

11 The role of local governments in governing sustainable consumption and sharing cities

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1. Introduction

Municipalities are key actors in their role as planners for sustainable urban development, and also have the responsibility to transform ambitious national and global goals and visions into local practices (McCormick et al., 2013). The role of municipalities in relation to enhancing sustainable consumption patterns has been increasingly highlighted by policymakers and in research. Creating sustainable societies and shaping their consumption patterns has become an everyday activity for municipalities. This is also the case for the Nordic countries and not least for Sweden, which will be used as an example in this chapter. The Nordic countries have the ambition of becoming sustainable leaders and enabling sustainable consumption (Mont et al., 2013).

Sweden has a long tradition of public ownership and centralized technical infrastructure, along with municipal autonomy, including self-governing of a large budget, taxation-rights and a high level of authority in spatial planning; the so-called planning monopoly (Palm, 2006). Municipalities will continue to play a central role in sustainable development, but in recent decades stakeholder participation has turned into an important prerequisite for municipal activities. In order to ensure sustainable development, municipalities need to adopt working methods and approaches that include external stakeholders in their processes. Municipalities can use both traditional forms of authority and new partnerships or processes to achieve effective governance (Bulkeley and Kern, 2006).

Achieving sustainable consumption demands a reinterpretation of the role of municipalities, businesses and citizens, and generates complex challenges and institutional contradictions for governance. This leads municipalities to explore new modes of governing. Several authors have developed theories and conceptual models to substantiate governance arrangements (for example, Evans et al., 2006; Hajer, 2011; Hoppe et al., 2014).

In this chapter we will discuss the model by Bulkeley and Kern (2006) where they formulated a typology of four different modes of governing in local climate governance that is based on the type of capacity used by the municipality in its

different roles (see also Kern and Alber, 2008). These four models are: *self-governing (or governing by example)*, which relies on the organizational capacity of the municipality to manage its own operations; *governing by provision*, which is related to the municipal role as provider of different goods and services; and *governing by authority*, which concerns the ability of a municipality to make specific behaviours compulsory and impose sanctions if this is not done. Finally, the authors discuss *governing by enabling*, which refers to the municipality's capacity to persuade and encourage through the use of positive incentives such as subsidies, information campaigns or the facilitation of different types of initiatives.

The typology has been extended by Bulkeley et al. (2009) with *governing by partnership*, which we include here. Compared with governing by enabling, governing by partnership is characterized by a more equal relationship between the municipality and other actors. Development of this kind of governance structure is seen as a consequence of the increased need to mobilize resources from actors outside formal control in order to formulate and implement public policy. In this network, the government is one of several actors and has no formal steering power over the other members (Peters and Pierre, 1998; Rhodes, 1997). Public and private actions and resources are coordinated and given a common direction and meaning.

In municipalities, consumption is related to local actors by managing available resources and dealing with limitations, which municipalities govern through both policy formation and policy implementation. To deepen the understanding of how municipalities govern sustainable consumption, we also need to scrutinize the development of different functions and strategies in municipalities. What can municipalities, in practice, achieve with different governing modes and is this engagement from a municipality always beneficial for sustainable consumption? This will be discussed below.

2. Different modes of governing in relation to authority and control

Policymaking today can be characterized by a process of the opening up of government towards broader governance comprising partnerships and network-oriented decision-making in an intricate interplay between public, private and non-profit organizations. The role of the municipality changes – it becomes one actor among many. Yet municipalities need to mobilize external actors (and their resources) for the formulation and implementation of public policy (Considine, 2005; Palm and Thoresson, 2014). Municipalities still need to carry out their compulsory duties and fulfil their responsibilities for providing welfare services to their citizens. Most of the tasks of municipalities are regulated in special legislation and these are managed by formal government processes.

This traditional government approach is characterized by the formal steering chain of public organizations and top-down hierarchal decision-making by political

actors. 'Government' implies that this governing takes place within governments and their formal institutions and the state's monopoly on the use of legitimate coercion is focused on this (Boyer, 1990; Stoker, 1998). In contrast, 'governance' refers to networks that are self-organizing and not fully accountable to governmental bodies. Cooperation and coordination are key processes and legitimacy is gained through the interplay of legal interpretations, common understanding and trust (Börzel, 1998; Peters and Pierre, 2004; Rhodes, 1997; Wihlborg and Palm, 2008).

