

This is a repository copy of *Power and capacity in local climate governance : Comparing English and German municipalities*.

White Rose Research Online URL for this paper:  
<http://eprints.whiterose.ac.uk/110911/>

---

**Conference or Workshop Item:**

Eckersley, Peter Mark [orcid.org/0000-0001-9048-8529](https://orcid.org/0000-0001-9048-8529) (2016) Power and capacity in local climate governance : Comparing English and German municipalities. In: UNSPECIFIED. (Unpublished)

---

**Reuse**

Items deposited in White Rose Research Online are protected by copyright, with all rights reserved unless indicated otherwise. They may be downloaded and/or printed for private study, or other acts as permitted by national copyright laws. The publisher or other rights holders may allow further reproduction and re-use of the full text version. This is indicated by the licence information on the White Rose Research Online record for the item.

**Takedown**

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing [eprints@whiterose.ac.uk](mailto:eprints@whiterose.ac.uk) including the URL of the record and the reason for the withdrawal request.

*Power and capacity in local climate governance: Comparing English and German municipalities*

**Peter Eckersley**

**Research Associate**

**Newcastle University, UK**

[peter.eckersley@ncl.ac.uk](mailto:peter.eckersley@ncl.ac.uk)

**Abstract**

This paper, which is based on fieldwork research in the comparable 'twin towns' of Newcastle and Gelsenkirchen, compares how the municipalities in these cities have worked with other actors to increase their capacity in climate policy-making. Drawing in particular on theories of resource dependency in intergovernmental relations (Rhodes 1981) and urban governance (Stone 1989), it introduces a new model for mapping vertical and horizontal power relationships at the subnational level. By applying this model to the empirical cases, it identifies how central-local relations in England are looser than those in Germany, and how this results in weaker municipal institutions. This has meant that Newcastle Council has had to rely more on local stakeholders to achieve its objectives when compared to Gelsenkirchen, and has also reduced its ability to exert hierarchical authority over other bodies.

Such findings have significant implications for proponents of 'localism', since they suggest that greater independence for municipal governments could strengthen societal actors at the expense of the local state. This might result in policies reflecting the private (rather than the public) interest, thereby increasing concerns about democratic accountability. They also

suggest that critics of the opaque and bureaucratic nature of 'joint-decision' systems should consider what the potential alternative might entail: a weaker state that has less capacity for co-ordinated action and is more reliant on private actors in policy-making processes.

## 1. Introduction

Despite increasingly stark warnings from the world's most eminent scientists about the potential consequences of rising global temperatures (IPCC, 2007, IPCC, 2014), policy-makers have struggled to address climate change effectively. A key reason for this lack of progress is that the issue requires a co-ordinated response from state and non-state actors at all levels across the globe. These actors include cities (Bulkeley and Betsill, 2003, Bulkeley and Kern, 2006), which various studies have identified as being particularly at risk from climate-related events such as flash-flooding, heavy storms and coastal erosion (Nicholls *et al.*, 2008, World Bank, 2010, IPCC, 2014), and in which the majority of the world's population now lives (UN, 2014). However, although many cities have agreed to implement ambitious climate protection strategies (Covenant of Mayors for Climate & Energy, 2016), recent austerity policies have weakened municipalities and could mean that they no longer have the capacity to develop a coordinated and effective response to the issue (Ferry and Eckersley, 2016).

This paper investigates climate change policy-making in English and German cities, focusing specifically on the comparable 'twin towns' of Newcastle upon Tyne and Gelsenkirchen. It contrasts how the two municipalities work with other *vertical* and *horizontal* actors to increase their capacity to develop and implement their climate change strategies, and therefore analyses the influence of other tiers of government and local stakeholders respectively. The paper begins by placing the investigation in the context of wider debates about the changing role of the state and how governing actors (including cities) seek to address wicked issues. This highlights how existing theoretical perspectives on subnational governance are not able to explain which actors are driving policy-making at the local level,

and it therefore proposes a more holistic framework to help understand these processes. Following a brief methods section, the paper then applies this framework to contrast how the municipalities in Gelsenkirchen and Newcastle are addressing the issue of climate change, analyse whether their governance arrangements changing in any way, and draw wider conclusions about what this tells us about local policy-making.

## **2. Analysing wicked issues at the local level**

As policy-makers have become increasingly concerned with tackling ‘wicked issues’ (Rittel and Webber, 1973), they have sought to work collaboratively across state and non-state organisational boundaries to increase their capacity to act. The emergence of ‘New Public Management’ (NPM, see Hood, 1991) techniques accelerated this trend, particularly at the local level, as a growing number of organisations were charged with delivering policy objectives and therefore more holistic ‘governance’ approaches became more common (Talbot 2016). Climate change has been variously described as the ‘ultimate wicked issue’ (Pollitt, 2016) or even a ‘policy tragedy’, because ‘time is running out; those who cause the problem also seek to provide a solution; the central authority needed to address it is weak or non-existent; and... policy responses discount the future irrationally’ (Levin *et al.*, 2012, p. 123). This suggests that it is likely to disrupt traditional policy-making processes even more than ‘normal’ wicked issues. Since such disruption could mean that existing power relationships between governing actors are changing, it raises significant questions for political scientists.

In order to address these questions in subnational contexts, many previous studies of climate change policy have adopted multi-level governance perspectives to illustrate how different

actors within and across tiers influence decision-making (see for example Lenschow, 1999, Auer, 2000, Bulkeley, 2005, Bulkeley and Betsill, 2005, Schreurs, 2008). Given that the issue requires a coordinated response and transcends the boundaries between the state, the market and civil society, this appears eminently sensible. In addition, Hooghe and Marks' set out a useful typology of multi-level governance that helps to categorise different systems: Type I consists of relatively static, multi-purpose jurisdictions within which a single public body has direct responsibility for a range of services; whereas more ad hoc, task-specific organisations are more common in Type II arrangements (Hooghe and Marks, 2003, see also Table 1).

Row	Type I	Type II
1	general-purpose jurisdictions	task-specific jurisdictions
2	non-intersecting memberships	intersecting memberships
3	jurisdictions organized in a limited number of levels	no limit to the number of jurisdictional levels
4	system-wide architecture	flexible design

*Table 1: Type I and Type II multi-level governance (source: Hooghe and Marks (2003))*

Crucially, however, although the typology might help to *illustrate* the fact that different jurisdictions have adopted contrasting governance arrangements, it does not *explain* the reasons for these differences or provide theoretical tools that could predict the ways in which they may change. Indeed, the overall idea of '(multi-level) governance' is more descriptive than analytical: it highlights the fact that numerous stakeholders are involved in making and

implementing policy, but does not act as a comprehensive theoretical framework to help understand *why* things turned out the way they did (see Smith, 2003, Zito, 2013, Eckersley, 2016 for more comprehensive critiques). Crucially, the typology lacks tools to analyse the nature of power relations within governance arrangements, and therefore it cannot help to identify which actors are most influential in policy-making processes.

