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Green Attraction—Transnational Municipal Climate Networks and Green City Branding

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Abstract

In this article, we investigate the nexus of green city branding and municipal climate networks. In recent decades, a number of formal transnational municipal climate networks have emerged and their membership continues to increase. In parallel, city branding that is based on green policies, has gained importance. Based on quantitative and qualitative data, we assess how and to what extent German cities use their membership in transnational municipal climate networks to communicate green city brands. In contrast to our expectations, we encountered very few indications of green city branding efforts by German cities. Our analysis shows that in general, branding considerations only play a negligible role in the involvement of cities in transnational municipal climate networks or climate policies. Instead, it seems that German cities use their membership in climate networks, to genuinely improve local climate change strategies. We therefore suggest that research on green city branding should be more sensitive to the particular context of cities and efforts should be made to unveil the underlying motives for the communication of green policies.

Keywords: transnational municipal climate networks, green city branding, urban climate governance, climate change mitigation, climate change adaptation

1. Introduction

In recent decades, climate change has become an urgent matter for all levels of government (Pachauri et al., 2014), and increasingly cities and regions engage in climate mitigation and adaptation. Cities are of great importance for climate change (Bulkeley, 2013) because for a long time they have dominated global energy use and material flows as well as emissions (Anderberg, 2012). And so it follows that cities are estimated to be responsible for 70% of the global greenhouse gas emissions (UN-Habitat, 2011). Climate change is also increasingly perceived as a threat to cities as many large cities are located in coastal areas, and so they are at risk of rising sea levels and storm surges. Furthermore, cities are more vulnerable to heat waves compared to rural areas (Maria, Rahman, & Collins, 2013). At the same time, cities are perceived to offer leverage points for tackling climate change due to scale economies in relation to heating and public transport systems (Kamal-Chaoui & Roberts, 2009).

Even if it is not obvious that taking action on global issues such as climate change is a local responsibility, and the impact of individual cities' actions remains negligible in relation to global emissions, the efforts of municipalities all over the world bear testimony to the growing importance of cities in the context of climate change policy. There has been a rapid diffusion of local climate initiatives with both climate adaptation and

mitigation plans including climate projects focusing on energy efficiency, alternative energy or transport (Hakelberg, 2011). In response to climate change, the last few decades have seen several transnational municipal networks (TMCNs) emerging to support such local efforts. The two most important, Climate Alliance and the Covenant of Mayors, unite several thousand European municipalities in their efforts against climate change. These networks connect and advise municipalities, and lobby for climate change policies on higher administrative levels, such as national governments or EU administration (Emelianoff, 2013). TMCN memberships are particularly widespread in Europe. Three of the four largest TMCNs (with regards to No. of members): Energy Cities (1,510 members), Climate Alliance (1,699) and the Covenant of Mayors (6,482), have almost exclusively European members.

Germany is an urbanized country with 75% of the population living in towns and cities (CIA, 2015). It is the EU country with the largest economy, population, and highest greenhouse gas emissions (United Nations, 2013). In Germany, the climate issue has been on the agenda since the 1990s, and in the recent decade, Germany has initiated the ambitious project of transforming its energy system to a renewable energy-based one (Strunz, 2014). German cities have actively contributed to climate mitigation by: “greening” their local energy suppliers (Stadtwerke), reducing consumption through improved insulation or through strict regulations in the local building codes (Kronsell, 2013). Many German cities have complemented their climate policies with memberships in TMCNs. TMCNs have seen a particularly wide proliferation amongst bigger German cities (>100 000 inhabitants). Nearly 90% (68 of 76) of them have joined at least one of the climate networks (Busch, 2015). In Germany, 136 cities with more than 50 000 inhabitants have joined at least one TMCN. This high number of member cities provides a solid base for a systematic investigation of TMCNs’ impact on local policies.

Green city branding, based on innovative local sustainability initiatives and ambitions, has increasingly been viewed as a potential basis for city branding. City branding, or city marketing, focuses mostly on “the city as a place for profitable business” and “the city as a good place to live in”. (Gustavsson & Elander, 2012) Sustainability or green city branding has the potential to combine these two facets of city branding. Recognized “eco-city forerunners” such as Curitiba, Portland, Freiburg and Malmö are often viewed as successful examples of green city branding, and attract thousands of “policy tourists” every year (Andersson, 2015) who come to see their innovative sustainability projects. Despite this development, empirical investigations of green city branding are scarce (Andersson, 2015).

In the most recent years, it seems to have become increasingly popular to use climate change mitigation or adaptation activities as a basis for green city branding (Gustavsson & Elander, 2012; Jonas, Gibbs, & While, 2011; Joss, Cowley, & Tomozeiu, 2013). This trend is visible with various eco-cities, where climate change related projects and plans have become increasingly important, but the most obvious examples of “climate branding” are found in cities that have declared goals to become carbon-neutral within the next few decades. The planned new city of Masdar in Abu Dhabi, United Arab Emirates, markets itself as *the world’s first carbon-neutral, zero-waste, purpose-built clean technology cluster* (Abu Dhabi System & Information Centre, n.d.; Cugurullo, 2013), while Växjö in Sweden is the first city that declared the goal of becoming fossil free and has branded itself as *“the greenest city in Europe”* (City of Växjö, 2007). Copenhagen has long been one of the most ambitious big cities in terms of green branding (Anderberg & Clark, 2013), and in recent years it has become one of the trendsetters for climate city branding. During the preparations of the climate meeting COP 15 in 2009, the city not only launched the vision that Copenhagen would be the world’s most environmentally sound metropolis by 2015 but it also declared the goal of becoming carbon neutral by 2025. This goal was followed by CPH 2025 Climate Plan in 2012, which presented a road map towards carbon neutrality, and has provided the basis for the city’s climate branding. Copenhagen is a steering group member in C40, which has provided the most important international scene for exposing Copenhagen’s climate ambitions and giving legitimacy to Copenhagen’s claims of being the frontrunner among capital cities. Gustavsson et al. (p. 63) found that TMCNs offer the ‘possibility to put the city’s name on the global map, in order to stand out as a pioneer city welcoming innovative ideas, combining local economic development with reduction of GHG emissions’ and thus serve as a vehicle for green city branding intentions (Gustavsson, Elander, & Lundmark, 2009).

The aim of this article is to contribute to the understanding of how climate branding, as a form of green city branding, relates to TCMNs and how cities engage in green city branding in the context of their membership in TMCNs. The overriding question addressed is *if and how cities use their memberships for green city branding*. We deliberately chose “use” as a rather neutral term to not exclude ways or channels of green city branding. The ways in which green city branding manifests, in the context of TMCNs, is further addressed in section 2.5. The research question is addressed through an investigation of the TMCNs and German cities, which are members of

these networks. Our analysis is based upon results from: a survey, interviews, website analyses and observations during network conferences and focuses on the following questions:

- 1) What opportunities for green city branding do TMCNs, active in Germany, offer their members?
- 2) How do cities actually use their membership in TMCNs for green city branding?
- 3) What explains the observed green city branding efforts?

The article starts with a background on city branding in general and different forms of particular green city branding, which serves as a basis for the analysis, and a review of research on TMCNs and on the nexus of green city branding and TMCNs. Then follows a presentation of the methodology of the study, where we explain our analytical framework. In the next part, we present our analysis of green city branding in relation to TMCNs and their member cities in Germany, which is followed by a discussion of the results of the analysis. Finally, we present the conclusions of the study, and some implications for future research on green place branding in the context of TMCNs.