This leads to implications for how municipalities govern consumption and the outcomes that a governing mode can be expected to achieve. In this chapter we will elaborate on the four governing modes in relation to three scenarios where the policy process is characterized by greater or less government involvement.

When a process or issue is initiated within a municipality, this is characterized as governmental. The results can be defined at the beginning, all decisions are made within the municipality, the municipality is responsible for implementation and the municipality also governs the whole process.

When a process or issue is initiated in collaboration with others, this is characterized as governance. When the municipality tries to predict results, these can take the form of different scenarios and the outcome is more open and can be different from predictions made during governmental processes. Decision-making is done in networks of public-private partnerships, implementation is done in collaboration and the municipality is one partner among many.

When a process is characterized as being mainly in the private or voluntary sector (for instance, outside the public sphere), from the municipality's point of view, this means that results are uncertain and cannot be predicted by the municipality. Decision-making is in the hands of the initiator – the private or volunteer actor – and implementation is carried out by the partners involved. The role of the municipality is mainly to support or facilitate these processes.

These three characterizations of a policy process will be discussed in relation to the governing modes identified in earlier research. Then we will present experiences from Sweden where different governing modes have been applied by municipalities. We will then discuss the role of municipalities and whether the examples illustrate a governmental, governance or private/volunteer process and what implications this could have for the municipality for governing sustainable consumption.

3. Experiences from Sweden of different governance modes

We will now discuss examples from Sweden where different governing modes have been used. These illustrate how municipalities have contributed to sustainable consumption practices, and we will use these examples for an initial discussion about the suitability of these approaches.

3.1 Self-governing

Self-governing (or governing by example) is strongly connected to government policy processes and a municipality's own role as a consumer. When a public organization buys a product (goods or services or a combination) with public funds, this is called public procurement and a large share of municipal consumption takes place within this framework. Since municipalities constitute a significant share of public procurement, municipalities have strong capacities in this area.

Public authorities are major consumers. In Europe, public authorities consume 16% of GDP in the 28 EU countries, which means that the public sector holds both great influence on sustainable consumption and has significant purchasing power (European Commission, 2011; Organisation for Economic Co-operation and Development, 2009). Public spending ranges from the purchase of medical equipment to the construction of roads and hospitals. Thus public procurement is an important regulation of public consumption. Sustainable Public Procurement (SPP) and Green Public Procurement (GPP) have been in focus recently. These concepts aim to capture the process used to secure the acquisition of goods and services in a way that minimizes damage to the environment (Meehan and Bryde, 2011; Michelsen and de Boer, 2009).

Research indicates that local and regional actors are becoming increasingly involved in projects that emphasize sustainable procurement. One reason for this is the proximity of the local level to citizens and the fact that the local level can detect unmet needs and act as an enabler of innovative sustainable measures (Dale-Clough, 2015). In Sweden, municipalities and municipal enterprises represented 68% of the number of public procurements advertised (National Agency for Public Procurement and the Swedish Competition Authority, 2016). Through public procurement, cities can incrementally limit their own environmental impact by purchasing 'greener' options, such as more energy-efficient vehicles.

Due to the large amounts purchased, municipalities also have the opportunity to contribute to technological change by purchasing niche products, such as biogas cars instead of more energy efficient vehicles (Palm and Backman, 2017a). Furthermore, public procurement can foster not only technological innovation, but also the innovation of new business models associated with more sustainable consumption, for example, hiring a car instead of purchasing one so that the vehicle can be driven by others when not in use by the municipality. Knowledge is, however, limited regarding to what extent this involvement has an effect on consumption (Lember et al, 2011). Earlier studies have shown that SPP or GPP is not used to its full potential in municipalities; this is explained by the existence of conflicting policies that create uncertainty with regard to the procurement process (Sporrang and Kadefors, 2014).

Another way of self-governing is through different organizational policies, such as travel policies for the municipality's staff (see Eloffsson et al., 2018). Such a policy can either steer the employee travels in a more sustainable direction, or limit the amount

of travelling done. For example, Västerås Municipality has a travel policy that encourages virtual meeting formats as opposed to meeting in person (Elofsson et al., 2018). On the other hand, however, some municipalities in Sweden have travel policies that explicitly propose flying as the first option, such as in Trelleborg in the case of journeys where flying would decrease travel time compared to a train journey, and thus avoid the need for an overnight stay (Trelleborg Municipality, 2017). While such a travel policy appears counterproductive from an environmental perspective, it does highlight the difficulty in negotiating between different priorities within a municipality.