Nonetheless, in such governance contexts, we should assume that power is likely to be wielded by those actors that have the necessary resources to achieve their policy objectives (Rhodes, 1981). Therefore, if subnational governments do not need to rely heavily on other vertical and horizontal actors, we can expect them to be relatively powerful within governance arrangements and determine their policy objectives fairly autonomously. In contrast, where public bodies need to work closely with societal actors and/or other tiers of government (something that we might expect to happen in wicked sectors), they will have less power to shape policy-making.

This suggests that a crucial factor determining the nature of local governance arrangements is *internal capacity* within the municipality – in other words, *the local authority's ability to achieve its policy objectives without having to rely on other actors for resources* (see Eckersley, 2016, on which this theoretical perspective is based). At this stage it is important not to confuse the concepts of *autonomy* and *capacity*. For example, a council that enjoys significant freedom from central direction may be substantially constrained by a lack of resources, an unclear constitutional status and/or a reliance on unpredictable revenue streams. In other words, although some authorities may be quite autonomous of higher tiers of government, they might have limited ability to achieve their objectives independently of other actors. Alternatively, local authorities that 'surrender' some of their freedom by

partnering with external actors may find that they are better placed to deliver policy goals than municipalities that jealously guard their independence. This is particularly the case in sectors such as climate change, given the importance of an inclusive and holistic approach to addressing such wicked issues (Wollmann, 2004).

Working on the assumption that decision-makers are rational actors, and will therefore try and adopt the most realistic and effective way of implementing policy, we can see how subnational governments will recognise the need to collaborate (and potentially compromise) with external actors in order to achieve their objectives in certain policy sectors (see Sellers and Lidström, 2007). This principle may also apply across jurisdictions, because councils in one country may be more constrained than their counterparts elsewhere (Sellers, 2002). For example, in his famous study of the city of Atlanta, Stone (1989) found that public bodies had to work extremely closely with private businesses in order to have the ‘power to’ address racial tensions effectively. Stone’s approach is based on similar principles to Rod Rhodes’ (1981) theory of resource dependence in intergovernmental relations – except that Rhodes focused exclusively on how a municipality interacts with higher tiers of government along the *vertical* dimension and therefore did not take account of other *horizontal* actors within subnational jurisdictions.

As this suggests, the nature of interdependent relationships between governing actors plays a key role in determining who can exert most influence over decision-making. Central to Rhodes’ analysis was identifying *which* resources each tier of government is dependent upon and *who* can provide those resources. These resources are not solely financial: they may also be constitutional or political, shaped by the hierarchical nature of intergovernmental relations, or associated with particular expertise or access to information. With this in mind, we can

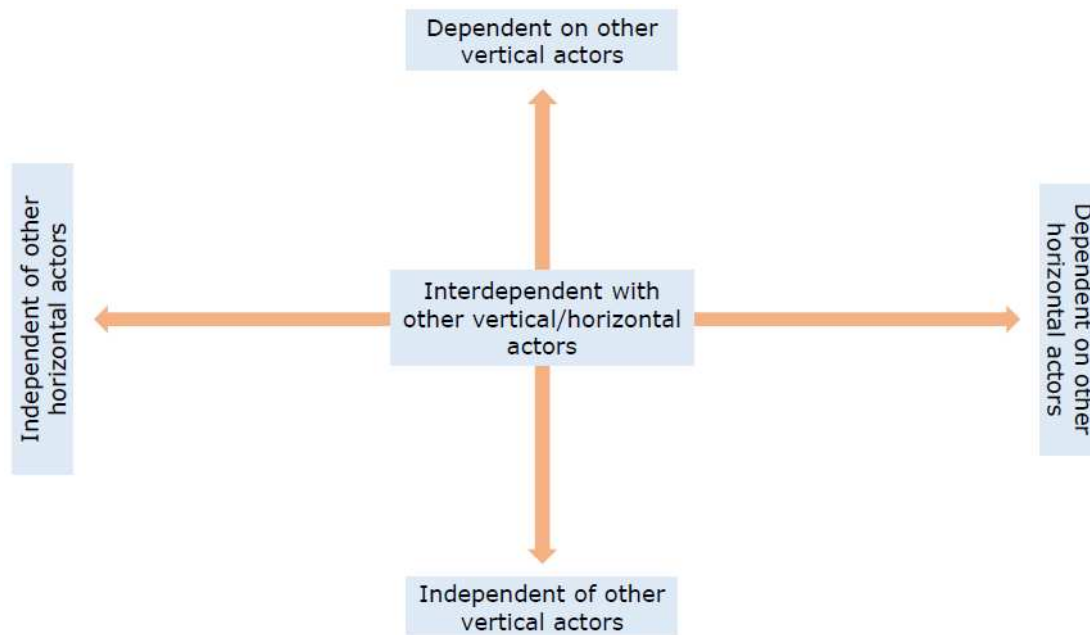


view the resulting governance arrangements as the consequence of state actors working with other stakeholders in order to increase their political power and institutional capacity (Peters and Pierre, 2001, Davies and Trounstone, 2012). By extension, we might expect organisations to become particularly reliant on external resources if they have very low levels of internal capacity. Moreover, changes in the level of internal capacity would affect the nature of power relations within the area, and therefore its policy-making arrangements.

Although he does not address this explicitly, Rhodes implies that *dependency* is the converse of high levels of *interdependency*. In other words, if the power relationship between two organisations is asymmetrical, one would be much more *dependent* on the other. However, if each organisation pursues its own objectives largely autonomously (in other words, there is limited reciprocity between the two), they would actually both be more *independent* of each other. This would also be the case if one actor would like to source additional capacity from others, but the support is not forthcoming and therefore no *interdependent* (or even *dependent*) relationship develops. Such eventualities cannot be illustrated easily using Rhodes' framework, but are nonetheless perfectly possible.

Figure 1 shows how we can map power relations in terms of all three potential scenarios (*interdependence*, *dependence* and *independence*) and along both the *vertical* and *horizontal* dimensions of governance. The diagrams take the municipality's perspective; in other words, where an organisation has been plotted near the *dependence* pole, this is because the local authority relies more heavily on other actors than they do on it. By the same token, the closer a council is located to the *independence* end of an axis, the more autonomously it operates – and if it sits in the middle, it is highly *interdependent* with other actors along that particular dimension. Furthermore, these relationships can also help us to understand the policy

approach that a subnational government might adopt. For example, where a municipality is highly *interdependent* with (or *dependent on*) other horizontal actors, it may need to adopt a strategy of engagement to persuade them to collaborate in governance arrangements – whereas greater *independence* might allow it to operate more hierarchically within the city.



*Figure 1: Power dependency relationships along the vertical and horizontal dimensions (adapted from Eckersley, 2016).*

### 3. Case selection and method

There are significant differences in the subnational government systems of Germany and England (Norton, 1994), and therefore it is particularly useful to compare how they influence local policy-making arrangements in the two countries. For example, until a ‘general power of competence’ came into force through the Localism Act 2011, English councils could only do what was expressly permitted in statute – otherwise they would be acting *ultra vires*

(outside the law) and could be prosecuted. This contrasts with a long-standing constitutional guarantee of *lokale Selbstverwaltung* (local self-administration) in Germany, which has enabled municipalities in that country to undertake any activity not prohibited by law since the early 1800s. Similarly, as a unitary state (notwithstanding devolution to the other UK territories of Scotland, Wales and Northern Ireland at the end of the 1990s), England's subnational system of government is substantially different to that of federal Germany. Such contrasts have led some academics to characterise Germany as having a 'Type I' multi-level governance arrangement (Herrschel and Newman, 2002), whereas England is much more akin to Type II (Miller *et al.*, 2000).

