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Governing Ecologically

How Germany's Green Party leverages its influence to promote ecological modernisation

By Arne Jungjohann

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By Arne Jungjohann

Edited by the Heinrich Böll Foundation

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By Arne Jungjohann

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FOREWORD

Shortly after the first projections on the future distribution of seats in the European Parliament were announced, there was a lot of talk in Brussels about the need and mandate for change. Compared to 2014, the Green Group (The Greens/EFA) gained more than 20 additional seats in the European Parliament elections in 2019. There is no doubt that the Greens will play an important role in the newly elected Parliament. It has often been said in recent days that the fragmentation of the European Parliament has increased, which carries the negative implication that the institution would now be incapable of action. However, there is a more positive take on the situation: the Parliament has become more pluralist and more diverse, which certainly bears fruitful opportunities for its work in the future.

The protests of recent weeks and months and the impact of Fridays for Future put quite a bit of pressure on certain parties during the election campaigns and led to a change of mind-set. Never before have the threats of the climate crisis been embraced by so many parties as an election campaign issue. Never before have so many parties committed to climate protection as a priority. The Greens certainly benefit from these developments, as the voters in many EU member states trust the Greens over all others to set solutions to the climate crisis in train – on the local, national and European level. The Green Group is the only parliamentary group which has been campaigning for decades with the utmost knowledge and commitment for an ambitious, future-oriented European energy and climate protection policy – despite the massive resistance they have faced in the European Parliament.

In Germany, the results of the European elections have changed the political landscape: for the first time in history, the German Green Party (Alliance 90/The Greens) is the second strongest force in a nationwide election. In comparison to 2014, the Greens almost doubled their result: they obtained 20.5 percent, which means a gain of 9.8 percentage points. This trend has been obvious for quite some time now: on the local and federal state level (Länder), the German Greens have achieved remarkable electoral successes.

This study looks at the government participation of the German Greens at the level of the federal states. The Greens are currently partners in nine coalition governments. This publication tackles an area of politics and ecological modernisation which has had considerable influence on the public debate in recent times, from the summer heat wave to driving restrictions for diesel vehicles via a transition in transport policy, all the way through to international climate protection. It therefore makes sense to single out Alliance 90/The Green Party as the representatives of a pro-ecology policy. In voter surveys, the German Greens regularly show as the party deemed to have by far the greatest competency in this area. It should therefore be

examined whether they are making use of the negotiation margin they possess at federal level. Indeed, that is what voters expect from a government, namely to make a difference, to assume responsibility for governance after the election and to reflect about the government's decisions.

Arne Jungjohann has managed to prove that it is possible for a political party to shape the work of government at both federal state level and within the federal multi-level system. However, it is not always easy to permeate these successes, as the long-term nature of political processes and policy interplay makes it very difficult to clearly ascribe political responsibility. This is a problem with particular regard to political communication, as it could give the impression that it does not matter who is in power. This study has the merit of demonstrating just how wrong that impression is. The good news is that it most certainly does make a difference who is in power.

Successfully implementing a study of this kind is possible only if many of those involved work together with commitment and to the best of their powers. At this point, we would like to express our thanks for this very commitment: we would like to thank Arne Jungjohann for his meticulous research and for his in-depth knowledge that has fed into this study; we would like to thank Niklas Graf (University of Duisburg), who supported Arne Jungjohann intensively; we would like to thank Constantin Mawrodiew (feinkost), who is responsible for the excellent graphics and layout of the study; and we would like to thank Bernd Rheinberg (editing), Jana Heyde (project management), who provided outstanding in-house support. Our very warmest thanks to all of you! We hope that readers of this study will find it fascinating, enriching and inspiring.

Berlin and Brussels, June 2019

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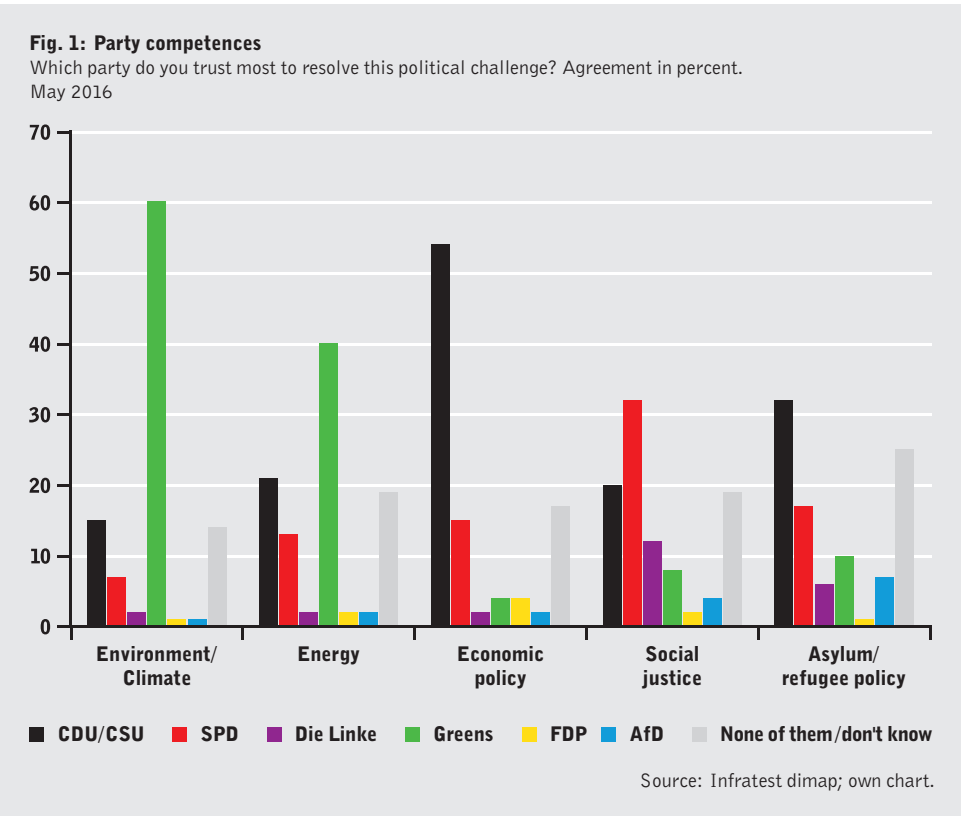
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1 Introduction