In Gothenburg, a self-proclaimed forerunner in terms of consumption governance, the 2018 budget contained several targeted goals for local administration units that focus on how the city can use its common resources more efficiently: for example, by renting out more of the municipal property premises that are empty for part of the day or longer periods.

3.2 Governing by provision

Municipalities can influence what is consumed within their geographical boundaries. In governing by provision, production and consumption usually takes place within the municipality and, therefore, production and consumption governance coincide to a large extent. Heating is one area where municipalities, or municipally owned companies, often have the ability to influence the consumption of residents (Magnusson, 2016). In Sweden, the provision of district heating, and the provision of heating produced by renewable resources as part of district heating networks, has played an important role in limiting the carbon emissions associated with heat consumption in cities (Di Lucia and Ericsson, 2014).

Governing by provision may also be about non-provision, for example, if gas is not provided via a gas grid, heating buildings with gas is thus not an option and solutions based on low heat demand in combination with electric heating could become more attractive. This was the case in a sustainability focused development in Egedal Municipality in Denmark (Smedby and Quitzau, 2016).

Municipally owned companies are often central in governing by provision, both in more traditional forms and in more innovative initiatives. In Eskilstuna Municipality, Sweden, a municipally owned waste and energy company runs a shopping centre called Retuna, which looks like a mainstream shopping centre but primarily sells reused and remanufactured products (Hedegård et al., 2016). The shopping centre opened in 2016 and is still at an early stage of development – it is, thus, too soon to assess its success.

3.3 Governing by authority

Municipalities have limited powers to govern by authority in relation to sustainable consumption. There are examples where municipalities have the right to regulate certain types of consumption. An example from the Swedish context is to limit the

time for stationary cars leaving their engines running. However, these are relatively isolated areas with limited impact. Another more commonly used regulation is to lower parking quotas for new buildings. Thus municipalities can influence consumption indirectly through different technical regulations, but here too, authority is limited.

In some countries, municipalities have the right to set their own energy performance standards on buildings, for example, when the city owns municipal land to be developed (see for example, Bulkeley and Kern, 2006; Smedby and Quitzau, 2016; Tambach and Visscher, 2012). Another way to exercise authority is as an inspection body for certain national regulations, like building regulations. Depending on the administrative context, municipalities can choose to be more or less stringent with regard to ensuring such regulations are applied and, in this way, can exercise some form of agency.

In 2015, Växjö Municipality won a court case that permitted them to force residential buyers of municipal land to connect their houses to the municipal district heating system, which, of course, will have a huge impact on the future heat consumption of these homeowners. The judgement was appealed by the Swedish competition authority, which, however, decided to withdraw this appeal in 2016 as the chance of winning was marginal.

3.4 Governing by enabling

In terms of governing by enabling, that is, through positive incentives, information and facilitation, municipalities have many avenues for promoting sustainable consumption. In particular, various types of information campaigns can be used to foster behavioural change. Municipalities can also support different types of grassroots initiatives for sustainable consumption, which is also a form of governing by enabling.

One example of governing by enabling is when a municipality, through the planning permission procedure, negotiates the minimum numbers of parking spaces required for new developments (SALAR, 2013). For example, in Malmö, if a developer makes an agreement with a car pooling company to offer their services to the residents of a new housing development, the number of parking spaces can be decreased. This is a way of enabling more sustainable forms of transport consumption and promoting business models at an early stage of development. This case also illustrates how different modes of governing are combined: governing by authority through the parking space requirement in planning permission, and governing by enabling through the option of flexible negotiation.

A different example that relies more on information than on negotiation is the various campaigns run by cities to encourage more sustainable forms of mobility. Again, Malmö serves as example with their campaign 'No ridiculous car journeys', which aimed to discourage car use for journeys shorter than five kilometres (Malmö

City Council, 2014). The campaign used both traditional forms of information such as advertising in newspapers and around the city, as well as more innovative forms, including campaign cyclists moving around in the city and a competition for the most ridiculous car journey. The campaign reached a broad audience (50% of the municipality) and of those residents who became aware of the campaign, 15% stated that it had persuaded them drive less (Hörlén et al., 2008).