Despite these differences, however, selected case studies of Gelsenkirchen and Newcastle share many common features, which enables us to adopt a 'most similar systems design' (Przeworski and Teune, 1970, Keman, 2011) and control for a large number of other variables. Firstly, they are very similar in size: Newcastle has a population of 270,000 and Gelsenkirchen has 260,000 inhabitants, and both are situated within larger conurbations – the Tyne and Wear region and the *Ruhrgebiet* area of north-western Germany respectively. Secondly, they were both strongly associated with heavy industry between the eighteenth and mid-twentieth centuries – coal mining was a major employer in both cities, Gelsenkirchen had a large steel sector and Newcastle was a big shipbuilding centre during this period. Thirdly, this shared history has left a common legacy of deindustrialisation and economic decline since the late 1960s, which both cities have sought to address by re-branding themselves as forward-looking, sustainable locations to attract investment from the low-carbon sector (Jung *et al.*, 2010, Bulkeley and Betsill, 2003). For example, both municipalities have set themselves explicit targets to reduce the level of carbon dioxide

emitted from their cities by over 20% between 2005 and 2020 (Stadt Gelsenkirchen, 2011, Newcastle City Council, 2010).

In preparation for this paper I undertook 34 semi-structured interviews with a total of 37 people in the two cities. Fifteen of the discussions, which covered 19 individuals, were in Gelsenkirchen and the surrounding area, and the remaining 19 interviews involved 18 different people in Newcastle. I conducted the Newcastle fieldwork between January 2012 and May 2015, and the Gelsenkirchen interviews between June and September 2013. I held thirty of the 34 conversations face-to-face, two on the telephone and one in each case study city by email.

The interviewees worked in a range of council departments, including environment, planning, economic development, corporate procurement and policy, and included some very senior managers in both municipalities. I also spoke to staff in a number of other public bodies, as well as representatives from the local voluntary sector in each city. All participants were guaranteed anonymity, in order to ensure that their individual interests were secured and to encourage more honest and open discussions. I also triangulated the interview data with a range of other sources, including academic analyses, statistics on carbon emissions, media coverage, 'grey' literature (such as audit or think tank reports), minutes from meetings, policy documents and legislation.

#### **4. Research findings**

The paper will draw on the fieldwork data to highlight the contrasting nature of policy-making arrangements for climate change strategy in Gelsenkirchen and Newcastle. It

addresses each city in turn, along both the vertical and horizontal dimensions, and employs Figure 1 as a template for identifying which organisations are driving their climate change strategies.

#### **4.1 *Climate change policy-making in Gelsenkirchen***

##### *4.1.1 Vertical governance structures*

Since Germany is often cited as having a traditional ‘Type I’ multi-level governance arrangement, we would expect Gelsenkirchen Council to operate within a fixed, system-wide architecture, with clear divisions between levels of government. In other words, its policy-making processes would be largely independent of other actors along the vertical dimension – namely the regional *Bezirk* tier that sits between municipalities and the state of North Rhine-Westphalia (NRW), the NRW *Land* government, and the federation. There is some evidence to suggest that this ‘Russian doll’ image of nested institutions operates in practice and can be applied to the development of climate change strategy in Gelsenkirchen. Indeed, several interviewees mentioned the importance of United Nations, EU or federal initiatives in raising the profile of climate protection and encouraging Gelsenkirchen to act (interviews 14, 19 and 20), whilst others stressed the importance of local governance for policy implementation:

I would say that climate protection takes places at various levels – global, EU, federal, and state... And then there is the execution of laws, which we have to implement as municipalities (interview 24).

More recently, even though hundreds of German municipalities have experienced severe financial difficulties since the early 2000s (Timm-Arnold, 2010), the vast majority have

retained a reasonable degree of autonomy over spending, including in relation to climate protection. This is in spite of the fact that local government has had to rely increasingly on funding from the federal and *Land* levels, much of which is distributed to individual municipalities in NRW through the *Bezirk* authorities. For example, Gelsenkirchen received funding from the federal government to cover 90% of the budget for implementing its climate protection strategy, the *Klimaschutzkonzept* (interview 21). This money has to be spent on climate protection initiatives, and government auditors will assess the extent to which it has been effective both mid-way through the programme and at the end of the decade. In accordance with the principle of *lokale Selbstverwaltung*, however, the municipality is able to determine the nature, timing and type of projects that it wishes to undertake (interview 14).

Nonetheless, the fieldwork research revealed that the notion of *Politikverflechtung* (Scharpf et al., 1976) is very much a reality within the city and wider *Land*. This concept describes the ‘political integration’ of state institutions that has developed within Germany since the 1950s. It is characterised by close cooperation between public bodies at all levels of government, as different they seek to improve their capacity to achieve common policy goals.

*Politikverflechtung* in the climate and energy sectors has been further encouraged by the *Energiewende* narrative, which stresses how Germany needs to move away from a reliance on fossil fuels and nuclear power, and towards renewables sources. The *Energiewende* concept has its origins in the federal government’s decision to introduce feed-in-tariffs for small-scale electricity producers, as well as the (SPD-Green) federal government’s decision to phase out nuclear power by 2021.<sup>1</sup> Notably, the policy has provided a common language

---

<sup>1</sup> Although the CDU-CSU-FDP coalition that took office in 2009 initially wanted to prolong the life of existing nuclear reactors by an additional 12 years, ministers reversed this decision after the Fukushima disaster in 2011. Nuclear power provided Germany with one-quarter of its electricity in 2011 (Oliver 2015), which means that a significant investment in renewables is required to ensure that supply will continue from 2022 onwards.

around which governance actors from various sectors and organisations can coalesce, as well as a clear strategy for developing policy across the country.

Indeed, both the *Energiewende* and *Politikverflechtung* were cited by a number of interviewees in Gelsenkirchen as a pervading influence over climate protection policy in the city (interviews 16, 19 and 21). These individuals stressed how the concepts contributed towards a culture of mutual support and cooperation between public bodies, which made it easier to coordinate activities and implement policy. In a similar way, interviewees within the *Bezirk* authority saw their role as being primarily to help municipalities to bid successfully for *Land* funding and deliver local policy objectives – rather than stipulating what the money should be spent on, or auditing specific projects. As such, their relationship with local government is more akin to that of consultant-client rather than master-servant (interview 26). Therefore, this trend towards greater *interdependence* between tiers of government has provided Gelsenkirchen Council with more capacity and ‘power to’ achieve its policy objectives.