Alliance 90/The Green Party are known as the «Party of Ecology». Protecting the environment runs through its political DNA. The preamble of the party's current manifesto reads: «protecting the natural environment is our central concern. Production and consumption must be shaped in such a way that they do not destroy today the livelihood opportunities of tomorrow» (Alliance 90/The Green Party 2002: 9; our translation). Ecology continues to be a central strand in the revision of the party's manifesto, which launched at the beginning of this year with the aim of being concluded to coincide with the party's 40th anniversary in 2020. When presenting the opening discussion in April 2008, the executive board stressed the need for a new radicality: «ecological issues are now far more radical than they were even in 2002, when the «middle of the century» was still a long way away. Our greatest challenge is that we need to be more radical and at the same time, the hill we must climb seems to be getting higher» (Alliance 90/The Green Party 2018; our translation).



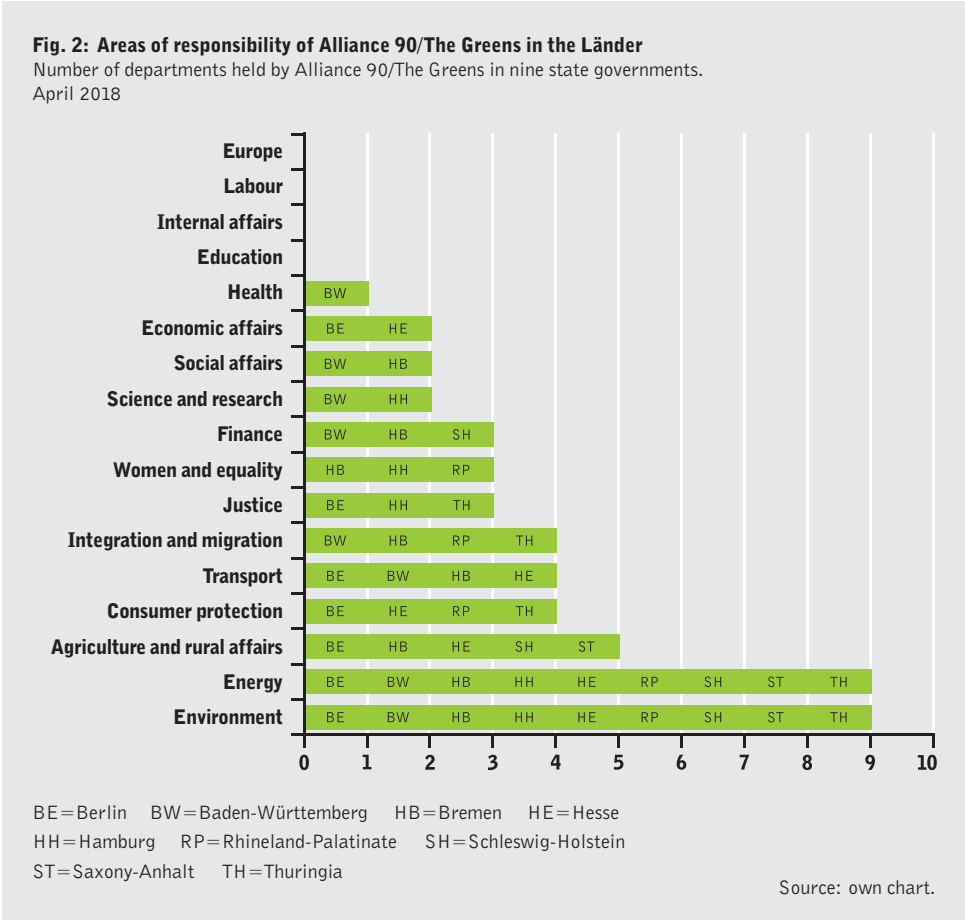
The party's self-conception is in line with how it is perceived from outside. For instance, the acting editor-in-chief of the weekly news magazine *die Zeit* speculates that in view of the climate crisis and the diesel scandal, twelve years of federal government with no Green component has spelled a «medium-sized economic and ecological disaster» (Ulrich 2017; our translation). Out of all the parties, Alliance 90/The Greens regularly comes out top in nationwide surveys concerning competences in matters of environmental and climate protection. This is its key competence. In energy policy as well, the Greens have now come to be ascribed the greatest degree of competence out of all parties (fig. 1).