The STPLN Open Maker Space in Malmö, an arts and community centre that hosts a co-working facility, a space for exhibitions and performances, and several do-it-yourself workshops for textile printing, sewing, knitting, carpentry, digital production, bicycle service and construction, and creative reuse/recycling, is an example of how the sharing economy can be supported. It is targeted at people of all ages active within the arts, technology, innovation, design and crafts. In most cases, people can use STPLN for free and, in return give their time and knowledge. The STPLN building is owned by Malmö City Council, which also provides basic financial support. STPLN offers new work and leisure opportunities for all Malmö citizens, encouraging more sustainable lifestyles, enhancing social cohesion, allowing for new ways of interaction, and providing learning and exchange of skills.

Other examples of sharing where municipalities are involved in minimizing consumption include different kinds of 'libraries', such as traditional book libraries but also, for example, 'tool libraries' or 'tool pools' where city dwellers can borrow tools at low or no cost. While the direct environmental benefit may be limited, it is often highlighted as innovative in a city's consumption governance (see also Chapter 7 in this volume). For example, in the district of Hammarby Sjöstad in Stockholm, the municipality enables different sharing activities via a cycle sharing infrastructure, tool and equipment sharing programmes and coordination of waste and recycling collection between tenants and owner associations to reduce the number of contractors and vehicles.

Sege Park in Malmö is planned to become one of the leading residential areas in the world based around the sharing economy. At the time of writing, discussion about construction was at an early stage: plans include a shared parking garage, with different auxiliary facilities to facilitate sharing, such as bicycle pools, car pools and laundry services, providing a physical structure where governing by design can enable sharing.

A further example of governing by design comes from the city of Umeå in northern Sweden. Access to green spaces is an important issue in a growing city in order to manage sustainable urban development. The Norrland University Hospital in Umeå is currently looking for green spaces that would be conducive to the recovery of patients, as well as providing recreational space for staff, students and residents. Demand for such space is expected to grow, not least because the number of residents will increase since the area around the city is becoming more densely populated. Today green structures near the hospital are mostly used by students and

are thus utilized less often during the summer months. Umeå City Council had the idea of developing trial activities for sharing the green spaces and increasing their attractiveness, as well as ensuring greater utilization of the park around the hospital via collaboration between property owners and tenants.

3.5 Governing by partnership

Climate change and sustainable consumption are developing within a context of increased globalization, deregulation and neoliberal ideology; this requires network-oriented decision-making processes that are based on an intricate inter-play of public, private and non-profit organizations and the coordination of their resources. Horizontal cooperation between a municipality and its partners from communities, industry, interest organizations and local businesses is usually necessary for successful implementation.

One such example is that Swedish municipalities have started addressing energy efficiency in local businesses in order to achieve local and national energy reduction goals. This is done by creating a network of companies with the declared aim of reducing energy consumption in these companies. The networks usually involve around ten companies, but there are also examples of 60 companies coming together to improve energy efficiency (Palm and Backman, 2017b).

Another example is from Malmö where contracts from the City Council allocating land to real estate developers include the requirement for participation in a dialogue process. The aim is to identify investment that would contribute to social, ecological and economic sustainability. Large sections of the physical space in cities are not under the control of municipalities and thus real estate developers and property owners need to be involved and engaged in sustainable urban planning processes so that the ambitious objectives regarding sustainability can be implemented.

4. Discussion

Swedish municipalities have a great deal of autonomy and have the power to act on many issues. The four different governing modes indicate that municipalities also find ways to circumvent any lack of power by choosing a specific governing mode. If, for example, they do not have the power to influence energy efficiency in local businesses, they can choose a partnership mode that opens up opportunities for governing in this area. Consumption governance is an area where municipalities often govern at the limits of their jurisdiction and/or their traditional area of governing.

Governing by example is a clear case of the process being defined by government. The municipality can decide on an objective and then use its own organization to implement and control the outcome of the process. The other clear governmental

example is governing by authority, where the municipality can impose regulations in an area and thus enforce sustainable consumption patterns.

When operating in a border area like sustainable consumption where public, private and voluntary sectors interweave, it is rare that municipalities control the whole process from the setting of the agenda to implementation. In these cases, the choice of governing mode(s) becomes even more important for ensuring implementation. Governing by partnership is such a case where the formulation of contracts is crucial to attaining the successful implementation of sustainable goals (compare Palm and Wihlborg, 2006; Wihlborg and Palm, 2008). Governing through enabling has also become common in connection with sustainable consumption.