This paper exclusively investigates the potential links between network membership and green place branding, but it is worth noting that TMCNs serve many purposes. Busch (2015) presents a conceptual overview of the functions that TMCNs provide their members, which is summarised in section 2.5. Further assessments of TMCNs' impacts on local climate governance have been conducted by e.g., Davies (2005) and Hakelberg (2014).

2. Background

2.1 Place and City Branding

A positive city image attracts people, investors and enterprises. This assumption is the basis for city branding, which has become an important activity for cities around the world (Lucarelli & Berg, 2011). "Branding" is originally a business and marketing concept. Branding aims at adding value to a specific product, service or organization by differentiating them from competitors. "Place branding" (or city branding), sometimes referred to as "place marketing", "urban marketing", "city promotion", and "destination selling", has similar aims. It has the intention to increase the attractiveness of cities, regions and nations. Place branding has the longest history in terms of tourist marketing (Hanna & Rowley, 2008), but it is no longer restricted to traditional tourist destinations. Rather, "place branding" has become an important element in the development strategies for all kinds of cities and regions.

Cities and regions use different forms of branding in order to increase their attractiveness for tourists, and new inhabitants, companies and investments, as well as to create or strengthen the local identity (McCann, 2013). These intensified place branding efforts are most often explained with reference to the increasing competition between cities and regions (Andersson, 2014; Ashworth, Kavaratzis, & Wannaby, 2015). In the emerging "knowledge economy", cities increasingly compete with one another and try to attract a talented, innovative, and creative work-force (the creative class) as well as companies that employ them for well-paid jobs (Florida, 2002). A city brand is perceived as a useful tool for "entrepreneurial" city governments (Harvey, 1989) in the global arena. Ashworth et al. (2015, p. 4) suggest that place brands may also provide strategic guidance for place development, serve as a basis for cooperation between stakeholders, and as a solution to particular local problems or they might enrich the place experience for tourists and visitors. By offering a vision for a desirable future development of the city, the brand can stimulate coordinated actions and mobilise resources for steps in this direction. The branding may be launched as a solution to particular problems such as insufficient financial means for revitalization of run-down areas.

The development of city and place branding has attracted growing attention from research during the last decade. A diversified body of literature on place branding has emerged, with contributions from many different disciplines (urban studies, business and management, geography, sociology and planning) as well as consultants and practitioners. Several literature reviews on place branding and place marketing have been performed in recent years (Andersson, 2014; Berglund & Olsson, 2010; Hanna & Rowley, 2008; Kavaratzis, 2005; Lucarelli & Berg, 2011; Lucarelli & Brorström, 2013; McCann, 2009). Lucarelli and Berg (2011) identify three dominating *perspectives adopted in city branding research*:

- 1) "Branding as production" focuses on how to create and manage a brand as well as a branding process;
- 2) "Branding as appropriation" focuses on the reception, use and consumption of the brand, and the interpretation and utilisation of the branding process;
- 3) "Critical studies of city brands and branding processes" with a focus on their relations to the economic, social

and cultural context.

The third type of studies includes place branding as part of the emerging urban entrepreneurialism and place branding as an undemocratic or socially excluding process (Andersson, 2014).

The studies under these varying perspectives differ both in terms of research interests and theoretical foundations, and ontological starting-points. The overviews show both the diversity of place branding research and point towards different challenges, including lacking conceptual consistency and empirically based theoretical frameworks and models.

2.2 How City Branding Manifests

In designing a city brand, some features of a city are emphasized, whilst others are dismissed. The brand may be based on an emerging or desirable characteristic, or a vision or goal, rather than current reality, but in order to be credible and successful in the long run it needs to be backed up by consistent actions (Anderberg & Clark, 2013; Dinnie, 2010). City branding can aim at the “outside”, i.e. a wider audience outside the municipality, but it can also be aimed at the citizens within the municipality, as an attempt to create a local identity. In the following, we focus on the first form of city branding, namely, branding directed at recipients outside of the municipality. The literature describes how outward-oriented place branding often focuses on creating a double image of the city as liveable and knowledgeable.

Even if cities attempt to emphasise “unique” traits of the city, it is interesting to note that cities seem to follow certain trends when choosing branding areas and images. “Best practice” recommendations increase this tendency and result in cities adopting similar branding strategies and develop similar images (Syssner, 2012). Furthermore, the claimed positive branding effects are often questionable and cannot be supported by empirical studies (McCann, 2009; Niedomysl & Jonasson, 2012). A further problem is that much of the literature remains on a theoretical or at best descriptive level when approaching the topic. Analytical studies based on rich empirical data are scarce (Andersson, 2015). As a result, many conclusions about branding are based on assumptions. This becomes particularly obvious when looking at the assumed intentions behind city branding. We will engage more with the question of branding intentions in section 6.2.

2.3 The Many Faces of Green City Branding: Eco-Cities, Green Place Marketing and Sustainability Branding

Marin-Aguilar and Vila-López (2014) suggest that two strategies for improving the city brand are gaining importance: firstly *experiential marketing*, by arranging “unforgettable experiences” such as mega events and secondly *green marketing*, by focussing on ecologically orientated policies.

Sustainable urban development or greening of the city has increasingly been presented as an opportunity for cities (Puppim de Oliveira et al., 2013). In different parts of the world, cities have in recent decades introduced sustainability initiatives. In connection with recognized sustainable city forerunners such as: Curitiba, Freiburg, Copenhagen, Portland, and Melbourne, it is often claimed that their efforts have had significant economic spin-offs, in terms of stimulating an emerging green economy and an increasing flow of green tourism with visitors coming to view, learn and be inspired by the local initiatives (Bouteligier, 2013).

There are several ways in which cities can use green or sustainability issues for place branding purposes. The first is to focus on liveability and the second is to focus on green-tech and policy. A third option, which is more recent and definitely more challenging to conceptualise, is the framing of the city as having a low impact on the environment. These different approaches are not mutually exclusive but instead they are often complementary, and occur at different aspects of a city’s efforts to communicate its sustainability strategy.

Liveable cities:

The positive link between green areas and human well-being in urban areas has been scientifically established (Chiesura, 2004; Tzoulas et al., 2007). Many cities have understood that “greenness” can be used as a branding tool, and marketed the city as “liveable” and thus attractive for inhabitants, companies and visitors (Insch, 2011). In general, this approach has not focused on the actual environmental impact of the city but solely the well-being of its inhabitants and visitors. Questions of emissions or impacts of domestic consumption seem secondary if not negligible. Environmental measures that are mentioned include the expansion of green areas, roof gardens and vertical gardens and the restoration of ecosystems within or close to the city limits (Dinnie, 2010). Technologies and policies that actually address global environmental impacts are mostly chosen for their impact on the local environment, e.g., lower emissions of pollutants or noise and health benefits that follow switching from car to bike. Alleviating climate change, it seems, is only mentioned as a bonus or something that became apparent in the ex post evaluation of projects (Busch & McCormick, 2014).

Knowledgeable cities:

In Europe, the economic potentials of green technologies have been actively pursued since the 1990s via policies linking environmental policy to national and regional development strategies. Environmental investments, alternative energy and other projects have been introduced to stimulate economic growth and competitiveness by the development of a strong, green technology sector (Anderberg & Clark, 2013). Local authorities often widely advertise outstanding projects. Examples of this kind of branding can be found all over Europe, especially in places that have implemented ambitious green economy projects, e.g., renewable energy projects. Güssing (Austria), Samsø (Denmark) and Feldheim (Germany) have all invested in infrastructure to accommodate guests who want to learn about renewable energy, while Prenzlau (Germany) claims the title “city of renewable energies” (Busch & McCormick, 2014). Another example is the city of Växjö in Sweden, which tries to increase its attractiveness through promoting its eco-businesses (Emelianoff, 2013). This attractiveness is used to lure policy tourists into visiting the city but also to put Växjö on the map of bodies that decide on the funding of future climate projects (Gustavsson et al., 2009).