The voters saw things in much the same way in the exit polls following the Länder elections in autumn 2018 (Bukow 2018a, 2018b). Two out of every three respondents in Bavaria considered that the Greens have the greatest competence in environmental protection and climate policy (Infratest dimap 2018a). The picture was even clearer in Hesse, where as many as three out of every four respondents ascribed the greatest environmental competence to the Greens and one in three also agreed that the Greens were most likely to be able to solve the diesel issue (Infratest dimap 2018b).

If ecology is the core competence of Alliance 90/The Greens, it begs the question as to whether the party plays on this strength when in office as well. The question is particularly relevant in view of the considerable number of government participations entered into in recent years by the Greens in the Länder, where they have, in all cases, taken responsibility for the Ministry for the Environment. They also head up other ministries of ecological significance such as transport, agriculture and energy (fig. 2). Participation in governments and the resulting responsibilities in topically important ministries should give the party enough leeway to get its policies (environmental in the broadest sense) adopted. The lead question this paper asks this: do Alliance 90/The Greens use this leeway from governmental participation at the state level to advance their policies for ecological modernisation?

The seemingly most usual method to answer the key question of this study is to begin by listing the laws, regulations etc. adopted by a government. This exercise allows the policy output of governmental action to be evaluated. Political science, particularly government research, offers useful approaches and many case studies for this purpose. There are many factors to explain the focus of governmental action: is it a rural or a city state? Is it an old (West German) or a new (East German) federal state? Is it a large Land or a small one, does it have large or small administration? What industries dominate its economic structure? What is the Land's political culture and tradition? How much constitutional leeway does a government in any case have in the specific political field? These questions serve to indicate that many different factors influence the degree of margin available to Land governments to impose policies. The extent to which individual parties succeed in pursuing their party-political objectives within coalitions depends in turn on additional factors. Is it a government of just one party or a coalition with two or three partners? What parliamentary majority supports the government? How are the ministries divided up between the coalition partners and how have their departments been allocated? The long list of questions makes clear how complex an undertaking it is to calculate the effect of

one single party on the government actions of a coalition. Additionally, a number of factors of influence overlap or mutually reinforce each other.



The question as to how much Alliance 90/The Greens make use of the leverage supplied by their government participations at the Länder level to push through policies in favour of ecological modernisation can therefore be answered in the framework of this study only if the field is clearly delimited. This process must take account of the fact that the Länder have an important role to play in the federal structure in that they are involved in federal legislation via the Bundesrat, or Federal Council. It is therefore not enough to take account of the Länder level alone to answer the lead question; examples of federal legislation should also be taken into consideration. This study therefore focuses on thematic case studies from two different political fields (energy, transport), one of which is predominantly a matter for the Länder, and the other very much for the Bund level and the Bundesrat than the Parliaments of the Länder. Following this introduction (Chapter 1), the lead question is thus answered along four steps:

- **Ecological modernisation in the Länder:** Chapter 2 evaluates those political science studies since 2007 that analyse the political fields at the Länder level that have a relevant ecological effect. These include the policy fields of energy policy, climate policy, environment and nature conservation policy, agriculture, genetic engineering, animal protection and hunting policy as well as transport policy. This chapter provides an initial indication of the policy fields in which Alliance 90/The Greens use their leeway in favour of an ecological modernisation, but also show the thematic areas in which the Land governments' leeway is more restricted.
- **A comparison of environment ministries across the Länder:** Chapter 3 compares the environment ministers of all 16 Länder in name, size and responsibilities. This comparison of their forms aims to establish whether a government participation of Alliance 90/The Greens has any effect on the way in which the responsibilities of environment ministries are decided upon and if so, what. It is important to establish this as it may be assumed that parties in government are more likely to be able to implement their political objectives if they also head up the ministry with responsibility for that particular political field.
- **Transport policy at the Länder level – cycling policy:** Chapter 4 uses the case study of the transition towards greener policies in transport to illustrate how exactly Alliance 90/The Greens are pushing forward policies in favour of ecological modernisation at the Länder level in their government participations. Cycling policy was selected out of all the many possible areas within transport because it is a field in which the Länder have clear leeway. The much more prominent subjects of regulating cars and the diesel scandal would, admittedly, have been very interesting, in many respects. But they were not appropriate for this line of questioning, as the circumstances are so specific – further competences for the EU, trickery on the part of the industry and a strong role for the courts – and it can therefore be presumed that the results would have little to say about how a state government proactively promotes ecological modernisation. Using examples, this chapter examines the cycling policies of the state governments in Bremen and Baden-Württemberg, as Alliance 90/The Greens are in charge of transport policy here and have been in power for more than a single term in office, which – given how long it takes to achieve results in this area – allows for a valid assessment (which is why Berlin, with its mobility law that was not signed off until 2018, has not been used as a case study). The study assesses the individual coalition agreements, lists the remits along with areas of responsibility and how these are allocated in the field of cycling policy and the policies agreed upon. To improve the classification of comments, experts from government, parliament and stakeholders in both Länder were interviewed.
- **Energy policy at the federal level – the Renewable Energies Act (EEG) reform:** Chapter 5 examines whether Alliance 90/The Greens' government participations in the Länder also allows them to influence the federal legislation process in favour of the ecological modernisation agenda. Due to their participation in nine state governments at the time of writing (November 2018), they have become an

