

1. Introduction

One of the more exciting developments in international environmental protection has been the proliferation of initiatives at the subnational level. An important but not so well-known component of this is the international partnerships between US and German subnational governments, states and *Länder*, respectively. The primary aims of these partnerships include drawing lessons from as well as transferring innovative policies and technologies. The partnerships relate to global governance for sustainable development. This concept stems from the United Nations Conference on Environment and Development (UNCED) and related approaches and processes, such as the International Organization for Standardization's (ISO) environmental management standards, the climate change regime, and the push for ecological modernization. The partnerships suggest a true multi-level dimension to global governance for sustainable development, as called for at the UNCED, from the international to the subnational, in which ideas and policies move in both a downward and an upward fashion (although not necessarily hierarchically) as well as horizontally.

The 1992 UNCED marked a new era of environmental protection in a globalized world. It was at this summit where the emerging principle of sustainable development became solidified. The focus was development of a long-term strategic approach to environmental protection that includes all relevant sectors and environmental media at all levels of government; in other words it was a multi-actor, multi-level governance approach. This multi-level depth is largely missing in the competing philosophies on options to address global environmental issues (the dimensions generally do not go beyond the national and international levels).

Subnational governmental activities in countries such as the United States and Germany are critical to the achievement of sustainable development goals, as they are primarily responsible for the successful implementation and achievement of environmental policy objectives. They often take the lead and establish more effective actions than are created by their respective federal governments. Additionally, they have some autonomous decision-making capabilities that are relevant to the international sustainable agenda, such as designing and implementing policies to promote renewable energy, land use and infrastructure decisions (choices

that affect emissions for decades), and other areas ranging from agriculture to waste management.

In the 1990s, both states and *Länder* took the leadership role in putting forth policy that is relevant to the international agenda of sustainable development and climate change. In many cases they created innovative policies and became frontrunners in certain policy areas, such as in land use, renewable energy initiatives and climate change policies. This is particularly the case regarding US states and climate change. Interestingly, this phenomenon largely went unnoticed until the early 2000s when this gap in awareness was exposed by a slew of reports that came out on the issue, mostly regarding the US states and climate change (CCAP, 2002, 2003; Herbert and Blechschmidt, 2001; Jörgensen, 2002; Pew Center, 2004, 2006; Rabe, 2000, 2002, 2006; WWF, 2003). And even now, such subnational leadership is not widespread public knowledge.

Remarkably, these subnational climate change efforts do not stop at the border. A couple of states have signed partnership agreements with European countries on climate change (California Office of the Governor, 2006; NJDEP, 1998b). Likewise, in 2001, a regional group of states formed an alliance with a group of Canadian provinces to reduce their greenhouse gas emissions (NYSERDA, 2002). Some states attended international conferences and negotiations. States involved in the Clean Energy States Alliance went to the 2004 International Conference for Renewable Energies in Bonn to find transatlantic partners to help in their efforts to create markets for renewable energy technologies (CESA, 2004). Likewise, members of the Regional Greenhouse Gas Initiative (RGGI) – a coalition of Northeast and Mid-Atlantic states that formed a cooperation to design and implement a regional greenhouse gas cap-and-trade program – traveled to Buenos Aires to the Conference of the Parties 10 (COP10).¹ On this basis there was talk of ‘linking up with the Europeans in a backdoor trading scheme on emissions’ (‘Some States’, 2004).

These actions are in line with other observations on the increasing role of subnational governments in ‘foreign affairs’, ‘international relations’ or ‘international arenas’ (Aldecoa and Keating, 1999; Fry, 1998; Kaiser, 2002, 2005; Lecours, 2002). Most of these activities have been in the economic arena, although not exclusively so. The evidence can be seen in their representation abroad where they lead trade missions, participate in regional and international organizations, enter into relations with other subnational governments, and sign agreements (Lecours, 2002). The World Bank has summed up the situation as a ‘widespread movement towards devolution’ (Canaleta et al., 2004, p. 90). As of the turn of the century, 95 percent of democratic countries had elected subnational levels of government (Canaleta et al., 2004; Lecours, 2002; Ohmae, 1993;

Richards, 2004). And as for governments that already have subnational levels, for example federal systems such as the United States and Germany, the movement has been for a stronger subnational role.

There is growing interest in the literature related to the driving factors for subnational activities or arrangements on the environment. Increased state activity and network and regional actions, such as the aforementioned state or province collaboration to address climate change, are important new developments in global environmental governance (Rabe, 2008, 2009; Selin and VanDeveer, 2005). Driving these actions are international scientific and political debates and immediate signs of climate impact. Other motivations include changing incentives for politicians; civil servant, state agency, non-governmental organization (NGO) advocacy coalition influence; and economic development opportunities (including the desire to be first-movers).