With regard to recent developments in the sharing economy, municipalities have engaged in processes that enable sharing. Sharing has many possibilities for contributing to more sustainable consumption: fewer resources are needed if a product or a space can be shared between many actors. However, this is not the point we aim to make here. The issue we would like to reflect upon is that of the role of municipalities in sharing. As noted above, municipalities in Sweden have invested in different solutions to enable their citizens to share more often. One critical issue that must be discussed in this connection is whether engaging in the sharing economy is the task of municipalities. Sweden has a long tradition of municipalities planning and implementing local sustainable solutions (Palm, 2006). Citizens *participate* in municipal planning, but seldom initiate it or take the leading role (Fenton et al., 2015; 2016).

One possible interpretation of engagement in the sharing economy is that municipalities are more effective than volunteer groups and thus disempower them from acting and engaging in a bottom-up movement that could contribute to a new kind of sharing economy under the municipality's 'radar'. When taking a leading role in developing a sharing economy, municipalities might also misunderstand or misinterpret which elements of consumption citizens actually want to share. This could result in many sharing points or hubs where no one actually participates in the sharing practice. As discussed, when a policy process is characterized as being both in the private and volunteer sector, from the perspective of the municipality this process has an uncertain character and an outcome that cannot be controlled. The question must then be asked as to whether the municipality should initiate and manage such a process.

All the governing modes, but especially those with a governmental character, contain a strong collaborative element. Depending on the municipality's collaboration partners, this has implications for the type of consumption governance taking place. If, as argued by Khan (2013), for example, these collaborative arrangements are dominated by existing elites, then they are likely to foster win-win commercial solutions for selected sustainability problems. In relation to urban consumption governance, the umbrella of smart cities captures many such solutions, for example, those related to energy efficiency and demand response management (Bulkeley

et al., 2009). In these cases, municipalities contribute to new technologies that could result in more sustainable consumption patterns. However, at the same time, this could entail the drawback of the municipality supporting solutions from established regime actors at the expense of grassroots initiatives and thus reinforcing unequal power relations.

Collaborative urban consumption responses, such as those gathered under the umbrella of Sharing Cities (McLaren and Agyeman, 2015) could also include solutions that are both compatible and incompatible with current market logic. A current trend is the development of more commercial forms of innovation in relation to collaborative consumption. For example, Sweden's largest car sharing cooperative announced in January 2018 that they would terminate their activities, stating that it was difficult to collaborate with the growing commercial actors in the area of car sharing (P4 Göteborg, 2018).

Nevertheless, we would like to note that being engaged in all different governing modes could be a suitable activity for a municipality. Enabling a sustainable solution could shape practices and expectations that could feed into future policy formation. For example, the introduction of reduced parking space allocation could lead to changing the cultural norm of car ownership, thus opening up opportunities for even more radical non-car-based mobility policies for cities. This interplay between policy implementation and policy formation is key to the increasingly experimental nature of local sustainability governance (Bulkeley and Castán Broto, 2012; Hoffmann, 2011; Smedby and Quitzau, 2016). The intention of raising critical issues in relation to the use of different governing modes is to emphasize the need for many actors to initiate and govern processes leading to sustainable consumption.

5. Conclusions

Changing patterns of consumption significantly demands connecting and strengthening both a diversity of activities in the sharing economy and sustainable consumption itself. As discussed, municipalities have many options for governing local consumption, yet it is important to maintain critical reflection and also to discuss when municipalities have gone beyond their mandate and their designated role. Municipalities have limited budgets and must prioritize. It is important that they do not do this in a way that rejects good ideas and initiatives from the private and voluntary sectors. These ideas and initiatives are often overshadowed by enthusiastic and ambitious projects run by municipalities. Yet this is also why collaboration in projects like Sharing Cities, to take just one example, is critical.

All governing modes will most likely require a sustainable transition; they also fulfil different functions in the process of achieving sustainable consumption. However, there is no clear picture of all ongoing governing processes. Given the lack of evaluation of these processes, it would be difficult to know whether the sum of all activities

had led to a sustainable outcome. The activities will no doubt require coordination as well as a comparison of goals and the identification of conflicts between these goals in order to define the most effective way for municipalities to contribute to sustainable consumption. More research also needs to be done on how to measure progress when a municipality is working in different areas, with diverse challenges that sometimes cut across various sectors and where the starting point in every sector is profoundly different. The infrastructure and planning of cities also needs to change in order to facilitate sustainable consumption and the sharing economy, but defining how and when this is to be done would necessitate further research.

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