active negotiation partner in various informal coordination committees between the federal government and the Länder. The study uses examples to examine this with regard to the reform of the Renewable Energies Act in 2014. This example has been selected because much of the negotiations were comparatively well documented by the media and these sources could be supplemented with qualitative interviews with the persons involved.

Finally, chapter 6 summarises the results and collates the overarching observations of the four focus areas, so as to answer the key question in condensed form. It also looks at the extent to which differences between the political fields of ecological modernisation can be identified, what the medium and long-term effects of Green government participations will be and whether there is any evidence to suggest that competition between the parties will find new life in the ecological arena.

2 Ecological modernisation policies in the Länder

As a sub-discipline of political science, policy analysis looks at material policy content (Blum/Schubert 2009). It asks what political players do, how policies come about and whether and how they take effect. It states that a policy should be drafted, systemised and typified. It should also explain why it took that form in particular. In this process, the material results of political decisions and what the State actually does in the political process are described as policy output. It then asks what laws have been passed. This is separate from concerns of policy outcome – in other words, explaining what the law actually causes to happen in the real world.

More than in any other political field, environmental policy research has in the past frequently examined precisely this effect, the policy outcome, of the measurable ecological improvement in a given Land (Böcher/Töller 2012, p. 22 et. seq.). Certainly, positive environmental effects are considerably harder to demonstrate and categorise than negative ones, as data must be collected over long periods, which costs a lot of money and also requires multi-disciplinary monitoring. For reasons of costs or financing gaps, data collection of this kind is only very rarely carried out.

How can the different policies of the various Länder be explained? Political science largely explains it through the differing starting socio-economic positions of the federal states, which is why the greatest differences are between the Länder of East and West Germany as well as between rural and city states. At the level of the Länder, additionally, the handprint of party-political decisions is clearly visible in certain political fields, for instance concerning matters of internal security, integration policy or matters of university tuition fees and the management of universities. However, they should be interpreted only as an explanatory variable among other factors of influence. What could not, on the other hand, be demonstrated was partisan effects in the fields of financial and social policy (Hildebrandt/Wolf 2016: 391). The theory of political parties assumes that left-wing parties increase State expenditure whilst right-wing governments lower taxes. When there is a change of government from left to right (or vice versa), these effects are expected to become visible. Sceptics point out that differences between parties in Germany are shrinking or that the parties' manifestoes might be expected to become more similar, because they are competing to maximise their votes in the political centre. It is also stated that governments' political leeway has grown very limited in recent years due to the processes of globalisation and Europeanisation.

2.1 Ecological modernisation within multi-party competition

At first glance, there are contradictory results for the political field of the environment, which is relevant in this study. For instance, there is evidence that environmental policy competition between Länder does not depend on the party affiliation of those responsible for environmental policy, which tends to be most developed if parties make this the subject of their competition. Parties increasingly highlight environmental issues and possible solutions to them in their manifestoes and during election campaigns as a way of standing out and winning votes, even if this carries political risks (Jacob et al 2016, p. 15). Other studies provide evidence of clear positive effects of the government involvement of Green parties on policy-making (Wenzelburger 2015).

In its infancy, in the late 1960s, environmental policy had only a minor part to play in party-political terms. In Germany in particular this changed with the rise and establishment of the Greens. Due to their presence at the state and, ultimately, also at the federal level, they have succeeded in putting environmental subjects onto the political agenda. Competition between the parties increased the pressure on the established parties to take a greater interest in environmental protection and develop their own ideas. The Green competition strengthened pro-environmental positions in other parties as well. Environmental protection has developed by stages into a *valence issue*¹ since the 1980s, with broad consensus on ecological objectives, but with disagreement between parties on the appropriate means, pace and timescales to meet these objectives. The parties' positions differ, to put it simply – particularly with respect to the scale of structural changes in the economic system and the role of the State in the multi-level system of the Federal Republic of Germany (Wurster 2010, p. 249 et seq.).