Studies indicate how certain subnational environmental activities are fitting into the larger multi-level system or how the decentralization efforts in the federal systems themselves have contributed to shifts in the roles of government (Brown, 1999; Jørgensen, 2002; Kern, 2008; Kraemer, 2007; Kraft and Scheberle, 1998; Rabe, 2000, 2007; Schreurs, 2008; Schreurs et al., 2009; Vogel et al., 2005). It is not just states but also cities that have become active policymakers in many countries, oftentimes before central governments; both NGOs and businesses have established programs to influence the public and policy as well as technological developments to help curb greenhouse gases (Andonova et al., 2009; Schreurs et al., 2009). Subnational activities and new forms of governance are altering decision-making patterns and dynamics within federal and multi-level systems (Betsill and Bulkeley, 2004; Blatter, 2001; Kern, 2008; Kern and Bulkeley, 2009; Kern et al., 2007; Kern and Monstadt, 2008; Rabe, 2007, 2008, 2009; Selin and VanDeveer, 2005; VanDeveer, 2010; Vogel and Swinnen, 2011). The findings show that there are different types of horizontal and vertical interactions and coordination among all levels of government and institutional regions, on both sides of the ocean. Public, private and civil society leaders are all involved in this trend toward decentralization. These different forms of cooperation and partnerships among these subnational public and private entities have emerged not only domestically but also transnationally (Andonova et al., 2009; VanDeveer, 2010). This is to say that the partnerships are part of a larger movement toward governing sustainability beyond the national and international arenas.

Despite the growing attention in the literature to new modes of climate and environmental governance, little attention has been given to the movement of transnational environmental cooperation among subnational and other actors or transnational 'regime' formation. Scholars

typify three such transnational networks and/or partnerships: public, private and hybrid (Andonova et al., 2009; Bäckstrand, 2008): for example, ICLEI-Local Governments for Sustainability; World Business Council for Sustainable Development; and Renewable Energy and Energy Efficiency Partnership, respectively. Within the public, there are same-level and mixed-level partnerships, such as transnational city-to-city (for example, Chicago and Hamburg), state-to-country (for example, New Jersey and the Netherlands) and region-to-region (Northern Virginia Regional Commission and the Verband Region Stuttgart) (Knigge, 2005; Medearis and Swett, 2003).

As with the US–German state partnerships, much of this transnational environmental collaboration started to crop up in the 1990s parallel to the UNCED and the climate change regime. They can be viewed as an effort to find alternatives to more traditional international policymaking among states and as means to fill in gaps created by the absence of state or international initiatives. There are also factors specific to the partners that can drive cooperative arrangements (Bäckstrand, 2008; Kern and Bulkeley, 2009; Schreurs et al., 2009; VanDeveer, 2010). Cities and states face similar problems and transnational learning is seen as an important strategy for them (Kern and Bulkeley, 2009). The climate change regime also lent itself easily to transnational governance because of the involvement of multiple sectors whose interests and activities transcend borders (Andonova et al., 2009). This adds more depth to the multi-level governance discussed above.

As these efforts continue to attract the attention of policymakers, private sector actors and scholars alike, the question remains: do such arrangements have an impact? And how do they function in relation to the traditional forms of government? Kern and Bulkeley (2009) ask if transnational municipal networks make a difference at the European, national and local levels. They find that such networks only benefit the pioneer cities because they have the resources to compete for and undertake projects that attract other funds. This study raises the question about the governing capacity of such networks, as they are highly dependent on governmental and European funding, and because they lack authority to force members to apply specific strategies. The soft approaches reinforce leaders and laggards. Bäckstrand (2008) had similar findings regarding governing capacities, indicating that since power is dispersed among market, governance and civil society actors, transnational public–private partnerships or network governance is limited to advocacy, service provisions and implementation, while standard setting remains in the hands of governmental actors. Others have found that the different forms of transnational governance steers constituents to achieve public goals (Andonova et al.,

2009; VanDeveer, 2010). But again, this is through soft approaches such as information sharing, capacity building and implementation. That said, these scholars found that some standard setting has occurred through networks such as the RGGI and the Chicago Climate Exchange, but these are primarily domestic networks.

The subnational partnerships between Germany and the United States are different from the traditional international friendship arrangements among cities and states or provinces (subnational governments) that began in earnest in the 1950s. They are more political, sovereign and issue- or project-centered compared to the twinning arrangements that generally centered on cultural, educational, professional and business exchanges that were set up to be long term (Clarke, 2010).² It is therefore not surprising that the US–German subnational environmental partnerships do not identify themselves as sister-state arrangements. The state of Maryland, for example, mentions that it has sister partnerships with 11 different regions from ten different countries (this is not counting the numerous sister cities), but it does not list its environmental partnership with Schleswig–Holstein among these arrangements. Furthermore, these partnerships also differ from the many cross-border environmental arrangements that form out of geographical necessity. They are not connected to the global organizations of subnational governments that are normally led by an international agency or based on a particular project or issue (Furmankiewicz, 2007).