Low-impact cities:

A third way that cities can use green or sustainability issues for place branding purposes can be seen in the efforts of some cities to reduce their environmental impacts. Cities have always been places of intense material (Anderberg, 2012) and carbon flows (Bulkeley, Castán Broto, Hodson, & Marvin, 2013). This has made cities sources of waste, not least in the form of greenhouse gas emissions. With the acceleration of climate change, the need for urban low-carbon transitions has become more and more urgent. Spear-heading this development (e.g., by hosting and developing urban labs) can attract international attention and can help by developing local know-how (While, 2013) which in turn increases the city’s image as “knowledgeable”. However, the low-impact criterion brings about specific advantages, independent from the other two other categories. If a city is a leading pioneer in the field of low carbon transitions, companies might be attracted to the city because of the high local standards that provide a clearer planning frame. The impact of potentially disruptive, national legislation might thus be attenuated. Certain companies might also try to free-ride on the low-impact reputation that a city has built. For citizens, a city that enables a low-impact lifestyle (irrespective of liveability) might be an important criterion. Cities might adopt a low-impact image to strengthen the local identity. Finally, cities might be interested to present their success to funding bodies like the EU to attract funding for further projects (Gustavsson et al., 2009). This approach is linked to city branding, directed at communicating inwards (see section 2.2) (Middleton, 2011).

2.4 The Green Entrepreneurial City

Much of the literature on place branding sees the dominating reasons for city branding-activities as a result of the need for cities to compete globally (Bouteligier, 2013; Brand, 2007; Gulsrud, Gooding, Konijnendijk van den Bosch, & Bosch, 2013). Insch describes it as “a sense of urgency” that “grips” city authorities and makes them create a brand for their city (Insch, 2011, p. 8). The phenomenon of city branding demonstrates how the role of city authorities nowadays involves the active creation of a place that attracts resources. Thus, these activities have to be seen as a manifestation of the entrepreneurial thinking that nowadays dominates urban policies and which are the result of a neoliberal agenda (Brand, 2007).

In his very influential article ‘From managerialism to entrepreneurialism: The transformation in urban governance in late capitalism’ David Harvey describes the conditions under which the role of city administrations have changed. When, in the past, city authorities were mostly occupied with managerial tasks, e.g., the provision of infrastructure, they nowadays engage much more in activities to ‘try and attract external sources of funding, new direct investments, or new employment sources’ (1989, p. 7). The main driver for this development was the increasing competition that arose between cities in times of drastic transformation of the industrial sector in developed countries in the 1970s and 80s. This trend was made possible by the increasingly free flow of mobile capital. This entrepreneurialism is marked by public/private partnerships and a strong focus on projects that emphasis the improvement of living or working conditions within a certain jurisdiction (Harvey, 1989). It is not only branding activities that are suspected to be part of the neoliberal agenda that forms the basis for urban entrepreneurialism, but also sustainability policies per se. Holgersen and Malm find that in the case of Malmö (Sweden), sustainability policies have been used as a “green fix” to address the city’s economic decline. The goal of this green fix is not the reduction of the city’s environmental impact for altruistic reasons, but the mobilisation of resources for the revitalisation of the local economy (Holgersen & Malm, 2015).

Such a neoliberal, entrepreneurial mind-set would have an impact on green policies and the communication of these policies. This means that green urban policies are aimed at increasing the attractiveness of the city and not

at reducing the environmental impact. As a consequence, the main priority for decisions in this policy field is how well a measure can be marketed, rather than the actual environmental benefits. Another consequence is that the communication of these policies is directed at companies, tourists and potential new inhabitants. Bouteligier raises the question if the “retrofitting of a municipal building, the creation of a zero-emissions neighbourhood, or the redevelopment of the waterfront in the historic centre” are the “projects that will transform the world’s current urban areas in more sustainable living environments” (Bouteligier, 2013, p. 94). However, these measures help the cities to portray themselves as innovative “sustainability hubs” (ibid). One of the most astonishing examples of this is doubtlessly the “Eco-City” Masdar in the United Arab Emirates. The planners of Masdar aim at constructing a waste and carbon free city with a sophisticated public transport system (Sanford, 2010). Ironically, the public transport system conveniently connects the city to the close-by Abu-Dhabi International Airport through a regular train service.

Checker goes one step further by arguing that sustainability efforts that focus on branding a city might not only produce suboptimal results but that they can be outright harmful for sustainability in a broader sense. She argues that projects labelled as sustainable can foster “environmental gentrification” which is high-end development that appears to be environmentally sound but in essence only serves profit-maximising interests. Such a development of course compromises social justice and leads to the displacement of poor inhabitants to less well-off neighbourhoods (Checker, 2011).

However, it must be questioned if this negative view on urban sustainability initiatives is justified and if the motives behind sustainability policies of cities are indeed only an expression of a neoliberal agenda.

2.5 Transnational Municipal Climate Networks

The emergence of transnational governance has been thoroughly addressed by academic scholars, especially from Political Science, and more specifically those focusing on international relations. Transnational governance describes a process in which actors other than nation states take action in an international arena (Andonova, Betsill, & Bulkeley, 2009). While there is a multitude of transnational actors (e.g., corporations, regional governments, NGOs) and forms of networks (regional municipal networks like the Union of Baltic Cities or transnational lobby organisations), this article exclusively focuses on formal transnational municipal networks with an explicit focus on climate change issues.

Definitions of TMCNs have been provided by Keiner and Kim (2007), Kern and Bulkeley (2009) and Busch (2015). According to Kern and Bulkeley TMCNs have to fulfil three criteria: a) membership in these networks is voluntary, b) networks are characterised by a polycentric set-up and consequently are self-governed and c) they fulfil more functions than only lobbying but they help their members to implement policies. Busch (2015) adds two criteria. First, TMCNs need to have more than two members, meaning that a partnership between two cities does not constitute a network. Secondly, TMCNs need to have a certain degree of formalisation and institutionalisation. This means that upon joining a network, cities gain access to certain rights (and in most cases obligations) and that the networks themselves gain agency through a formal status and infrastructure (staff, offices and headquarters).

Busch (2015) presents a conceptualisation of functions that TMCNs offer their members. These are: consultancy, advocacy, commitment brokering and networks as platforms. Consultancy refers to tools and advice for local governments, provided by the networks’ own formal infrastructure. An example of the kind of consultancy that a TMCN might provide is greenhouse gas emission accounting software or packages, for implementing climate activities with the local population. The advocacy function refers to the work of representatives from the networks in raising the issue of local climate governance to higher administrative levels such as nation states or the EU. The third function of commitment brokering occurs when networks compile, manage and publish emission inventories of their members. The idea behind this is that municipalities are more likely to live up to their voluntary emission reduction commitments if their progress (or underperformance) is communicated publically and when one city’s progress is embedded in a narrative of a wider climate movement. The last function of networks as platforms, describes the space and channels that networks grant their members, to present their own profile, best practice and success stories. This can be membership profiles on webpages, conference presentations, brochures or newsletters. The last two functions (commitment brokering and networks as platforms) offer member municipalities the possibility to present their efforts to a wider audience of other cities and interested experts. (Busch, 2015)

2.6 Green City Branding and TMCNs

The scientific community has, up to now, only indirectly taken interest in the link between branding and TMCNs, but it has identified several activities and functions of TMCNs that may contribute to the green branding of cities.