The parties use environmental policy to market their actual core competence. The FDP sees environmental protection as the expression of a liberal social policy with a market economy approach, the self-perception of holding responsibility within an enlightened society and the individual actions of its players. Since the 1980s, the CDU has tied its environmental policy programme in with Christian values such as the integrity of creation. The SPD lays emphasis on the potential for creating jobs and industrialisation and pursues an ecological industrial policy that seeks to secure jobs for the long term by basing them on sustainability aspects. Die Linke (The Left), on the other hand, interprets the ecological crisis as the result of the capitalist economic system and links it to social and equality aspects as well as protection from market liberal, non-sustainable profitability based on short-term profit on the part of dominant market players, as well as a misguided, capitalist system of incentives that is in line with the market and very much to be criticised (Federal Environmental Agency 2016, p. 13).

1 *Valence issues* are subjects on which all voters can agree (such as full employment, price stability, security). The opinions of voters and political players differ over *position issues* (Stokes 1963).

Looking at an international comparison, German environmental policy has in the last decades been seen as comparatively progressive and stable across party boundaries. In this regard, it has benefited from conditions that are favourable to party politics. In Alliance 90/The Greens, a party with the brand essence of environmental protection, has become firmly established, is able to take on a major strategic role in multi-party competition and has been in power over several years in various coalition configurations (Jungjohann 2018; Switek 2015). But additionally, and for a number of different reasons, the other parties have shown a certain openness to ecological issues. Although there are still some differences between manifestoes and, in some cases, considerable differences of opinion around symbolic proposed environmental legislation (deposits on beverage containers (*Dosenpfand*), ecological tax reform (*Ökosteuer*), the phasing-out of nuclear energy and, more recently, the phasing-out of coal), the CDU/CSU and SPD in particular have been able to move their content closer together, as long as they have included market interests in the political decision-making process. It is worthy of note that the Greens are greatly influenced by their political rivals, making a point of taking the firmest stance (Bukow/Switek 2017, p. 120). In this way, competition between parties makes a considerable contribution to the development of the content of environmental policy, when environmental policy themes have been discussed in party manifestoes or used by the party leadership for the purposes of strengthening a profile and standing out from other political players. This, however, is not without political risks, as with the «petrol at 5 Marks a litre» debate in the parliamentary elections of 1998, which allowed political opponents successfully to mobilise against attempts at ecological modernisation and use that to create a profile (Federal Ministry of the Environment 2016, p. 12).

Developments since the parliamentary elections of 2017, however, show that the public mood can change quickly. Alliance 90/The Greens can thank the continued outstanding competence in matters such as environmental protection, climate protection and energy policy they are perceived to possess by supporters of all parties for their good showing in Bavaria and Hesse in the state elections of 2018, as the voter surveys show (Bukow 2018a, 2018b; Infratest dimap 2018a, 2018b). The other parties must answer for themselves as to what extent they plan to continue leaving the field open for the Greens on such a central issue of the future.

There are more and more signs that CDU/CSU and SPD are hoping to reposition themselves on the issue. Within the CDU, analyses are circulating that suggest that it is the younger voters in particular who consider the subject of the environment much more important than the Union has done in previous years. «Clearly, we have some catching up to do on the subject of ecology [...]. The question of climate protection could be a bridging subject among middle-class groups of voters who voted Green last time», said the CSU parliamentary group leader Alexander Dobrindt, who is known to be a critic of the Greens (Rinke 2018; our translation). This has been echoed by CDU party leader Annegret Kramp-Karrenbauer, who stressed during the race for the CDU chairmanship that the party could not afford to leave environmental protection to the other parties (FAZ 2018).

The SPD has also indicated its intention of taking a clear stance on ecological concerns, thereby distinguishing itself from the Greens. In August 2018, for instance, SPD party chair Andrea Nahles slammed the Greens' climate protection policy as reckless: «the Greens protect the climate through the state-sponsored closure of coal-fired power stations, with no regard for the local population» (Medick 2018; our translation). In a strategy paper two months later, the party leadership called for a clear future perspective for workers in the lignite mining regions affected by the fossil fuel phase-out (Carstens 2018). Statements of this kind leave the impression that the SPD is seeking mainly to use climate protection as a theme to raise its own profile in social issues, not to claim the field of ecology for itself.

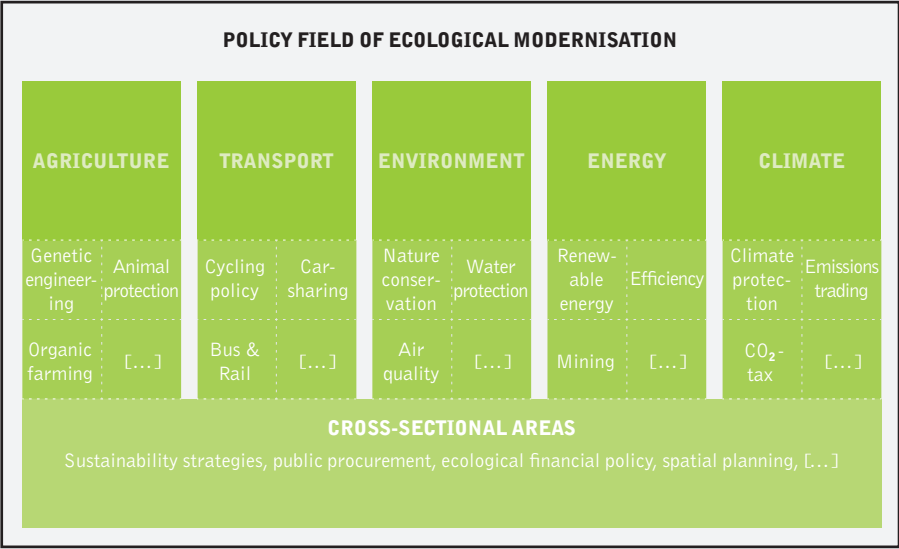
Although the matter is subject to the vagaries of politics, a comparatively high level of continuity in environment policy exists in Germany across party boundaries. Admittedly, there will always be shifts in emphasis following a change of government, but these are rarely fundamental in their nature. The biggest U-turn in this regard was the change of government in 1998, which brought with it the first-ever government participation for Alliance 90/The Greens at the federal level. The red-green coalition sparked a catch-up process for previously neglected environmental fields, such as the nature conservation, and initiated substantial environmental innovations through the ecological tax reform and the phasing-out of nuclear energy (Wurster 2010: 254).

