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## What role for network governance in urban low carbon transitions?

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#### ABSTRACT

Many cities around the world have taken a pioneering role in tackling climate change and they will be key players in a possible transition to a future low carbon society. However, cities are at the same time constrained and act in a world of multi-level governance where local decision makers are dependent on both higher political levels and other actors in society. In this situation network governance has emerged as a promising 'new mode of governance' where cities can increase both the legitimacy and implementation capacity of an ambitious climate agenda. In network governance the municipality is a facilitator rather than commander and implementer. However, there are also some important potential problems with network governance relating to its democratic legitimacy (politics increasingly carried out by closed elites) and its capacity to lead to radical change (networks of established interests tend to preserve status quo). The aim of this paper is to critically analyse the role of network governance in urban low carbon transitions. The paper builds on original empirical research from the Swedish context which is supplemented by experience found in the literature from other cases. The paper draws from, and merges, two different theoretical perspectives on governance: network governance and transition governance. The literature on network governance asks whether this mode of governance is legitimate and effective, while the literature on transition governance explores what governance configurations are needed in order to steer towards a (low carbon) transition. The findings of the paper show that the effects of network governance are mixed both regarding its policy outputs and its democratic legitimacy. On the implications of network governance for urban low carbon transitions it is argued that while network governance can contribute to niche developments and innovation at the urban level, the elitist character of networks risks maintaining existing unsustainable patterns and defining possible urban futures in too narrow terms.

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#### 1. Introduction

To avoid dangerous climate change, greenhouse gas emission levels have to peak in the next decades and approach close to zero over the course of this century (Rummukainen et al., 2011; IPCC, 2007). There is a growing acknowledgement that this will require a low carbon transition that will affect all aspects of society. At the global climate meeting in Cancun 2010 it was decided that "developed countries should develop low-carbon development strategies or plans" (UNFCC, 2010, §45). Low carbon road maps have been developed by the European Commission and by national governments such as the UK and Denmark. Transition initiatives also engage civil society and market actors. One example is a recent report by the European paper industries on how their sector can be part of a low carbon transition (CEPI, 2011). Another example is the

0959-6526/\$ – see front matter @ 2012 Elsevier Ltd. All rights reserved. http://dx.doi.org/10.1016/j.jclepro.2012.11.045 Transition Town movement that engages people at the community level to explore how an alternative low carbon future could look like (Smith, 2011).

Many cities around the world have decided on local climate goals that amount to a low carbon transition, making the local level an important political arena for climate governance (Bulkeley et al., 2011; Bulkeley and Betsill, 2003; Coenen and Menkveld, 2002; Collier, 1997). The emergence of a transition perspective introduces long-term thinking into climate governance and stresses that decisions today should pave the way for more systemic changes in the future. Though the overarching goal of a low carbon transition (to drastically reduce climate gas emissions) is agreed upon, the ways to reach this goal and the implications for cities are open to contestation. To take one example, the solution to the problem of carbon emissions from urban traffic can be envisioned either as the introduction of zero-carbon technologies and fuels, or as the development of a new urban infrastructure that is based much less on private motorized transport and more on walking, cycling and public transport. Both strategies could potentially lead to successful







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transition but they imply quite different urban futures. Thus, decisions on low carbon urban transitions are inherently political and should be open to political debate.

This paper starts out from the observation that network governance is playing an increasingly important role in urban climate politics and in low carbon transitions. Looking at governance practice we can see that cities around the world are experimenting with new forms of governance that include collaboration and partnerships with civil society and business actors. The reason for this development is that local governments have limited control over the implementation of mitigation measures and lack authority to enforce actors to comply with policies (Betsill and Bulkeley, 2007). Thus, it becomes necessary to forge consensus among different local actors around ambitious climate policy goals in order attain an effective implementation. At the same time the emerging research field of transition studies puts high emphasis on the role of networks and network governance in order to attain the long term transformation processes that are needed to reach a low carbon society. While network governance offers clear promises both from the point of view of effectiveness and possible democratic qualities, there are also risks associated with this governance form.

Therefore, the aim of this paper is to critically analyse the role of network governance in urban low carbon transitions. The paper draws from, and merges, two different theoretical perspectives: network governance and transition studies. The literature on network governance centres on the question whether this mode of governance is legitimate and effective. The literature on transition studies explores how sustainability transitions occur and how they can be governed, and it identifies network governance as an important governance mode. More specifically the paper sets out to address the following questions: To what extent is network governance an important feature of contemporary urban climate governance? What are the effects of network governance in terms of its outcomes and democratic legitimacy? What is the potential role of network governance in future urban low carbon transitions?