Zeppel identifies certification (e.g., through ICLEI's Cities for Climate Protection Programme) and attracting low carbon industry investments, as two drivers for municipal climate policies (Zeppel, 2013), and another link is found in inter-municipal learning. Pioneering cities may acquire a "teacher" status that builds on the city's expertise in the context of TMCNs. "High levels of policy performance" attracts "information seekers" (Lee & van de Meene, 2012). So high-performers can expect more delegations from other cities and eco-tourists.

Bouteligier finds that the C40 network has actively used its potential to provide a public platform to attract new members (2013). Cities that are interested in presenting themselves as leaders can use this platform for green city branding purposes within and outside of the network (Bouteligier, 2013). Hakelberg investigates the case of Hannover (Germany). He finds that the city used its membership in CCP to present its progressive climate policies. Thus the city was able to "get rid of its mediocre image" and present itself as innovative climate pioneer (p. 61f). This was necessary to live up to high expectation that arose through the city's status as the host for EXPO 2000. However, these efforts were also perceived by the city as an attempt to attract high-tech business and highly qualified personnel (Hakelberg, 2011).

3. Hypotheses

Green city branding has become more common. City branding is often directed towards "the outside", and cities are increasingly active in city networks, which form an important part of the external relations of cities. Therefore, it can be expected that the participation of cities in transnational climate networks is related to the development and communication of city brands. Based on this, we formulated the two hypotheses that guided our research:

"German cities widely use channels provided by TMCNS to communicate their green city brands."

"German cities widely use their membership in TMCNs as a component of their green city brands."

These hypotheses do not imply that other functions of networks as described in section 2.5 do not occur or are not used by cities. However, this paper explicitly focuses the aspect of place branding and TMCNs.

4. Methodology

In order to answer the research questions and approach the hypotheses, we developed a research design that would help us to identify green city branding efforts amongst German cities and their work with TMCNs. Empirical material was gathered in the form of material disseminated by TMCNs and member cities (webpages, presentations at network conferences and brochures). These data were complemented with an online questionnaire that was sent to all German cities that hold membership and have more than 50 000 inhabitants (n=135, responses 61 [response rate 45%]). The questionnaire entailed questions on TMCN membership and the content and communication of local climate policies. In addition we conducted field-visits in four German cities (Bielefeld, Bonn, Hannover and Frankfurt am Main) and held six semi-structured interviews with personnel responsible for work that the cities' administrations had with the networks we identified for this research. These four cities were chosen because many respondents to the survey had named them as particularly visible and good practice examples. We also gathered further information from former and current staff of TMCNs.

We analysed the material in a step-wise approach, by slowly shifting the focus from the networks and their activities towards the cities and their respective activities. Thus, we attempted to cover many different ways in which green city branding, in the context of TMCNs, may occur.

5. Analysis

5.1 TMCNs in Germany

TMCN memberships are widespread in Germany, with 488 local governments holding membership in at least one network. These local governments are home of more than half of the German population. The quantitative analysis shows that big cities are not only more likely to join a TMCN, but they also are more likely to be a member in several networks simultaneously, compared to small cities or rural municipalities. (Busch, 2015)

We started our investigation by identifying the transnational networks with an explicit focus on climate issues that are active in Germany (see Table 1). Networks such as ICLEI, with a wider focus on sustainability issues, were not included. Through an analysis of the networks' profiles, based on an investigation of their webpages, service, activities and materials, we categorised the networks according to their green city branding potential. The criteria for this categorisation were:

- Exclusivity (open only to certain cities),
- Internal differentiation (grouping of cities according to performance),

- Space to display member profiles on network homepages,
- Provisioning of other network functions,
- Confidentiality (whether networks had exclusive sections on their homepage which can only accessed by members).

Two networks stand out: the C40 network and the UNISDR “Making Cities Resilient: 'My City is Getting Ready!' Campaign” (in the following “Resilient Cities”). Both these networks practice an internal differentiation of their members by awarding special status to good performers. Other network activities such as “providing a consultancy service” are rather underdeveloped in comparison to other TMCNs (Busch, 2015). When it comes to confidentiality, both networks do not have a separate “members-only section”, meaning that all information is available to the public. This might indicate that the internal communication between members is not prioritised. Furthermore, both networks offer space on their webpages, which members can use to present their climate policies. While members of C40 seem relatively unrestricted in what they are allowed to present, Resilient Cities uses a template to bring member profiles into the same format. On top of that, C40 claims to be an exclusive network of pioneering cities, which display leadership in questions of climate change. See Table 1 for more details and information on other networks.

These two networks are not widely proliferated in Germany. C40 has two German members (Berlin and Heidelberg) and the Resilient Cities network has one (Bonn). The network with the widest proliferation in Germany (Climate Alliance, 466 members) does not have a very strong focus on city branding activities, but it still offers its members space to present their climate policies.

Eight out of the nine TMCNs refer to branding-related activities when describing the advantages that cities gain upon joining. Despite its high branding potential, C40 does not mention branding-related advantages. Mayors Adapt and the WMCCC list branding or branding related aspects as their first advantage. In the case of WMCCC, this probably has less to do with green city branding but more with appealing to the vanity of mayors to attain “global recognition as a sustainability leader”. WMCCC is a network of local mayors and not of cities.

Table 1. TMCNs in Germany

Network	Exclusiveness	Internal differentiation	Other network functions	Confidentiality	Space to present climate policies
C40	Yes	Climate Leadership Awards; Steering Committee, Innovator, Mega or Observer City	Medium	No	High
Cities for Climate Protection Program (CCP)	No	City of Ambition	High	Yes	Low
Climate Alliance	No	Climate Star	High	Yes	High
Covenant of Mayors	No	No	High	Yes	Medium
Energy Cities	No	No	Medium	Yes	High
World Mayors Council on Climate Change (WMCCC)	No	No	Medium	Yes	Low
The Making Cities Resilient: 'My City is Getting Ready!' Campaign	No	Role Model Cities	Medium	No	Medium
Mayors Adapt	No	No	Medium	Yes	Medium

Notes. Exclusiveness: A network is considered “exclusive” if acquiring membership is only possible when municipalities fulfil certain requirements (e.g. demonstrate their leadership in the context of climate policies).

Internal differentiation: Some networks differentiate internally between their members by assigning certain categories to high-performers.

Display of members’ profiles: Some networks offer their members the possibility to present their policies and projects. Some provide space for the members to present themselves as they see fit while others only provide a predefined profile page.

Other network functions: This characteristic refers to how networks perform in other network functions as identified by Busch (2015).

Exclusive web content: The fact that some of the web content is not available to everybody might be a hint that the network focuses on more than just spreading the branding message for their members.

Space to present climate policies: low: public membership list; medium: + predefined templates to present city are available; high: + individual member pages with detailed description

5.2 Branding through TMCNs

According to our survey results, the majority of German cities actively presented their climate work in the context of TMCNs (>58%). The most important channels were network conferences (38%) and city websites (32%) followed by printed leaflets (11%). 74.5% replied that they had learned about the climate work of other municipalities through the networks. The four most important media outlets for learning about other municipalities were: conferences (62%), websites (31%), newsletters (18%) and leaflets (9%) (multiple answers were possible). Cities that were named as particularly visible in the networks were: Frankfurt, Bonn, Munich, Freiburg, Bielefeld, Hannover and Münster. 58% of all respondents reported that they knew about visitors who had come to their city because of the local climate work. The most common group of visitors was staff from other municipalities (45%), politicians from the region (42%), foreign delegations (42%), interested citizens (24%) and scientists (12%). Only one city reported that they had been visited by a company (which is half as often as regional church groups who visited two cities).

