Cross-sectoral collaboration within the SDDC	Sectoral
Policy instruments	Guiding	Financial	Financial

relates with their sectoral objectives. In Gothenburg it is a supposedly cross-sectoral collaboration that manages the transport infrastructure policymaking. However, as shown in the analysis, formal rules, the current power structures and the municipalities' spatial embeddedness have resulted in sectoral policymaking, correlating with a conventional approach to transport planning. This means that there is more focus on accessibility, economic and labour market development than energy objectives such as decreasing use of fossil fuels and energy efficiency. One conclusion to be drawn from this is that municipalities seem to be generally more interested in transport development from a conventional approach than from a sustainable approach.

Public transport policymaking shows in both Stockholm and Gothenburg how a strict sectoral process might result in more of a cross-sectoral policy. The results imply that energy efficiency has become one of the major goals in public transport and thereby energy is considered an integrated issue of system development. One possible reason is that energy-efficient travel is a commonly used argument for increasing public transport, primarily in urban areas. The separation of transport infrastructure and public transport planning into different policy processes and to some extent different organizations is the case in both Stockholm and Gothenburg. This might result in parallel policymaking and possibly contradictory policies. If they were integrated into the same policy process the integration of energy objectives might be more possible, since they are integrated in public transport planning. However, there is also a risk that energy issues would be excluded and that such an integrated process only would focus on accessibility and economic development.

CONCLUSION

The discussion of the two cases ends in one general conclusion: that cross-sectoral collaboration does not necessarily lead to cross-sectoral policymaking, which will not necessarily result in a more energy-efficient transport system. This is due to the level within which the collaboration takes place (if it is on the goal or action level), the territoriality of the collaboration, sectoral power structures and the participants' spatial embeddedness. To be successful in changing policymaking for transport towards energy efficiency, it is important to consider these aspects and take action to solve the potential problems before a cross-sectoral collaboration process is formed. There is a call today from researchers and policymakers for more cross-sectoral collaboration and policymaking processes concerning transport system development (see e.g. Banister 2008; EC 2011; Hickman et. al 2013; Hull 2011; McCormick, Anderberg, Coenen, & Neij, 2013; Storbjörk & Isaksson, 2014). However, this study of Stockholm and Gothenburg elucidates, in line with other studies (see e.g. Isaksson, Antonson, & Eriksson, 2017; Marsden & Groer, 2016; Stead, 2016), the complexity of such calls and the need for research to understand the results of policymaking and organizational structures to be able to achieve a more energy-efficient transport system.

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