2.2 Policy fields of ecological modernisation

Does Alliance 90/The Greens use the leverage of their government participations in the Länder to push through policies favourable to the objective of ecological modernisation? To answer the lead question of this study, this chapter aims to analyse the policy output of state governments with Green participations in selected policy fields that can be summed up using the term ecological modernisation. As an overarching multi-disciplinary policy area, *ecological modernisation* should be understood in this context to refer to all political activities that aim at conserving the natural life resources and nature (fig. 3): environment and nature conservation policy (air, water, soil, marine conservation, flood defences, species conservation, biodiversity), agricultural policy (including regional issues such as viticulture and fishing), hunting policy, genetic engineering, animal protection, energy policy, climate policy. On top of these, a range of policies have cross-cutting effects. This concerns approaches such as the greening of public procurement, green financial policy, divestment in the public sector, green investments, sustainability strategies, etc.

It is becoming clear that the political field covers many sub-elements. Before going into the question of the specific policy output of governments with Greens participating in greater depth, a closer look should first be taken at the available research. For this purpose, a review of political science studies will be undertaken. Only studies that concentrated on one of the political fields of ecological modernisation set out in this study, carried out examinations at the Länder level and cover

Fig. 3: Policy field of ecological modernisation



Source: own chart.

the period between 2007 and 2017 have been selected (the studies are listed in the appendix). The political field of climate policy constitutes an exception, as there are no existing studies that meet the criteria listed,² although several Länder have begun to legislate in recent years. There is therefore a brief overview of climate policy.

2.2.1 Energy policy

Energy is a cross-cutting policy field that extends to economic, environmental, climate, structural and research policy. National policy objectives such as phasing-out of nuclear, moving to renewables and energy savings stipulations put pressure on the Länder governments to act on the state level. Due to competing legislative powers between the Land and Bund levels, the Länder get a say in certain policy areas of the economy, mining and energy and considerable freedom to act as they see fit at Land level in a number of areas (Wurster 2017). Moreover, the Länder are able to contribute to national legislation via the Federal Council and at least object to laws that are not subject to approval (e.g. energy industry, EEG) and launch a conciliation procedure, which leads to decisions being delayed and, in some cases, concessions being made by the federal government (Rave 2016). In this way, for instance, they are involved in

² Monstadt und Scheiner's study (2016) on state policy-making in energy and climate policy is one exception. However, as it has focused on depicting the geographical distributional effects of the EU emissions trading system on the Länder, it is of limited relevance in answering the key question.

the decision as to which of the power grid expansion plans of the Federal Network Agency will be rolled out and which will not (Ohlhorst et al. 2014, p. 100; Heimann 2015). Finally, certain downstream regulations in the field of energy are subject to approval within the legislative process.

In 2017, **Wurster und Hagemann** looked at which factors influence the expansion of renewable energy in the Länder and the speed at which this takes place. In their study, the authors also consider whether there are measurable partisan effects with regard to government participations of Alliance 90/The Greens. The analysis covering the period 2004 to 2014 traces two paths at the Länder level: firstly, a group of less economically developed states (Mecklenburg-Western Pomerania, Brandenburg, Saxony-Anhalt and Thuringia) have driven expansion as part of an economic innovation strategy. Alliance 90/The Greens were not part of the government in any of these states during the period covered by the study. However, the authors do not conclude that the absence of the Greens from these governments may have been favourable to the expansion of renewables. Secondly, the party-political composition of the various state governments seems to have played at least a moderate role in economically stronger Länder. Those in which Alliance 90/The Greens were part of the coalition appear to have generally achieved a faster roll-out of renewables. This, conversely, does not mean that governments with no Green participation necessarily put on the brakes. Precisely in Länder with a high expansion potential, such as Lower Saxony and Schleswig-Holstein, coalitions across party lines have driven the expansion during the period under investigation. In certain cases, a greater effect can be put down to Green government participation if the contrast to previous governments, in Rhineland-Palatinate for instance, is significant. There, the authors identify a clear difference between the red-green coalition (2011–2016) and its red-yellow (SPD/FDP) or red (SPD) predecessors. Under its Minister for Economic Affairs, Climate Protection, Energy and Regional Planning, Eveline Lemke (Alliance 90/The Greens), the state considerably increased its expansion objectives for renewable energies compared to the previous governments. In this way, the production of energy from renewable sources nearly doubled during a single legislative period. The authors explain the fact that the partisan effect in favour of Alliance 90/The Greens is not greater overall by pointing out that there were only few Green coalition participations in Länder with a large expansion potential and that when it came to it, previous governments had already begun to exploit this potential in all cases but one.