To investigate how green city brands play out in practice, we analysed all 44 available websites from different networks that offer their members the opportunity to present themselves through a member profile. A criterion for websites to be included in this analysis was that they had to offer sufficient space and freedom for cities to present a clear brand. Simple factsheets with, for example emission inventories, were not taken into consideration. The distribution was as follows: Climate Alliance 41; C40 2; Resilient Cities 1.

Of the 44 city profiles, 17 presented some kind of coherent description that resembled a brand with distinct brand attributes (Dinnie, 2010). However, when comparing with the cities' official websites, only 8 of these were confirmed through consistent information. We then analysed the presented city profiles in relation to the three components of green city branding. 40 cities presented themselves as low-carbon, 23 as knowledgeable and 13 as liveable. Surprisingly, we encountered 8 municipalities, which presented alternative green brands on their own websites, which were not reflected in the cities' membership profile. For example, the city of Augsburg uses the slogan "Umweltstadt Augsburg—Kompetenz und Engagement" ("environmental city Augsburg—competence and engagement"). Despite this clear reference to being "knowledgeable" the membership profile at Climate Alliance only presented the city as "low-carbon".

41 of the 44 city profiles were located at the Climate Alliance webpage. The remaining 3 were at C40 (Berlin, Heidelberg) and Resilient Cities (Bonn). C40 and Resilient Cities scored fairly high in our evaluation of their green city branding potential. Berlin and Heidelberg both use their membership pages on the C40 website to present case studies from their cities. A clear overarching brand is not visible in the case of Berlin, which only presents case studies that underline the innovative character of the projects. Heidelberg does not employ a clear name for their brand, but presents the city in a coherent manner, as a forerunner in climate issues. This image is confirmed through documented emission cuts. What is remarkable is that both pages have not been updated since November 2011.

Resilient Cities, together with C40, displayed a high potential for place branding. Bonn is the only German member of this network. In the short text of Bonn's member profile, the city is portrayed as a place that has attracted many UN organisations and NGOs, which are active in the field of sustainability. This is consistent with the information that we gathered during our interviews with staff members of the city. However, the brand of Bonn as a hub for NGOs is not directly related to questions of local climate policies. Bonn also holds the status of a "Model City" within the network. Cities are recognised by UNISDR as model cities after they have been nominated. According to the C40 webpage, these cities 'must show innovation, sustained results in reducing disaster risk and must be interested to showcase results.' Amongst other things, Model Cities have to 'prepare audio-visual material presenting innovative solutions for urban risk and local risk reduction, and organizing policy dialogues'. However, just like Berlin and Heidelberg in C40, the information about Bonn on the campaign's webpage has not been updated since 2011.

The webpages of C40, Resilient Cities and Climate Alliance do not present any information on the management of the member profiles. C40 and Resilient Cities did not reply to our inquiry on this issue. However, a former staff member informed us that updating the network's webpage is not a main priority. Some texts on the webpage have not been updated for many years. Climate Alliance informed us that the members do not update their profiles independently. Updates of some member profiles are done on a monthly basis. Members can of course send updates and new projects to Climate Alliance, but this happens rarely. Mostly, it is the network's staff who initiate the profile updates for its members.

5.3 Communication of Climate Policies

During our interviews with administrative staff of German cities, we asked about the recipients who received the

communication about municipal climate work. 5 out of 6 interviewees reported that the cities' inhabitants were the first and most important recipients. However, this communication was not about creating an identity or image, but to mobilise people for climate friendly activities and behaviour. A second reason for prioritising citizens was that the municipalities work needs to be communicated for accountability reasons, as the environmental or climate departments receives public funding. Furthermore, re-election of politicians with an ambitious climate agenda is in the interest of the administration, which in turn can support these politicians by stressing the success of respective policies and programmes.

According to our informants, communicating climate work in the context of TMCNs was mainly directed at peers from other municipalities. This information fits well with the results from the survey, which showed that conferences were very important for the communication of climate work. Here, the focus lies on helping colleagues in other municipalities to improve climate work. Observations from network conferences confirmed that these were mostly visited by staff from municipal administrations.

An exception in this context is the city of Bonn. While an employee from the climate department (responsible for the work with Climate Alliance, Covenant of Mayors and Resilient Cities Campaign) confirmed the described picture, a different employee from the Department of International Affairs and Global Sustainability (responsible for WMCCC) expressed the importance of making Bonn known internationally. For this department, the work with TMCNs is, amongst others, one way to distinguish as a competent city when it comes to conferences and cooperation. This helps the city to compete for hosting international conferences or organisations. Two examples are ICLEI—Local Government for Sustainability and the United Nations Framework Convention on Climate Change (UNFCCC) secretariat, which are both located in the city.

5.4 Membership as Brand Attribute

We analysed the websites of all German cities with more than 50 000 inhabitants, which are members in at least one TMCN, to see if and how the membership is displayed and if it is part of creating a green city brand. We then categorised the display of membership into: “visible”, “hidden”, “invisible” and “not mentioned”. We applied the “visible” category if city websites had a specific section (either paragraphs with heading or separate pages) on one or several of the TMCNs, or if they used any of the logos of the networks on their websites. We used the “hidden” category if websites mentioned one or several of the networks without dedicating specific paragraphs or sections to them. Memberships were labelled as “invisible” if reference to network membership could not be found on the permanent pages of the city website, but if network membership was referred to in documents such as decisions of the local parliament, financial reports or old press releases. The “not mentioned” category was applied if a thorough analysis of the city website and use of the search function did not yield any positive results. Search terms were the German and English name of the network that the cities were members of. We then analysed if the way in which membership is displayed is part of a coherent green place brand.

Out of all of the 130 city webpages, 42 (32%) displayed their membership visibly, in 37 cases (28%) the membership was hidden, 21 (16%) cases were categorised as “invisible” and 30 (23%) did not mention the membership at all. We did not find a single case in which membership was mobilised as an element of a coherent city brand. This is even more surprising when considering that we identified two cities that utilise green topics for their city brand. Castrop-Rauxel (“Europastadt im Grünen”—something along the lines of “European City surrounded by Nature”) is member of Climate Alliance, however, we could not find any trace of this membership on the city's webpage. Grevenbroich (“Bundeshauptstadt der Energie”—“Federal Capital of Energy”) does not directly refer to its membership in Climate Alliance on their webpages, but we found proof of the membership in the city budget for the year 2014. Consequently, we categorised this case as “invisible”. In summary only about 1/3 of all German cities with membership in any of the eight networks displayed their membership visibly and membership does not play any role in the creation of exclusive green city brands.

Finally, we investigated if cities present their climate work in a way that can be interpreted as a separate brand or side-brand and what role TMCNs played in this context. We defined side-brand as a brand that does not represent the entire city, but only one specific field, which is then used as a separate brand. Our search for campaign pages and potential side-brands identified seven campaigns that can be identified as side-brands (Table 2). Again, TMCNs did not play a crucial role in the creation of these side-brands. Furthermore, the fact that these webpages were nearly exclusively in German indicates that they were not designed to inform an international audience.

Table 2. Side brands of German cities

City	Side Brand	Steps in navigation until user hits reference to TMCN membership	Language
Frankfurt am Main	Frankfurt Green City	2	German, some parts in English but not the part referring to TNCMs
Rheine	Klimaschutz Rheine Gemeinsam Zukunft gestalten	1	only German
Bamberg	Klimaallianz Bamberg	3	only German
Tübingen	Tübingen macht blau	Membership not mentioned here	only German
Ludwigsburg	Wissenszentrum Energie	Can only be found by downloading a pdf version of the climate strategy	only German
Aalen	Aalen schafft Klima	2	only German
Herten	Gemeinsam für's Klima	Membership not mentioned here	only German

Note. Table 2 displays the side brands we identified from cities' homepages.