Empirically the paper is based on an in-depth case study of climate governance in the city of Växjö in Sweden. Material for the case study comes from seven semi-structured interviews with politicians and civil servants that were carried out in 2007–2008. Each interview lasted between 30 and 60 min and was transcribed. Besides the interviews written documentation has been used such as climate and environmental strategy documents. The case study is complemented by secondary material from similar case studies covering cities in Europe, North America and Australia. Today there is a fairly wide range of empirical research on urban climate governance allowing for comparisons and a general discussion of results, although the focus of other studies has not been specifically on the role of network governance.

The paper starts with a critical discussion of the concept of network governance. This is followed by a discussion of the main features of transition studies, its views on network governance and the implications for urban low carbon transitions. In the subsequent section it is shown – through the combination of an in-depth case study and an overview of existing research – that the climate challenge has led to governance innovations in cities that include network governance and stakeholder deliberation. Two different types of networks are discussed and analysed: policy formation networks and policy implementation networks. It is argued that the effects of network governance are mixed both regarding its policy outputs and its democratic legitimacy. In the next section, which is more explorative, the further implications of network governance for urban low carbon transitions are discussed and it is argued that while network governance can contribute to niche developments and innovation at the urban level, the elitist character of networks risks maintaining existing unsustainable patterns and defining possible urban futures in too narrow terms. In the concluding section a call is made for a more balanced view on the role of networks in urban low carbon transitions and a persistently critical approach to the effects and consequences of network governance.

#### 2. Network governance: a critical introduction

Network governance refers to a shift from traditional hierarchical governance forms where the state is the regulator, to looser forms of governance where private actors such as business and NGOs increasingly participate in policy making (Bogasson and Musso, 2006; Koimann, 2003; Sørensen, 2002; Pierre and Peters, 2000). The shift towards network governance is explained by the increasing policy dependency of governments on other actors derived from the complexities of modern societal problems and that states have ceded power to other levels and actors (Pierre and Peters, 2000). Research shows that network governance is also relevant in the local context (Bogasson and Musso, 2006; De Rynck and Voets, 2006; Sørensen, 2006; Aars and Fimreite, 2005).

Networks can be described as a governance form along with hierarchies and markets (Bäckstrand and Kronsell, 2010). Hierarchy is based on strong chains of command in a top-down fashion while the market is a self-organizing governance form based on free transactions between actors. Networks, in turn, rely on links between public and private actors, which can be both organizations and individuals. A key feature of networks is that actors are interdependent and cannot carry out their decisions alone. Co-operation and trust are thus essential traits of network governance. The interdependence calls for deliberation and consensus to reach common solutions. Network governance covers a broad range of organizational forms from public-private partnerships and stakeholder participation to informal personal interactions between individuals. Actors will have various motives for joining the network and differing opinions on the preferred outcome. Interdependency between actors does not preclude asymmetrical power relations. On the contrary, Bogasson and Musso (2006, p. 7), claim that "structural power differentials and conflicts" is one of the main issues of network governance. Arguably, the general distribution of power in society is reflected in networks, which can be criticized for contributing to maintaining status quo and existing power imbalances (Fischer, 2006).

A primary reason for the emergence of networks has been to find solutions to policy problems that are commonly felt by policy makers and other involved actors. As Aars and Fimreite (2005, p. 244) write: "Networks are predominantly legitimised on the basis of the results they achieve, not the processes through which they are reached. Thus, it can be argued that [network] governance means a shift from input to output legitimation." The interdependency between actors however means that it is difficult for policy makers to use networks as an implementation mechanism. Instead policy implementation will be carried out as a process of deliberation and bargaining where actors implement measures only to the extent that they perceive that it is beneficial to their own goals.

There is a debate on whether networks pose a risk to, or can enhance, the democratic qualities of decision making. Critics argue that networks lack many of the formal attributes necessary for achieving a democratic process (Aars and Fimreite, 2005). Others see network governance as an unavoidable attribute of modern politics and argue that traditional liberal accounts of democracy fail to assess its democratic potentials (Meadowcroft, 2007; Bogasson and Musso, 2006; Sørensen, 2002). Clearly, networks challenge the authority of elected representatives and question traditional forms of legitimacy. The effects of network governance on participation and deliberation are mixed. First, the selection of participants in networks is seldom the outcome of a process of democratic Download English Version:

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