For Baden-Württemberg, **Wurster** (2017) sets out the results of the energy policy of the green-red coalition between 2011 and 2016 with regard to energy production, distribution and consumption. Wurster notes that regarding the subjects of the nuclear phase-out, expanding wind energy and citizens' participation, Green-Red identifiably placed its own priorities. Moreover, the lines of continuity from the previous government are visible (e.g. renewable heating and combined heat and power co-generation). At the same time, the pressure to adapt to the national transition to renewables continued to be very high on Baden-Württemberg, as a traditional nuclear state. Green-Red seems to have taken at least a few steps in the right direction. Beyond the state borders, the coalition moreover made a positive contribution

to the energy transition at national level: firstly, due to high political commitment over the energy policy programme and broad support programmes at Land level; and, secondly, due to the state government's willingness to work with other Länder, moth-balling its own interests, in a compromise on identifying a final storage repository for nuclear waste. The green-red coalition is thus proof that state governments can have some leverage for influence above the level of the Land itself. Admittedly, the study does not look at the two coalition partners individually, but it can be assumed that Alliance 90/The Greens did much to shape the coalition's energy policy as the partner responsible for the subject area, not least because Minister President Winfried Kretschmann takes a very strong personal stance in this political field and takes political action at Bund level.

In their study, **Monstadt and Scheiner** (2016) analyse the costs and benefits of the energy transition for the Länder as well as their regional economic interests. The key question is whether the federal system helps promoting or holding back the transition to renewables. The study looks at two areas of activity, promoting renewables and emissions trading, since the 1990s. It concludes that regional energy interests determine the state governments' attitudes to the energy transition. Established party lines take a back seat in this process. The Länder are noted to present their own regional interests offensively at the Bundesrat. For instance, North Rhine-Westphalia made the case for keeping as many exemptions in place as possible for energy-intensive industries, whilst «coastal states» like Lower Saxony called for higher support for wind power.

Wurster and Köhler (2016) examine the energy policy measures of the Länder with emphasis on similarities and differences. Some of the Länder have pursued their own differentiated strategies and are in favour of Länder developing differently. They report that considerable partisan effects can be identified in some cases: Green government participation is reported to support the expansion of renewables, for instance in Baden-Württemberg, Schleswig-Holstein and Thuringia. On the other hand, Länder in which the CDU/CSU is in power tended instead to support bioenergy, because of its relevance for the agriculture sector.

In a comprehensive comparative study, **Diekmann, Schill, Püttner and Kirrmann** (2017) analyse the progress made by the Länder in expanding renewables. They examine the political efforts made by the Länder to push forward the expansion of renewables and to influence technical progress and structural economic change in favour of renewables (energy policy programmes, targets, support measures, research strategies, etc.) to rank the Länder. In terms of political efforts in favour of expansion, Baden-Württemberg is the undisputed leader. According to the study, this Land stands out through its energy policy programme, renewable energy targets and stipulations in the field of renewable heat production. Thuringia and Schleswig-Holstein, two other states in which Alliance 90/The Greens are in the coalition, take second and third places. Saarland, Saxony and Bremen bring up the rear. Regarding efforts in favour of a technological and economic transition, Mecklenburg-Western Pomerania is in top position ahead of Lower Saxony, Bavaria and Baden-Württemberg.

In last place come Saarland, Hesse and a state with Green government participation since 2011, Rhineland-Palatinate.

Töller (2017) investigates partisan effects in the regulation of fracking. She examines the position of the CDU/CSU parliamentary group in the Bundestag as well as those of the red-green state governments in North Rhine-Westphalia and Lower Saxony between 2011 and 2016. At first glance, the results contradicts the assumption parties and coalitions from the center-left pursue a more stringent environmental policy than those from the center-right. For instance, the CDU/CSU parliamentary group has militated for tougher conditions for fracking than the red-green Land government of Lower Saxony. Töller considers that much of the cause lies in the problem structure at regional level. For instance, several members of the CDU/CSU parliamentary group from districts with shale gas reserves departed from the initial pro-fracking party line. Ultimately, the CDU/CSU was divided and in the end agreed on relatively strict regulations. In North Rhine-Westphalia, both the SPD and the Greens – in line with the pro-coal policy of the North Rhine-Westphalia SPD – supported a ban on fracking. The red-green coalition in Lower Saxony, however, admittedly supported a ban on unconventional fracking, but only on the understanding that conventional fracking, which has been practised for around 30 years in the region, would be permitted to continue. Although this line thwarted the expectations of the grass roots and the manifesto of the national party, the Green members of the Lower Saxony parliament went along with it for the sake of maintaining the coalition.