6. Discussion

6.1 Where Are the Brands?

Our analysis produced little proof of an active and widespread engagement of German cities in green city branding activities in the context of TMCNs. This result is surprising because the literature on city branding generally describes the situation as cities being pressed into branding activities—as *Insch* puts it: “a sense of urgency grips many city authorities to create a brand for their urban place” (*Insch*, 2011, p. 8). Bearing this in mind, one would expect more activities by German cities in this field, as German cities have a lot to show due to their long climate work experience. Furthermore, TMCNs, in theory, offer a great channel to convey cities' branding messages or alternatively, membership could be used as brand attributes. Instead, cities use their membership in TMCNs to communicate their climate policies to peers in other municipalities and local inhabitants.

Based on the results of this research we conclude that both hypotheses have to be rejected. In the following we present a number of themes that emerged from this research, which can serve as explanation for the discrepancy between our hypotheses and our findings.

6.2 Intentionality

The literature on place branding generally presents a rather straight forward understanding of green policies: they are a) being implemented to increase a city's attractiveness and are b) then communicated through an intentional branding strategy. However, the research conducted for this paper raises questions about both these points.

In the context of green spaces, *Braiterman* states that “branding a city as green requires bold action” (*Braiterman*, 2011, p. 77). This statement reveals an underlying assumption of branding literature that is so prevalent that it can be called a systematic mistake. This assumption, which is fully in line with the perception of city authorities as entrepreneurs, is that all action is taken solely for the purpose of branding. Why would it take “bold actions” to brand a city as green if the city already IS green? But if the city already is green prior to the implementation of branding measures, one needs to accept the thought that there might be other reasons for policies that can after their implementation be used for branding purposes.

This observation is confirmed by *Busch & McCormick*, who describe success cases of decentralised energy applications in German villages (*Busch & McCormick*, 2014). In these cases, branding was not an initial intention of climate policies, but emerged in the aftermath of successful projects. They also find that local mayors did not base branding efforts on strategic decisions, but that they were faced with demands to accommodate interested guests (international delegations, regional politicians, journalists and not least scientists). This was confirmed by our data. With the possible exception of parts of *Bonn's* work with TMCNs, none of our informants talked about branding strategies. One informant even spoke about the need to restrict the number of foreign delegations that visit the city and so the city administration introduced a policy that would only allow official visits from partner cities. The reason for this is that official visits bind resources from administrative staff,

which the administration needs, in order to fulfil their “actual” job of working on local climate issues. Also, economic advantages for the local economy are rather limited, as many of the visiting delegations are exempt from paying VAT. This example shows that what might appear to be a branding effort, might just be an attempt to live up to external expectations.

A further interesting aspect, with regard to intentionality, is revealed if the historic development of climate policies in Germany is taken into consideration. Many German cities have a long-standing history when it comes to local climate policies of 20 years or more. This means that the topic of climate change was taken up by German cities long before it had become a “sexy” topic that was useful for green city branding. This fact stands in stark contrast to the assumed motives of place branding literature, namely, making the city more attractive to investors and qualified inhabitants.

6.3 Green Policies as a Political Act

The literature on green city branding depicts green policies as motivated by branding considerations. Our research rejects this idea for the overwhelming majority of German cities. But if it is not branding, then what makes cities implement green policies or ambitious climate work? Bulkeley addresses this question to some degree by pointing at the sense of voluntarism by cities, which shaped early adoptions of local climate policies (2013, p. 74). As explained above, the cities we visited during our fieldwork emerged as success cases from our survey. When asked about reasons for their efforts, our informants referred to the urgency of climate change and the pressing challenges of decarbonising our cities. Emelianoff confirms our findings by pointing out that studies of local energy transitions often underestimate the role of political motivation (Emelianoff, 2013).

Many, if not all decisions that are taken by city authorities are political in nature. This means that policies can be motivated by different factors and not only by an entrepreneurial agenda. Local politicians such as mayors or members of city parliaments can be in favour of green policies because these are part of pre-election promises or simply because local politicians want to do “the right thing” and live up to “environmental responsibility”. However, the literature on city branding seems to see these measures exclusively as part of branding efforts. This is problematic, not only because researchers might be looking for the wrong motivation for policies, but also because it depoliticises political acts and reduces them to decisions, based on an entrepreneurial agenda without normative foundation.

6.4 Recipients

When it comes to the communication of these efforts, what appears to be a coherent branding strategy, might indeed be the communication of a coherent climate strategy. Who are then the intended recipients of this communication? The data suggests that most of the communication is directed either at peers in the administration of other cities (external) or the respective city’s inhabitants (internal).

The literature on city branding claims that cities are eager to attract new citizens with high human capital, as they will probably be good taxpayers. The presentation of the city should thus focus on the city’s attractiveness for a specific (creative) class (Florida, 2002). On their profile website at Climate Alliance, the city of Nürnberg presents the city’s “Energy Debt Prevention Programme”. This programme helps poor households to implement energy efficiency measures to avoid energy related debt. Such a programme seems neither a very promising way of attracting the creative class nor a manifestation of the entrepreneurial agenda that the literature attributes to city administrations.

Our investigation of cities’ side brands (Table 2) showed that most homepages are directed at the local population by providing links to local climate programmes (e.g., subsidies for energy-efficient refurbishment of residential houses or financial support for renewable energy appliances). The pages were nearly exclusively in German (except for parts of Frankfurt’s page) and did not seem to be aimed at big corporations, mobile capital or highly qualified future citizens. Rather, the communication of local climate policies predominantly serves as a mobilising narrative for the local population and not as bait for mobile capital on an international market.

6.5 Uniqueness vs. Best Practice Dilemma

As pointed out above, the literature on city branding sees the main motivation for green policies, and branding activities in particular, as part of a general constellation of competition between cities worldwide. However, a core idea of the networks that we investigated for this research is the notion of cooperation. This is particularly true for climate change mitigation measures, which only become effective if many contribute in similar ways. In the context of TMCNs this need for cooperation is covered by what Busch calls the “commitment brokering function” (2015). This function is taken up by all the networks that are both active in Germany and have a mitigation component as part of their portfolio (especially the two biggest ones: Covenant of Mayors and

Climate Alliance). Cities aspire to create a brand based on a unique status, but do so by presenting best-practice, which in turn is supposed to be taken up by other cities, thus undermining the established uniqueness (Insch, 2011). Thus, standardisation, which is desirable in the context of climate change mitigation policies, becomes a threat to the city's brand. In this context, McCann (2013) questions if the reasons for communicating policies and presenting a city's success are purely driven by egoistic branding considerations. Or as he puts it 'many city leaders and other powerful urban policy actors seem to be driven by a desire to be leaders as well as winners' (p. 20) in a global competition (McCann, 2013).

6.6 TMCN Membership as Brand Attribute

As pointed out earlier, our data showed very little indication for the use of network membership as a brand attribute. While a good share of the investigated cities displayed their membership on city webpages, a coherent brand was only encountered in the case of Bonn. However, the brand of Bonn was not directly concerned with green issues but focussed on presenting the city as hub for NGOs. Even cities that are: members in many networks, have many years of experience with climate policies and are known internationally for their climate policies, do not use the network membership for branding purposes. For example, we classified Freiburg im Breisgau as "invisible" as we could not find any information on TMCNs on the main webpages of the city. At the same time, Freiburg is a member of 5 TMCNs simultaneously. The results of investigating the side brands of cities (Table 2), mostly confirmed this observation. It seems that TMCN membership is not something that German cities use for branding purposes. In this context, it is interesting to note that membership to the European Energy Award (EEA) was in many cases displayed more visibly. However, we do not have sufficient data to present a comparison between visibility of EEA membership and TMCN membership.