#### 4.1.2 *Horizontal governance structures*

Previous studies have highlighted how most German municipalities have retained a greater degree of control over local utilities and other public services than their English counterparts (Bulkeley and Kern, 2006, Becker et al., 2015). This suggests that Gelsenkirchen Council would have a stronger position in local governance arrangements than its counterpart in Newcastle, because it has direct influence over a broader range of public services and horizontal actors. Indeed, its strategy of reimagining the city as a centre for solar energy during the 1990s and 2000s, together with the ambitious initiatives that flowed from this

vision, highlights how the council sought to act largely *independently* of other horizontal actors in policy-making. During this period, council officers sought to promote the idea of Gelsenkirchen as the *Stadt der tausend Sonnen* ('city of a thousand suns'), in direct contrast to its previous image of *Stadt der tausend Zechen* ('city of a thousand pits', (Jung *et al.*, 2010)). This was exemplified by the installation of what was then the world's largest solar power station of its type (210 kW) on Gelsenkirchen's new science park in 1996, explicit council support for local businesses that manufactured products in the renewable energy supply chain, and the creation of the *Ruhrgebiet's* first solar housing estate in the Bismarck area of the city (interview 19). Although this attempt at building a 'Solar Valley' in post-industrial western Germany ultimately failed after being undercut by cheap Chinese competitors, it nonetheless highlights how Gelsenkirchen Council played a crucial part in trying to re-orient the city's economic and political outlook around environmental protection.

Similarly, the municipality took a very strong leadership role in developing the city's climate protection strategy (the *Klimaschutzkonzept*). This document was drafted by an advisory body of municipal officers and politicians, together with some managers from the local energy supplier ELE. Crucially, other businesses and voluntary groups in the city were not involved in these discussions (interviews 14 and 21). Some council staff have since engaged with other local stakeholders to try and persuade them to play their part in achieving the planned reductions in carbon emissions, for example by reducing their reliance on road transport. However, it is notable that this only happened *after* the strategy was adopted formally by the council.

It is also important to point out that neither public officials nor other stakeholders in Gelsenkirchen questioned the municipality's leadership role and authority within the city.



This highlights the fact that the authority had the capacity to exert very strong influence over other local actors. One interviewee, who had extensive knowledge of local government in both Germany and the UK, agreed that the status of the municipality in governance arrangements differs significantly between the two countries. Crucially, this status plays a key role in shaping relationships with other horizontal actors, because it means German councils can employ more traditional hierarchical approaches to policy-making:

Municipalities in Germany have a very, very much stronger position than in Great Britain and therefore do not have to do so much with civil society. They don't have to work with other actors – at least at the moment (interview 27).

However, the authority does collaborate with external organisations outside the formal, hierarchical state framework. For example, the state of North Rhine-Westphalia has five *Bezirke* (regional districts), all but one of which cover some part of the heavily-industrialised *Ruhrgebiet* area. Somewhat bizarrely, there is no statutory regional body to oversee this territory – in spite of its shared history, economy and demographics (interview 22). Instead, the municipalities within the *Ruhrgebiet* work across *Bezirk* boundaries on various initiatives related to climate change (such as transportation and planning),<sup>2</sup> in recognition of the fact that they have more in common with each other than with many of their neighbours in the same *Bezirk* (interviews 14, 21 and 22). This began in the 1990s with the re-development of some of the *Ruhrgebiet* into the international Emscher Park exhibition (Technische Universität Dortmund, 2008), a collaboration that subsequently evolved into the *Regionalverband Ruhr* (interview 20). As such, council officers bypass traditional jurisdictional boundaries and

---

<sup>2</sup> For example, BOGESTRA, a partnership between the municipalities of Gelsenkirchen and Bochum, provides public transport services in the two cities, in spite of them being situated in different *Bezirke* (Münster and Arnsberg respectively).

engage in *Politikverflechtung* horizontally as well as vertically, in order to increase their municipality's capacity to achieve its objectives.

In addition, Gelsenkirchen Council no longer has complete control over public services and utilities in the city, after it sold off or outsourced some functions in the 1990s. Notably, the municipality took this decision in order to generate revenue and avoid further financial problems. As one officer recognised, a lack of capacity played a crucial role in Gelsenkirchen's decision to outsource its utility provision and become more *interdependent* with other governance actors:

It was about the money. It's that banal (interview 24).

As a result, the municipality now operates within a more fragmented institutional arrangement than was previously the case, which means that it needs to liaise with external organisations on issues related to climate protection. However, it is worth noting that 49.9% of the shares in ELE (the local energy company) are owned by local authorities, and therefore Gelsenkirchen and two neighbouring municipalities are able to exert some control over the organisation's strategy. Indeed, the organisation is led by two executives, one of which is employed by RWE and the other by the three authorities combined – and any major decisions must be approved by both of these individuals. As the following subsection on Newcastle will illustrate, this gives the German council much more influence over local energy provision than its English counterpart.

Moreover, the wicked nature of climate change has meant that the council cannot rely solely on public bodies to make and implement policy. Slowly but surely, Gelsenkirchen Council

has sought to involve external actors in its approach to climate protection, largely because decision-makers have acknowledged that they need to persuade residents and businesses to change their behaviour in order to reduce carbon emissions (interviews 14 and 15). Indeed, the authority's *Klimaschutzkonzept* notes how the municipality is only responsible for 2% of the city's CO<sub>2</sub> emissions, and therefore private households and businesses need to make a significant contribution to the overall target of reducing GHG emissions by a quarter between 2010 and 2020. Yet, although the council relies heavily on these other actors to achieve its climate objectives, it cannot use many hierarchical tools to force them to operate in a more sustainable manner. Therefore, by adopting an 'enabling' mode of governance rather than relying on 'governing by authority' (Bulkeley and Kern, 2006), officers in the municipality have increasingly sought to persuade local actors to engage with the *Klimaschutzkonzept*, rather than introduce binding regulations.

For example, the council has begun to take a more active approach to initiating behaviour change, including marketing campaigns to inform households and businesses that they would benefit from feed-in tariffs if they installed PV panels (interviews 19 and 24). In 2012 and 2014 it organised climate conferences and invited key actors from across the city to share ideas on carbon reduction (interview 20). Furthermore, the *Klimaschutzkonzept* lists numerous other examples of how the municipality is hoping to persuade stakeholders within Gelsenkirchen to change their behaviour. They include: encouraging cycling through a rent-a-bike initiative; a more co-ordinated campaign to encourage people to use public transport and car-sharing schemes; real-time updates to bus, train and tram timetables; engagement with private sector landlords to improve the energy efficiency of their properties, and a tool on the municipal website that allows householders and businesses to calculate the financial viability of installing solar panels on their properties (Stadt Gelsenkirchen, 2011). These all illustrate a

growing reliance on horizontal governance tools, as the municipality recognises that it needs to work with other societal actors in order to achieve its climate objectives (interview 20).