While there are no complete data about exactly how many such partnerships exist, the trend between the United States and Germany has stood out. Yet, no study has comprehensively examined more than two partnerships (Wisconsin-Bavaria 1998, and Maryland-Schleswig–Holstein 2002) (Jørgensen, 2006; Knigge, 2005; Medearis and Swett, 2003). Even less has been written about how such arrangements fit into the overall picture of global governance for sustainable development in a multi-level international system (Jørgensen, 2006).

This increased role of US and German states in environmental policy and their cooperation is an important development in the called-for multi-actor, multi-level approach to achieving global sustainable development. This is particularly true in light of the lack of accord between the United States and the European Union on important issues such as climate change. Rabe (2009) and VanDeveer (2010) even go as far as to say that climate change policy development in the United States is comparable to that of the European policy, when these governance systems are examined as analogous types of federations. When comparing at these adjusted scales, one sees both leaders and laggards, similar policy choices that have prompted contacts between states and the European Union (EU)

and other member states, and similar clusters of policy professionals that not only develop policy internally but look to other states and foreign governments to partner with. Furthermore, these parallels extend to other federal or multi-level governance systems, whether they ratified Kyoto or not, such as Canada and Australia (Rabe, 2008; Schreurs, 2010). And this is not limited to climate change, as Germany initially lagged in its sustainable development policies while the *Länder* took the lead. All of this suggests that climate change and sustainable development policies can no longer be framed simply as an issue among nation-states by way of an international regime. These issues should be approached through a lens of multi-level governance (Kern, 2008; Rabe, 2007, 2008, 2009; VanDeveer, 2010; Vogel and Swinnen, 2011).

This book aims to establish some generalizations about these partnerships based on the following four questions:

1. What are the common driving factors in which US and German states form innovative environmental partnerships?
2. What were the results of the arrangements?
3. What supports and hinders such partnerships in the implementation process?
4. What role do US and German innovative environmental partnerships at the subnational level have in global environmental governance for sustainable development in a multi-level system?

The value of such partnerships in a multi-level system and their effects or potential effects on policy is subject to their ability to function, that is, to be created and carried out.

The inductive, qualitative study compares five cases where Memoranda of Understanding (MoUs) have been established:

1. California–Bavaria (1995) – formed to mutually promote environmental and renewable energy technologies (Bavaria MRDEA and Cal/EPA, 1995).
2. Wisconsin–Bavaria (1998) – established to cooperate on environmental regulatory reform (Wisconsin DNR and MRDEA, 1998).
3. California–Bavaria (2000) – created for the purposes of environmental regulatory reform, specifically regarding environmental management systems (Bavaria MSDEA and Cal/EPA, 2000).
4. Maryland–Schleswig–Holstein (2002) – formed to collaborate in sustainable development, energy conservation, renewable energy, greenhouse gas emissions reductions, ‘green’ buildings and land management (MDE and MUNF, 2002).

5. California–North Rhine–Westphalia (2004) – established to work together in the field of clean energy technologies, particularly in hydrogen and fuel cells (CARB and MESP, 2004).

As for analytical tools, since not every state or *Land* has formed a partnership, yet enough have done so to make it a trend, both an agency and a structural approach are helpful. First, I turn to the theoretical concept of policy entrepreneurs, for example Kingdon (1984), Mintrom (1997), Mintrom and Vergari (1998), McCown (2005) and Schneider and Teske (1992). According to Kingdon (1984), policy entrepreneurs are ‘advocates for proposals or for the prominence of an idea’ (p. 122). Such advocates can be found in any location in the policy community, such as in government, interest groups or in other organizations. But while policy entrepreneurs may have diverse backgrounds, according to Kingdon (1984) they, like business entrepreneurs, have a defining characteristic: ‘their willingness to invest their resources – time, energy, reputation and sometimes money – in the hope of a future return’ (p. 122).

I employ the theoretical concept of multi-level governance (MLG), which characterizes the changing relationships between public and private actors situated at different territorial levels, thereby crossing the normally separate spheres of domestic and international politics. This concept may serve as a causal factor, as actors may feel the need to fill in a void left by the federal government. Hooghe and Marks (2003) outline two types of MLG, one which is characterized by flexible, task-specific, overlapping (intersecting) jurisdictions at an unlimited number of territorial scales; and the other as a limited number of non-overlapping (general-purpose) jurisdictions at a limited number of territorial levels with long life spans, which are nested within one another like a Russian doll, and that are more in line with the traditional federalism structures. The authors suggest that these two types co-exist; the first one is embedded in the legal structures of the more formal one.