7. Conclusions

To conclude, our research indicates that either the majority of German cities do not actively engage in green city branding activities in the context of TMCNs, or they are doing a terrible job of it. Very few cities show distinct branding efforts. Despite the potential that TMCNs offers for green city branding, we had to reject both hypotheses. This is surprising as the literature on green place branding raises expectations that contradict our findings. A number of explanations for this discrepancy emerged from our research.

Our data revealed very different motivations for the communication of climate policies from what the literature suggests. Cities may not always be happy to be visited by yet another delegation, to learn about the outstanding local climate policies. Presenting the city's green policies can thus, in some cases, be traced back to reducing external visitors, as all information can be found online. We also found very little indication for the "sense of urgency that grips many city authorities to create a brand for their urban place" (Insch, 2011, p. 8). Literature from the field of branding and marketing depicts green city branding and green policies in general as acts that are exclusively motivated by an entrepreneurial agenda, which aims to attract mobile capital. This drastically oversimplifies the political and social realities of cities. During our investigation, we did not encounter a single case where green policies were motivated by entrepreneurial arguments. Furthermore, our research shows that what could be interpreted as green city branding is, in almost all cases, directed at the local population. All in all we encountered less indication for an entrepreneurial agenda than we expected.

These findings have of course consequences for research conducted in the field of green city branding. Our research underlines the importance of carefully considering the local conditions and involving qualitative data that sheds light on the motives behind alleged branding. An interesting starting point for future research could be to look into the internal decision making processes of cities in the context of TMCN membership and green city branding. Who initiates membership with which motives and how is membership used afterwards? Our research points at a great variety of ways of dealing with TMCN membership amongst German cities. However, we had to adjust the scope for this article so that the issue became manageable. This resulted in an over-simplification with regard to how cities, as actors, were handled. We treated cities and their administrations like coherent actors who take straightforward decisions and implement policies in a coherent manner without encountering internal conflicts. We of course acknowledge that this is not the case and that cities are a political space where different interests collide—even within a cities administration. A reoccurring theme during our research was the question of who takes the decision to join a network. In some cities, like Frankfurt (Main), the administration commands a high degree of autonomy when it comes to these decisions. In other cities, political bodies take these decisions. This can cause some friction as, for example, some mayors have the ambition to present their city through the network while the staff, who have to execute the daily climate work, use the networks for different purposes. Our data showed very little indication for a strong desire of staff to engage in branding efforts, but again, Bonn is the exception.

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References

- Abu Dhabi System & Information Centre. (n.d.). *Masdar City*.
- Anderberg, S. (2012). Natural Resource Flows and Sustainability in Urban Areas. In *Encyclopedia of Sustainability Science* (pp. 6853-6864).
- Anderberg, S., & Clark, E. (2013). The green and sustainable Øresund region: Eco-branding Copenhagen and Malmö. In I. Vojnovic (Ed.), *Sustainability: A global urban context*. East Lansing: Michigan State University Press.
- Andersson, I. (2014). Placing place branding: an analysis of an emerging research field in human geography. *Geografisk Tidsskrift-Danish Journal of Geography*, (March), 1-13. <http://dx.doi.org/10.1080/00167223.2014.895954>
- Andersson, I. (2015). *Geographies of Place Branding—Researching through small and medium sized cities*. Stockholm University.
- Andonova, L. B., Betsill, M. M., & Bulkeley, H. (2009). Transnational Climate Governance. *Global Environmental Politics*, 9(2), 52-73. <http://dx.doi.org/10.1162/glep.2009.9.2.52>
- Ashworth, G. J., Kavaratzis, M., & Wannaby, G. (2015). The need to Rethink Place Branding. In G. J. Kavaratzis, M. Warnaby, & G. Ashworth (Eds.), *Rethinking Place Branding: Comprehensive Brand Development for Cities and Regions* (pp. 1-12). Heidelberg: Springer.
- Berglund, E., & Olsson, K. (2010). Rethinking place marketing—a literature review. *50th ERSA Congress*, 1-19.
- Bouteligier, S. (2013). *Cities, Networks, and Global Environmental Governance: Spaces of Innovation, Places of Leadership* (Vol. 1). Abingdon, Oxon: Routledge.
- Braiterman, J. (2011). City Branding through New Green Spaces. In Keith Dinnie (Ed.), *City Branding—Theory and Cases* (pp. 70-81). Basingstoke: Palgrave Macmillan.
- Brand, P. (2007). Green subjection: The politics of neoliberal urban environmental management. *International Journal of Urban and Regional Research*, 31(September), 616-632. <http://dx.doi.org/10.1111/j.1468-2427.2007.00748.x>
- Bulkeley, H. (2013). *Cities and Climate Change*. London: Routledge.
- Bulkeley, H., Castán Broto, V., Hodson, M., & Marvin, S. (2013). Introduction. In H. Bulkeley, V. Castán Broto, M. Hodson, & S. Marvin (Eds.), *Cities and Low Carbon Transitions* (Revised pa., pp. 1-10). Milton Park: Routledge.
- Busch, H. (2015). Linked for action? An analysis of transnational municipal climate networks in Germany. *International Journal of Urban Sustainable Development*, (July), 1-19. <http://dx.doi.org/10.1080/19463138.2015.1057144>
- Busch, H., & McCormick, K. (2014). Local power: exploring the motivations of mayors and key success factors for local municipalities to go 100% renewable energy. *Energy, Sustainability and Society*, 4(1), 5. <http://dx.doi.org/10.1186/2192-0567-4-5>
- Checker, M. (2011). Wiped Out by the ‘Greenwave’: Environmental Gentrification and the Paradoxical Politics of Urban Sustainability. *City & Society*, 23(2), 210-229. <http://dx.doi.org/10.1111/j.1548-744X.2011.01063.x>
- Chiesura, A. (2004). The role of urban parks for the sustainable city. *Landscape and Urban Planning*, 68, 129-138. <http://dx.doi.org/10.1016/j.landurbplan.2003.08.003>
- CIA. (2015). CIA Factbook. Retrieved March 9, 2015, from <https://www.cia.gov/library/publications/the-world-factbook/>
- City of Växjö. (2007). *Welcome to Växjö The Greenest City in Europe*. Växjö.
- Cugurullo, F. (2013). How to Build a Sandcastle: An Analysis of the Genesis and Development of Masdar City.