For their part, non-state actors have been happy to participate in governance arrangements and help the municipality implement its objectives by retrofitting buildings and encouraging more sustainable commuting. Interviewees attributed this willingness to the council's dominant position as the city's democratically elected body, which means that other actors feel compelled to respect its policies (interviews 14 and 21). Indeed, the overall impression from conducting fieldwork in both countries was that municipalities in Germany are held in higher esteem than their English counterparts, and that this status enables them to cast a larger 'shadow of hierarchy' over other actors in local governance arrangements (Héritier and Lehmkuhl, 2011). Yet, it still illustrates a shift towards more fragmented governance arrangements, since policy making and public functions are no longer concentrated within Gelsenkirchen Council. In other words, the authority is now more *interdependent* along the horizontal dimension than was previously the case – although it is crucial to note that it still exerts more hierarchical authority over other horizontal actors than its counterpart in Newcastle (see Figure 2). Fundamentally, this shift is due to a lack of capacity within the council to achieve its political objectives *independently* of other organisations. These capacity constraints are partly financial (this was certainly the key driver behind privatising the *Stadtwerke*), partly due to the fact that pre-existing state institutions were unable to respond effectively to industrial decline, and partly a function of the fact that wicked issues need to be addressed by both state and societal actors.

## 4.2 *Climate change policy-making in Newcastle*

### 4.2.1 *Vertical governance structures*

Since 2010 there have been significant changes in central-local relations in England, including the Localism Act 2011, which heralded the abolition of centralised performance management frameworks and the introduction of a ‘general power of competence’ that enables councils to undertake any activity that is not expressly prohibited in law. These have meant that local authorities are operating even more *independently* of other vertical actors than was previously the case – albeit within a tightly constrained financial context (Lowndes and Pratchett, 2012). Such developments have had significant implications for local governance, particularly in terms of Newcastle Council’s relationships with other horizontal actors.

To illustrate this, Newcastle Council’s climate change strategy was developed and implemented largely *independently* of central government (interview 1) – and this was at a time before the Localism Act gave municipalities greater autonomy from ministerial influence. However, it is important to remember that this Act came into force at a time when local government funding was reduced significantly, which has led most (if not all) municipalities to re-consider their spending priorities (Ferry and Eckersley, 2015). As a result, many councils now focus fewer resources on climate protection than was previously the case (Scott, 2011).

As one of the councils that has seen its funding reduce by more than average, Newcastle has been particularly hard hit by these developments. Indeed, although the city continues to

attach great importance to environmental issues, the funding cuts have led the council to reorganise its service directorates and incorporate its climate change strategy into other priorities:

There has been some evolution of our climate change or sustainability policy. It [now] has to have a far greater focus on how it can deliver on tackling inequalities... and I think that's a good thing (interview 30).

As a result, the council is now much more concerned about issues of fuel poverty (and how to tackle this problem in a way that also benefits the environment) than was previously the case. Although some central initiatives have survived (such as a project to fund the installation of charging points for electric vehicles (EVs) and thereby encourage their take-up, there are very few other central funding streams available that support municipal attempts to combat climate change (interviews 8 and 12). In part this reflects the 'un-ringfencing' of many grants, which means that the vast majority of central government funding is no longer earmarked for councils to spend on specific services or functions.

In other words, because there are far fewer mechanisms to co-ordinate policy along the vertical sub-dimension, Newcastle Council's climate change strategy has become even more *independent* of the centre since 2010 (see Figure 2 on page xxx). Unlike the *Energiewende* in Germany, there is no clear narrative around which governance actors can coalesce that also relates to those based outside the environmental policy sector. Therefore, even though different tiers of government agree about the need to combat climate change and reduce carbon emissions, there is less leadership, coordination and direction than was previously the case. Moreover, as the next subsection will show, these vertical arrangements have played a

key role in determining the city's horizontal governance relationships, due to the impact they have had on municipal capacity.

#### 4.2.2 *Horizontal governance structures*

Various central government initiatives between the 1990s and 2010 fostered a climate of competition between English local authorities, as the UK Government tried to encourage councils to outdo each other in terms of providing value for money in public services (Dowding and Feiock, 2012). This conscious attempt to encourage councils to be more *independent* of each other contrasts sharply with the situation in Germany, where the principle of *Politikverflechtung* predominates both vertically and horizontally and facilitates greater co-operation between municipalities to achieve common goals. It has also led to more outsourcing and privatisation of local services in England, thereby fragmenting municipalities and making it harder for councils to coordinate and control policy implementation (Stewart, 1993). In particular, Newcastle City Council is unable to exert as much influence over public utilities in the city as its counterpart in Gelsenkirchen. Although Newcastle does run some small district heating networks (in the housing estate of Byker and the shopping centre at Eldon Square, for example), these only account for a very small amount of the energy consumed in the city. Instead, the council is almost entirely *dependent* on the goodwill of power companies and private customers (which are perhaps unlikely to purchase more expensive green energy without being incentivised or forced to do so) to take decisions that might help to reduce carbon emissions in the city.

Perhaps in response to this fragmentation, Newcastle Council has sought to collaborate with other municipalities on policies related to climate change. The city has developed particularly

close links with neighbouring Gateshead as a way of increasing state capacity on both banks of the River Tyne. For example, the two councils produced a shared local development strategy (Newcastle City Council 2013), have liaised very closely on issues of sustainable development (interviews 1, 2 and 12) and even created a joint brand of NewcastleGateshead to promote the area (Pasquinelli, 2014). Newcastle also played a key role in the development of the North East Combined Authority (NECA), a strategic body that comprises council leaders and elected mayors from six of the seven municipalities in the region and has responsibilities for transport and economic development. This suggests that the council is working increasingly *interdependently* along the horizontal dimension, as it seeks to increase its capacity to achieve policy objectives.

In a similar way, Newcastle adopted a much more inclusive approach to the development of its climate change strategy than Gelsenkirchen. Although council officers drafted the original document, they incorporated ideas and input from other members of the city's climate change partnership, including both of its universities, its hospitals, the police force, transport authority and some community groups. The drafting process also included formal consultations, through which senior officers considered whether ideas from members of the public could be included in the final document (interview 31). In addition, as part of its overall strategy of involving societal groups in policy-making, the council organises open 'Green Cabinet' meetings at least once a year, which involve businesses, voluntary groups, academics and citizens, who debate and contribute towards the city's environmental strategy. The municipality has also provided strong support to grassroots projects such as 'Greening Wingrove', a community co-operative aimed at encouraging residents to live more sustainably and improve their local environment (interview 31, see [www.greeningwingrove](http://www.greeningwingrove) for further information).



Newcastle's inclusive approach also extends to budgetary decision-making (Ahrens and Ferry, 2015), thereby illustrating how the English authority is much keener to embrace the idea of involving residents and local businesses in policy-making than its German counterpart. Indeed, leading politicians in the city's Labour group were keen to develop a broad societal coalition for policy-making and implementation before it took office in 2011. More recent developments, particularly the financial austerity that has affected all English councils (but particularly urban municipalities in the north such as Newcastle) have merely accelerated this process:

It was very much a core part of their manifesto when they were fighting to take over the council in the 2011 elections... We knew there were big financial challenges, but... at that point we didn't fully realise how big they were... This would have been core Council policy, whatever the financial challenges. It's something that the Leader and the Cabinet believe in very much. The budget challenges mean that we have to increase the pace around this. And the budget challenges mean that we simply don't have a choice – this isn't something that we'd like to do, this is something that we must do if we're going to preserve public services, because the Council simply won't have the money to do all of those things. It just necessitates getting local residents more involved (interview 30).