In addition to this backdrop of multi-level governance, and adding an economic dimension, I apply the literatures on the diffusion of innovative environmental policy and ecological modernization. The concepts of policy transfer and policy diffusion (specifically innovative environmental policy diffusion and ecological modernization), which stem from the comparative politics literature, provide helpful lenses (in agency and macro structure, respectively) regarding the reasons for the spread of innovative policies and/or technologies and the characteristics of this process. Even though the literatures on the diffusion of innovative environmental policy and ecological modernization have based their characterizations on the nation-state, they can be applied for the most part to the subnational level

as well. When it comes to vertical and horizontal diffusion, in a multi-level system vertical diffusion may span beyond the national and international levels to all levels of government and horizontal diffusion may occur across any level.

Policy transfer is concerned with the 'process by which knowledge about policies, administrative arrangements, institutions and ideas in one political system (past or present) is used in the development of policies, administrative arrangements, institutions and ideas in another political system' (Dolowitz and Marsh, 2000). Dolowitz and Marsh's (2000) policy transfer framework is useful for determining the motivation of actors to promote lesson-drawing. Their continuum is helpful for uncovering the degree of agent versus structural forces involved in the decision to transfer.

Policy diffusion, which 'asks for those conditions that favor or hinder the spread of policy innovations within the international system' (Tews, 2006), provides more of a macro-structural perspective for the spread of such policies. The literature on international environmental diffusion considers structural factors, which includes a globalization component. The works of Tews (analytical framework) (2006), Busch et al. (2006) and Kern et al. (2001) categorize three causal factors for the diffusion of innovative policy, namely the dynamics of the international system, national factors and the characteristics or type of the policy innovation. The literature on ecological modernization, which is the 'innovation and diffusion of environmental technologies' (Jänicke, 2006a, p. 12) looks at the factors influencing nation-states to promote the diffusion of such technologies. Jänicke (2006b) and Jacob and Volkery (2006) examine the characteristics of frontrunner countries. Furthermore, Jänicke (2006b) distinguishes why pioneering countries come and go. Jänicke and Jacob (2006) lay out the phases in which countries become lead markets.

Finally, I turn to the literature on 'new institutionalism', to answer the question: what supports and what hinders partnerships? In his book on institutional theory in political science, Peters (2005) argues that among the strands of institutionalism there is a central core that binds them all. The basic argument of new institutionalists is that not only do structures matter, but that they are a primary variable in explaining political behavior.

The potential usefulness of this work will include first and foremost a better understanding of how and why such transnational subnational horizontal cooperations came into being, their functionality and what the potential of such arrangements are. While some of the components will be distinct to the state-to-state partnerships, I suggest that their underlying driving factors and functionality will have a general applicability to other non-national transnational governance arrangements that have emerged

around the same time and in conjunction to the same international pressures, as they face similar opportunities and obstacles. What are the required drivers, impacts, means of implementation and their relationship to institutional governmental structures? Do international subnational agreements really function? The study provides insight into the dynamics of global governance for sustainable development in a more inclusive multi-level system (international to subnational), and the potential role of the subnational level both in regime implementation and in the vertical and horizontal diffusion of policies. Finally, it will contribute to a better understanding of the coexistence of multi-level governance – that is, ‘policy actors and stakeholders operating across horizontal and vertical levels of social organization and jurisdictional authority around a particular issue’ (VanDeveer, 2010, p. 7) – within the traditional institutions of government.

This book is organized into nine chapters. Chapter 2 reviews relevant theoretical perspectives, that of policy entrepreneurs, multi-level governance, policy transfer and policy diffusion (specifically environmental policy diffusion and ecological modernization), and new institutionalism. Chapter 3 provides background into the evolving roles of US and German states in reference to the international agenda of the UNCED, the ISO’s EMS standards and climate change (for example, the United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol) and to their respective federal governments throughout the 1990s and into the 2000s as the partnerships began to transpire. This includes a discussion of the respective federal systems and of state/*Land* capacities. In addition, it considers the internationalization of subnational (state/*Land*) politics in general, especially regarding their respective economies. Chapters 4–8 present the case studies in chronological order starting with the California–Bavaria partnership of 1995 and ending with the California–North Rhine–Westphalia partnership of 2004. Each case study is divided into four sections to examine the key components of the different stages related to the establishment of the partnership and its implementation: the MoU, driving forces, the process, and the implementation and overall results. Chapter 9 provides an analysis and discusses implications.

NOTES

1. The Conference of the Parties is the highest decision-making authority, consisting of representatives of all states that are parties to the climate convention, which meets annually to review and promote its effective implementation. The number represents which annual meeting.

2. Such arrangements can also have an environmental component. There is a 1997 sister-state partnership between South Carolina and Rhineland Palatinate, the primary focus of which is education.