- Journal of Urban Technology*, 20(1), 23-37. <http://dx.doi.org/10.1080/10630732.2012.735105>
- Davies, A. (2005). Local action for climate change: transnational networks and the Irish experience. *Local Environment*, 10(1), 21-40. Retrieved from <http://dx.doi.org/10.1080/1354983042000309298>
- Dinnie, K. (Ed.). (2010). *City Branding—Theory and Cases*. Palgrave Macmillan.
- Emelianoff, C. (2013). Local Energy Transition and Multilevel Climate Governance: The Contrasted Experiences of Two Pioneer Cities (Hanover, Germany, and Vaxjo, Sweden). *Urban Studies*, 51(7), 1378-1393. <http://dx.doi.org/10.1177/0042098013500087>
- Florida, R. (2002). *The rise of the creative class: And how it is transforming work. Leisure, community and everyday life*. New York: Basic Books.
- Gulstrud, N. M., Gooding, S., Konijnendijk van den Bosch, C. C., & Bosch, C. C. K. Van Den. (2013). Green space branding in Denmark in an era of neoliberal governance. *Urban Forestry and Urban Greening*, 12(3), 330-337. <http://dx.doi.org/10.1016/j.ufug.2013.03.001>
- Gustavsson, E., & Elander, I. (2012). Cocky and climate smart? Climate change mitigation and place-branding in three Swedish towns. *Local Environment*, 17(8), 769-782. <http://dx.doi.org/10.1080/13549839.2012.678319>
- Gustavsson, E., Elander, I., & Lundmark, M. (2009). Multilevel governance, networking cities, and the geography of climate-change mitigation: Two Swedish examples. *Environment and Planning C: Government and Policy*, 27(1), 59-74. <http://dx.doi.org/10.1068/c07109j>
- Hakelberg, L. (2011). *Governing Climate Change by Diffusion* (1st ed.). Berlin: Freie Universität Berlin, Forschungszentrum für Umweltpolitik. Retrieved from http://edocs.fu-berlin.de/docs/servlets/MCRFileNodeServlet/FUDOCS_derivate_00000001736/Hakelberg_ffu_report_08-2011.pdf?hosts=
- Hakelberg, L. (2014). Governance by Diffusion : Transnational Municipal Networks and the Spread of Local Climate Strategies in Europe. *Global Environmental Politics*, 14(1), 107-129. <http://dx.doi.org/10.1162/GLEP>
- Hanna, S., & Rowley, J. (2008). An analysis of terminology use in place branding. *Place Branding and Public Diplomacy*, 4(1), 61-75. <http://dx.doi.org/10.1057/palgrave.pb.6000084>
- Harvey, D. (1989). From managerialism to entrepreneurialism: the transformation in urban governance in late capitalism. *Geografiska Annaler. Series B, Human Geography*, 71(1), 3-17. <http://dx.doi.org/10.2307/490503>
- Holgersen, S., & Malm, A. (2015). "Green fix" as crisis management. Or: In which world is Malmö the world's greenest city? *Geografiska Annaler: Series B, in press*.
- Insch, A. (2011). Branding the City as an Attractive Place to Live. In K. Dinnie (Ed.), *City Branding—Theory and Cases* (pp. 8-14). Basingstoke: Palgrave Macmillan.
- Jonas, A. E. G., Gibbs, D., & While, A. (2011). The New Urban Politics as a Politics of Carbon Control. *Urban Studies*, 48(12), 2537-2554. <http://dx.doi.org/10.1177/0042098011411951>
- Joss, S., Cowley, R., & Tomozeiu, D. (2013). Towards the 'ubiquitous eco-city': An analysis of the internationalisation of eco-city policy and practice. *Urban Research & Practice*, 6(1), 54-74. <http://dx.doi.org/10.1080/17535069.2012.762216>
- Kamal-Chaoui, L., & Roberts, A. (2009). *Competitive cities and climate change—OECD Regional Development Working Paper*. Paris. Retrieved from <http://www1.oecd.org/governance/regional-policy/44232251.pdf>
- Kavaratzis, M. (2005). Place Branding: A Review of Trends and Conceptual Models. *The Marketing Review*. <http://dx.doi.org/10.1362/146934705775186854>
- Keiner, M., & Kim, A. (2007). Transnational City Networks for Sustainability. *European Planning Studies*, 15(10), 1369-1395. <http://dx.doi.org/10.1080/09654310701550843>
- Kern, K., & Bulkeley, H. (2009). Cities, Europeanization and Multi-level Governance: Governing Climate Change through Transnational Municipal Networks. *JCMS: Journal of Common Market Studies*, 47(2), 309-332. <http://dx.doi.org/10.1111/j.1468-5965.2009.00806.x>
- Kronsell, A. (2013). Legitimacy for climate policies: politics and participation in the Green City of Freiburg. *Local Environment*, 18(8), 965-982. <http://dx.doi.org/10.1080/13549839.2012.748732>

- Lee, T., & van de Meene, S. (2012). Who teaches and who learns? Policy learning through the C40 cities climate network. *Policy Sciences*, 45(3), 199-220. <http://dx.doi.org/10.1007/s11077-012-9159-5>
- Lucarelli, A., & Berg, P. O. (2011). City branding: a state-of-the-art review of the research domain. *Journal of Place Management and Development*, 4(1), 9-27. <http://dx.doi.org/10.1108/17538331111117133>
- Lucarelli, A., & Brorström, S. (2013). Problematising place branding research: A meta-theoretical analysis of the literature. *The Marketing Review*, 13(1), 65-81. <http://dx.doi.org/http://dx.doi.org/10.1362/146934713X13590250137826>
- Maria, V., Rahman, M., & Collins, P. (2013). Urban Heat Island Effect: thermal response from different types of exposed paved surfaces. *International Journal of Pavement Research and Technology*, 6(4), 414-422. [http://dx.doi.org/10.6135/ijprt.org.tw/2013.6\(4\).414](http://dx.doi.org/10.6135/ijprt.org.tw/2013.6(4).414)
- Marin-Aguilar, J. T., & Vila-López, N. (2014). How can mega events and ecological orientation improve city brand attitudes? *International Journal of Contemporary Hospitality Management*, 26(4), 629-652. <http://dx.doi.org/10.1108/IJCHM-03-2013-0117>
- McCann, E. (2013). Policy Boosterism, Policy Mobilities, and the Extrospective City. *Urban Geography*, 34(1), 5-29. <http://dx.doi.org/10.1080/02723638.2013.778627>
- McCann, E. J. (2009). City marketing. In *International encyclopedia of human geography*. Elsevier.
- Middleton, A. C. (2011). City Branding and Inward Investment. In K. Dinnie (Ed.), *City Branding—Theory and Cases* (pp. 15-26). Basingstoke: Palgrave Macmillan.
- Niedomysl, T., & Jonasson, M. (2012). Towards a theory of place marketing. *Journal of Place Management and Development*, 5(3), 223-230. <http://dx.doi.org/10.1108/17538331211269639>
- Pachauri, R. K., Allen, M. R., Barros, V. R., Broome, J., Cramer, W., Christ, R., ... Ypersele, J.-P. Van. (2014). *IPCC Climate Change 2014: Synthesis Report*.
- Sanford, L. (2010). A tale of two eco-cities. *Modern Power Systems* (pp. 20-22). Retrieved from <http://cat.inist.fr/?aModele=afficheN&cpsidt=22944914>
- Strunz, S. (2014). The German energy transition as a regime shift. *Ecological Economics*, 100, 150-158. <http://dx.doi.org/10.1016/j.ecolecon.2014.01.019>
- Syssner, J. (2012). *Världens bästa plats? Platsmarknadsföring, makt och medborgarskap [The world's best place? Place marketing, power and citizenship]*. Lund: Nordic Academic Press.
- Tzoulas, K., Korpela, K., Venn, S., Yli-Pelkonen, V., Kaźmierczak, A., Niemela, J., & James, P. (2007). Promoting ecosystem and human health in urban areas using Green Infrastructure: A literature review. *Landscape and Urban Planning*, 81, 167-178. <http://dx.doi.org/10.1016/j.landurbplan.2007.02.001>
- UN-Habitat. (2011). *Cities and Climate Change—Global Report on Human Settlements 2011. Building Safer Cities: The Future of Disaster Risk*. London.
- United Nations. (2013). Millenium Development Indicators—Carbon Dioxide emissions.
- While, A. (2013). The Carbon Calculus and Transitions in Urban Politics and Political Theory. In H. Bulkeley, V. Castán Broto, M. Hodson, & S. Marvin (Eds.), *Cities and Low Carbon Transitions* (Revised pa.). Milten Park: Routledge.
- Zeppel, H. (2013). Carbon Management by Queensland Local Councils: Citizenship for Transitioning to a Low Carbon Future. *Journal of Corporate Citizenship*, (49), 117-136. <http://dx.doi.org/10.9774/GLEAF.4700.2013.ma.00009>

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