These political preferences reflected a belief that greater *interdependence* with societal actors would increase the municipality's ability to achieve its objectives, because pooling resources with other organisations would increase the city's capacity to implement policy. Although the council does not adopt all of the public's suggestions, these mechanisms highlight how Newcastle's policy-making processes contrast sharply with those of its twin town in the *Ruhr*. In the latter, the only contributors to the *Klimaschutzkonzept* were either employees of the

municipality or the energy supplier ELE – other non-state actors did not even get to see the plan until after it was published.

One officer at Newcastle Council also felt that nurturing external relationships and involving societal actors ‘in the tent’ of policy-making at the outset made it easier to disseminate the city’s climate protection strategy to a wider audience. This was because the partnering organisations were more likely to support and promote a document that they helped to create (interview 31). Indeed, Newcastle Council gives voluntary and other groups explicit responsibilities to encourage local citizens and businesses to change their behaviour around transport, for example (interview 8). In contrast, staff at Gelsenkirchen Council emphasised the importance of promoting their *Klimaschutzkonzept* only *after* it was published, and took sole responsibility for this task rather than relying on other bodies (interview 14).

In particular, the council’s relationship with Newcastle University has proved crucial in regenerating the city and furthering its sustainability objectives. For example, the two organisations have collaborated closely together in the redevelopment of a large brownfield site in the city centre (Science Central), which will feature a number of state of the art sustainability features (interview 11 and 31) and forms a core part of this strategy. The university has taken the lead on ensuring that Science Central acts a beacon of sustainability, and staff within the municipality are comfortable with this arrangement, given that the academic institution has significantly more resources and capacity to integrate climate change considerations into the overall design of the development (interview 6). Crucially, however, it means that the university (rather than the council) shapes how sustainability priorities are operationalised on the site, with the result that it has been designed primarily as a ‘living laboratory’ that produces data for scientific research, rather than a democratically-led project

to support policy goals on low-carbon lifestyles and social inclusion (interview 13). In other words, initiatives of this nature are aligned more closely with academic interests, rather than those of the wider local community. As such, we can see how the municipality is becoming increasingly *dependent* on the university to develop and implement the city's sustainability and climate change strategy.

## 5. Discussion

Overall, therefore, Newcastle Council works far more *interdependently* with other horizontal actors (in fact, in some areas it *depends* on them to develop and implement ambitious climate change policies) when compared to its counterpart in Gelsenkirchen. This is primarily due to the authority having less capacity to act *independently* and exert hierarchical authority over other societal actors. Notably, however, the growing capacity deficit within Newcastle is largely due to its increasingly *independent* vertical relationship, since it is now less able to access the resources that are necessary to achieve its political objectives from the UK Government. In contrast, the *Energiewende* narrative and the tradition of *Politikverflechtung* ensure that different vertical actors coalesce and co-ordinate policy-making and implementation in Gelsenkirchen, resulting in a municipality that has more capacity to act *independently* along the horizontal dimension. These shifts in the vertical and horizontal arrangements in both cities are illustrated in Figure 2 and Table 2.

Along the horizontal dimension, Gelsenkirchen Council has retained more control over public services within the locality than its counterpart in Newcastle. This is because far fewer services have been outsourced, privatised or 'hived off' to arms-length bodies – and where shares have been sold, the state has often retained a significant stake in the controlling

organisation. In addition, it has not had to rely on other local actors (such as the university and Greening Wingrove). This is partly because third sector bodies just do not exist to the same extent in Germany (interview 27), but also because there is a much stronger belief that state bodies should provide public services and not divest themselves of these responsibilities (interview 24). As such, Gelsenkirchen remains a much more *independent* actor along the horizontal dimension than Newcastle.

	<b>Gelsenkirchen</b>	<b>Newcastle</b>
Vertical sub-dimension	<i>Politikverflechtung</i> and the <i>Energiewende</i> result in significant vertical <i>interdependence</i>	Increasing <i>independence</i> from central government since 2010, due to funding reductions and the abolition of performance frameworks
Horizontal sub-dimension	Some fragmentation of service provision	Significant fragmentation of service provision
	Some collaboration with neighbouring councils in the <i>Ruhrgebiet</i>	Increasing collaboration with neighbouring councils through the combined authority
	More <i>independent</i> of other local actors	More <i>dependent</i> on other local actors

*Table 2: Contrasting multi-level governance structures for climate change strategy in Gelsenkirchen and Newcastle*

Figure 2 illustrates how power relations in the two cities have developed in recent years, and along both the vertical and horizontal dimensions. For example, it shows how Newcastle has become more *independent* of central government since 2010, after local authorities no longer needed to report their progress against central targets to government ministers, and also received much less funding through the grant system. This is in spite of the fact that it operates within severe financial constraints imposed by ministers in London. In contrast, the common narrative of the *Energiewende* in Germany helps to ensure that all tiers of the state coalesce around common policy goals and collaborate to achieve them. Combined with the endemic nature of *Politikverflechtung* in government institutions, this serves to ensure that municipalities have a high degree of interdependence with those jurisdictions ‘above’ them – despite the constitutional guarantee of *lokale Selbstverwaltung*.

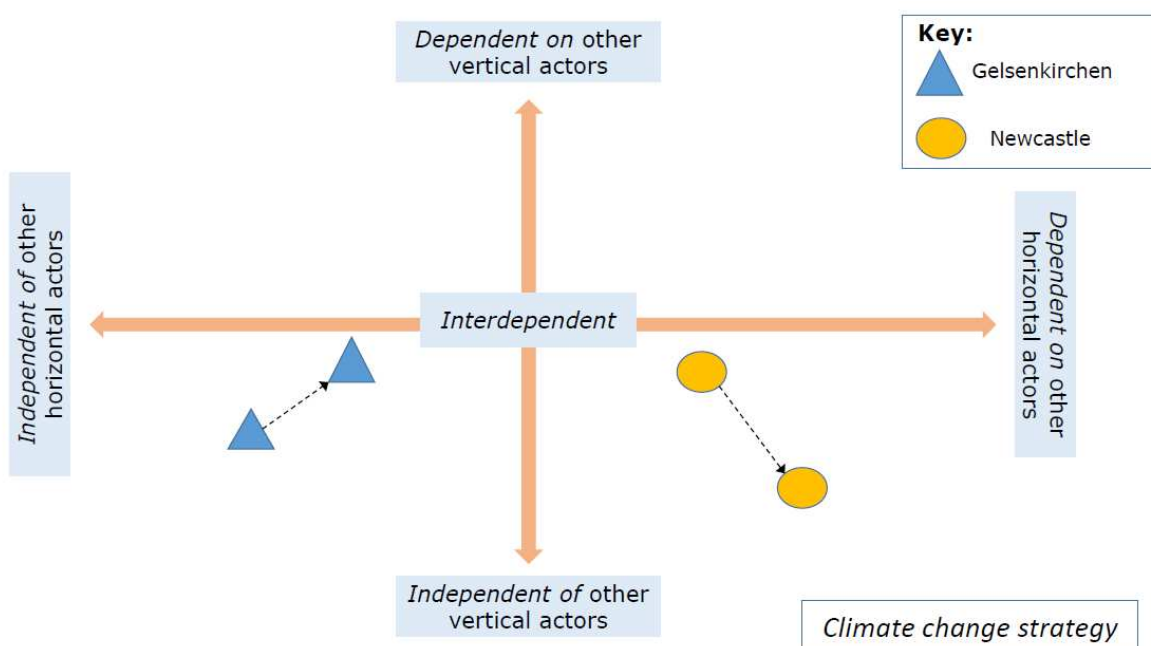


Figure 2: Trends in vertical and horizontal power dependencies for climate change strategy in Gelsenkirchen and Newcastle

Along the horizontal dimension, Newcastle Council has been more *dependent* on private energy companies than its Gelsenkirchen counterpart for several decades. On top of this, recent decisions to allocate an increasing number of public functions to voluntary groups such as Greening Wingrove – and particularly the university – will mean that its climate change strategy is increasingly *dependent* on other actors within the city. This is because the municipality will no longer be directly involved in an increasing number of activities that relate to climate change and sustainability in the city. Interestingly, the council has sought to regain some of its influence by taking a leading role in the creation of the combined authority, which meant that it worked more *interdependently* with other municipalities in the region. It also seeks to collaborate with other private and voluntary actors in the city through the Green Cabinet initiative. However, its financial situation and lack of internal capacity to implement policy means that it is increasingly *dependent* on the decisions and actions of other local stakeholders. By comparison, Gelsenkirchen Council operates more *independently* in climate change policy development and implementation along the horizontal dimension. This is because it can exercise more control over local public services, and also because councils in Germany have a higher status within their local communities. Nonetheless, the municipality has begun to realise that the actions of organisations outside the local authority will play a key role in the success of its climate protection initiatives, and this has led to it working more *interdependently* with other actors in the city.

## **6. Conclusions**

This paper has highlighted how both Gelsenkirchen and Newcastle are changing their policy-making arrangements in order to address capacity constraints and address the issue of climate change more effectively. In particular, both cities now take a more horizontal and

interdependent approach to horizontal governance relationships, in order to try and persuade societal actors to support council objectives, provide additional resources, and facilitate behavioural change amongst local businesses and citizens. These changes were necessary to address the complex and unprecedented challenge of climate change, which means that the state has to collaborate much more with other societal actors than in traditional ‘non-wicked’ policy sectors. In addition, financial pressures caused by industrial decline and the austerity agenda have weakened municipal capacity and accelerated this trend towards greater horizontal engagement – with the result that Newcastle and Gelsenkirchen are travelling in the same direction along this sub-dimension (see Figure 2 on page 28).

Nevertheless, Gelsenkirchen Council continues to enjoy a stronger position within the city than Newcastle, largely because it is buttressed by the high level of *vertical* interdependence and mutual support, which provides the council with additional capacity and therefore enables it to operate more *independently* of other local actors. For its part, ministerial policies have made Newcastle Council increasingly *independent* of the centre since 2010 and weakened municipal capacity to achieve policy objectives. Alongside a more fragmented local state, this has led to municipal decision-makers trying to mobilise a broad coalition of local stakeholders on the issue of climate change in order to try and address it more effectively. In other words, the increasing vertical *independence* has resulted in more horizontal *dependence* (particularly involving Newcastle University), because the council does not have the capacity to act alone.

Overall, each city’s governance approach is largely determined by its council’s perceived ability to achieve policy objectives. Decision-makers have sought to identify the most effective way of implementing policy and adopted this in order to increase the chances of

success. As such, although both municipalities recognise that they need to work with other organisations to deliver their climate change strategies, Newcastle has to collaborate more closely with horizontal actors than Gelsenkirchen because it does not receive as much support from higher tiers of government. Moreover, because this means that Newcastle Council has less control over policy-making than its German counterpart, it results in policies that may be less congruent with the municipality's objectives. Crucially, therefore, the resources, capacity and institutional contexts within which these municipalities operate shape the nature of local governance arrangements. Moreover, as we have seen in the case of Science Central (where the university is defining sustainability in terms of its own academic priorities rather than those of the council), these relationships can ultimately shape the nature of policy outcomes.

These findings have significant implications for proponents of 'localism', since they suggest that greater vertical independence for municipal governments might strengthen societal actors at the expense of the local state. Such an eventuality could mean that policies reflect the private interests of powerful non-state actors, rather than the priorities of democratically-elected councillors and mayors. By weakening the internal capacity of municipalities, they may also preclude councils from adopting particular policy instruments, because officials could take the view that they might not be deliverable in the face of strong opposition from other actors. Such concerns raise important questions about local democratic accountability. In addition, they suggest that critics of the opaque and bureaucratic nature of 'joint-decision' systems (Scharpf, 1988) should consider the potential alternative: a weaker state that has less capacity for co-ordinated action and hierarchical authority, and is therefore more reliant on private actors in policy-making processes.



## 7. References

- AHRENS, T. & FERRY, L. 2015. Newcastle City Council and the Grassroots: Accountability and Budgeting under Austerity. *Accounting, Auditing & Accountability Journal*, 28.
- AUER, M. R. 2000. Who participates in global environmental governance? Partial answers from international relations theory. *Policy Sciences*, 33, 155-180.
- BECKER, S., BEVERIDGE, R. & NAUMANN, M. 2015. Remunicipalization in German cities: contesting neo-liberalism and reimagining urban governance? *Space and Polity*, 19, 76-90.
- BULKELEY, H. 2005. Reconfiguring environmental governance: Towards a politics of scales and networks. *Political Geography*, 24, 875-902.
- BULKELEY, H. & BETSILL, M. 2003. *Cities and climate change: urban sustainability and global environmental governance*, New York, Routledge.
- BULKELEY, H. & BETSILL, M. M. 2005. Rethinking sustainable cities: Multilevel governance and the 'urban' politics of climate change. *Environmental Politics*, 14, 42-63.
- BULKELEY, H. & KERN, K. 2006. Local government and the governing of climate change in Germany and the UK. *Urban Studies*, 43, 2237-2259.
- COVENANT OF MAYORS FOR CLIMATE & ENERGY. 2016. *Sustainable Action Plans Catalogue* [Online]. Available: [http://www.covenantofmayors.eu/actions/sustainable-energy-action-plans\\_en.html](http://www.covenantofmayors.eu/actions/sustainable-energy-action-plans_en.html) [Accessed 7 July 2016].
- DAVIES, J. S. & TROUNSTINE, J. 2012. Urban Politics and the New Institutionalism. In: MOSSBERGER, K., CLARKE, S. E. & JOHN, P. (eds.) *The Oxford Handbook of Urban Politics*. New York: Oxford University Press.

- DOWDING, K. & FEIOCK, R. 2012. Intralocal competition and cooperation. *In:* MOSSBERGER, K., CLARKE, S. E. & JOHN, P. (eds.) *The Oxford Handbook of Urban Politics*. New York: Oxford University Press.
- ECKERSLEY, P. 2016. A new framework for understanding subnational policy-making and local choice. *Policy Studies*.
- FERRY, L. & ECKERSLEY, P. 2015. Budgeting and Governing for Deficit Reduction in the UK Public Sector: Act Three ‘Accountability and Audit Arrangements’. *Public Money and Management*, 35, 203-210.
- FERRY, L. & ECKERSLEY, P. 2016. Debate: Climate change and COP21 in Paris – Addressing the ultimate wicked issue. *Public Money and Management*, 36, 241-242.
- HÉRITIER, A. & LEHMKUHL, D. 2011. Governing in the shadow of hierarchy: New modes of governance in regulation. *In:* HERITIER, A. & RHODES, M. (eds.) *New modes of governance in Europe: Governing in the shadow of hierarchy*. Basingstoke: Macmillan.
- HERRSCHEL, T. & NEWMAN, P. 2002. Governance of Europe's City Regions. *Planning, Policy & Politics*. Routledge.
- HOOD, C. 1991. A public management for all seasons? *Public Administration*, 69, 3-19.
- HOOGHE, L. & MARKS, G. 2003. Unraveling the central state, but how? Types of multi-level governance. *American Political Science Review*, 97, 233-243.
- IPCC 2007. Climate Change 2007: Synthesis Report - Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Geneva: Intergovernmental Panel on Climate Change.
- IPCC 2014. Climate Change 2014: Impacts, Adaptation and Vulnerability - Summary for Policymakers. Geneva: Intergovernmental Panel on Climate Change.

- JUNG, W., HARDES, A. & SCHRÖDER, W. 2010. From industrial area to solar area - the redevelopment of brownfields and old building stock with clean energies. *In: VAN STADEN, M. & MUSCO, F. (eds.) Local Governments and Climate Change: Sustainable Energy Planning and Implementation in Small and Medium Sized Communities.* Heidelberg: Springer.
- KEMAN, H. 2011. Comparative Research Methods. *In: CARAMANI, D. (ed.) Comparative Politics.* 2nd ed. Oxford: Oxford University Press.
- LENSCHOW, A. 1999. Transformation in European Environmental Governance. *In: KOHLER-KOCH, B. & EISING, R. (eds.) The Transformation of Governance in the European Union.* London: Routledge.
- LEVIN, K., CASHORE, B., BERNSTEIN, S. & AULD, G. 2012. Overcoming the tragedy of super wicked problems: constraining our future selves to ameliorate global climate change. *Policy Sciences*, 45, 123-152.
- LOWNDES, V. & PRATCHETT, L. 2012. Local Governance under the Coalition Government: Austerity, Localism and the 'Big Society'. *Local Government Studies*, 38, 21-40.
- MILLER, W. L., DICKSON, M. & STOKER, G. 2000. *Models of Local Governance: Public Opinion and Political Theory in Britain*, Basingstoke, Palgrave.
- NEWCASTLE CITY COUNCIL 2010. Citywide Climate Change Strategy & Action Plan 2010 - 2020: Delivering Newcastle's Sustainable Community Strategy. Newcastle City Council.
- NICHOLLS, R. J., HANSON, S., HERWEIJER, C., PATMORE, N., HALLEGATTE, S., CORFEE-MORLOT, J., CHÂTEAU, J. & MUIR-WOOD, R. 2008. Ranking Port Cities with High Exposure and Vulnerability to Climate Extremes. *OECD Working Papers*. Paris: OECD.

- NORTON, A. 1994. *International Handbook of Local and Regional Government: A comparative analysis of advanced democracies*, Aldershot, Edward Elgar.
- PASQUINELLI, C. 2014. Branding as Urban Collective Strategy-making: The Formation of NewcastleGateshead's Organisational Identity. *Urban Studies*, 51, 727–743.
- PETERS, B. G. & PIERRE, J. 2001. Developments in intergovernmental relations: towards multi-level governance. *Policy & Politics*, 29, 131-135.
- POLLITT, C. 2016. Debate: Climate change - the ultimate wicked issue. *Public Money and Management*, 36, 78-80.
- PRZEWORSKI, A. & TEUNE, H. 1970. *The Logic of Comparative Social Enquiry*, London, John Wiley & Sons.
- RHODES, R. A. W. 1981. *Control and power in central-local relations*, Westmead, Gower.
- RITTEL, H., W. J & WEBBER, M., M. 1973. Dilemmas in a General Theory of Planning. *Policy Sciences*, 4, 155–169.
- SCHARPF, F. W. 1988. The joint-decision trap: lessons from German federalism and European integration. *Public Administration*, 66, 239–278.
- SCHARPF, F. W., REISSERT, B. & SCHNABEL, F. (eds.) 1976. *Politikverflechtung: Theorie und Empirie des kooperativen Föderalismus in der Bundesrepublik*, Kronberg: Scriptor.
- SCHREURS, M., A. 2008. From the Bottom Up: local and subnational climate change politics. *Journal of Environment and Development*, 17, 343-355.
- SCOTT, F. 2011. Is localism delivering for climate change? Emerging responses from local authorities, local enterprise partnerships and neighbourhood plans. London: Green Alliance.
- SELLERS, J. M. 2002. The Nation-State and Urban Governance : Toward Multilevel Analysis. *Urban Affairs Review*, 37, 611-641.

- SELLERS, J. M. & LIDSTRÖM, A. 2007. Decentralization, Local Government, and the Welfare State. *Governance*, 20, 609–632.
- SMITH, A. 2003. Multi-Level Governance: What it is and how it can be studied. In: PETERS, B. G. & PIERRE, J. (eds.) *Handbook of Public Administration*. London: Sage.
- STADT GELSENKIRCHEN 2011. Integriertes Klimaschutzkonzept Abschlussbericht. Stadt Gelsenkirchen.
- STEWART, J. 1993. The limitations of government by contract. *Public Money and Management*, 13, 7-12.
- STONE, C. N. 1989. *Regime Politics: Governing Atlanta, 1946-1988*, Lawrence, Kansas, University Press of Kansas.
- TECHNISCHE UNIVERSITÄT DORTMUND (ed.) 2008. *Internationale Bauausstellung Emscher Park: die Projekte 10 Jahre danach*, Essen: Klartext.
- TIMM-ARNOLD, P. 2010. *Bürgermeister und Parteien in der kommunalen Haushaltspolitik. Endogene Ursachen kommunaler Haushaltsdefizite*, Wiesbaden, VS-Verlag.
- UN. 2014. *World's population increasingly urban with more than half living in urban areas* [Online]. New York: United Nations. Available: <http://www.un.org/en/development/desa/news/population/world-urbanization-prospects-2014.html> [Accessed 10 July 2015].
- WOLLMANN, H. 2004. Local Government Reforms in Great Britain, Sweden, Germany and France: Between Multi-Function and Single-Purpose Organisations. *Local Government Studies*, 30, 639 – 665.
- WORLD BANK 2010. *Cities and Climate: Change: An Urgent Agenda*, Washington, World Bank.

ZITO, A. R. 2013. Multi-level governance, EU public policy and the evasive dependent variable. *Multi-Level Governance: the Missing Linkages*. Northumbria University, Newcastle upon Tyne.