2.2.2 Climate policy

Climate policy is a relatively new political field, which is shaped by the global nature of climate change. Driven by international agreements in the 1990s, such as the UN Framework Convention on Climate Change (1992) and the Kyoto Protocol (1997), the national level has increasingly been the focus, as this is where the implementation of targets laid down internationally is carried out (Itzenplitz 2012). In turn, the negotiation of national measures leads to players at sub-state level, such as the Länder. They started taking ownership of the subject for themselves, making their own contribution to solving the problem and influencing national discourse. By now, all Länder have developed concepts, action plans or strategies with a climate policy dimension, often in combination with energy policy. In some cases this has led to the revision of various sectoral laws (laws on energy, emissions control, planning, construction, housing and transport; Kroll 2017). Not least the Fukushima reactor accident in 2011 also marked a turning point in German energy policy and a breakthrough for the *Energiewende* in terms of multi-party competition. Within just four years of the disaster, 12 Länder revised their climate and energy programmes (Scheiner 2016, p. 145).

Climate policy is only just beginning to take shape as a political field in its own right at the state level. So far, just seven Länder have signed off their own climate laws. These form the basis of a climate protection strategy and. In most cases they stipulate for the public sector to become a role-model of reducing emissions. They set out

overarching objectives, coordinate measures to achieve them and thereby create an institutional framework. In this way, they seek to fit in with the cross-cutting nature of climate protection (Wickel 2015). Some of the states, such as North Rhine-Westphalia and Baden-Württemberg, use an extensive participation and dialogue procedure to get stakeholders on board at an early stage, speed up the downstream legislative conciliation process and reduce potential for conflict or head it off at the pass (Kroll 2017). Broadly speaking, the climate protection laws mark out a procedural framework. The objectives do, admittedly, have stronger legal value than a simple Cabinet decision, because they are laid down in law. However, even these targets remain of a fundamentally political nature. Additionally, they allow light to be shed on infractions and can thus be discussed, publicly and transparently (Müller 2018).

The city state of Hamburg has been the lone frontrunner with a light climate protection law from 1997 (HmbKliSchG 1997). However, it is no more than a compilation of various stand-alone measures in favour of more climate protection. The first substantial state climate law was enacted in early 2013, by the red-green coalition in North Rhine-Westphalia, with the green-red coalition in Baden-Württemberg following suit half a year later. In both cases, a new coalition government called for a «new start for climate policy» (Scheiner 2016, p. 146), involving a slight increase of existing climate objectives and/or a more binding nature for the Land political level. In August 2014, the third state law entered into force, in the shape of the climate protection law of the red-green coalition in Rhineland-Palatinate (MUEEF 2014). This was followed by Bremen with a Climate Protection and Energy Act (BremKEG 2015), which entered into force in March 2015. A year later, the grand coalition in the national capital followed with the Berlin Energy Transition Act (2016). In March 2017, the so-called «coastal coalition» of SPD, Alliance 90/The Greens and SSW signed off Schleswig-Holstein's Energy Transition and Climate Protection Act (Land government of Schleswig-Holstein 2017). In the same month, the red-red-green coalition in Thuringia became the first former East German state to pass a law. The red-green Land government of Lower Saxony introduced a climate bill at the same time, but due to early parliament elections in October 2017, it was never adopted (MUEBK 2017). In August 2018, the Minister for the Environment and Energy of Saxony-Anhalt, Claudia Dalbert, presented a draft climate and energy policy (MULE 2018). Overall six Länder have passed climate protection laws since 2013. Further three Länder have published drafts of legislation. With only one exception (the coalition government in Berlin), Alliance 90/The Greens were part in all of these coalitions and were in charge of the responsible Ministry for the issue. This suggests that Alliance 90/The Greens were the driving force behind climate policy becoming established as a political field in its own right at Land level.

2.2.3 Environment and nature conservation policy

The term environmental policy covers political measures, legislative guidelines, administrative programmes and other public and state efforts to preserve natural resources. Through this, environment and nature conservation policy covers the

broadest cross-sectional area of all of the policy fields of ecological modernisation covered in this study. Surprisingly, however, there is relative little recent research on this field. Since 1974 and the establishment of the German Federal Environment Agency, environmental policy has been institutionally enshrined in Germany. There are now functional authorities and officials at almost all levels of the political and administrative system in Germany and their regional authorities and administrative units, which are entrusted with the mission of achieving the objective of more protection for the environment and nature (BPB 2008). A study on the implementation of the nature conservation provisions by the Länder (Volkery 2008) concludes that coalitions with Alliance 90/The Greens acted fastest during the investigation period 2002–2005. Conversely, CDU/CSU-led Länder tended to act later in implementation «to deregulate their nature protection law in chunks» (ibid., p. 267; our translation), also as a reaction to the red-green national government that passed the new Federal Nature Conservation Act in 2002. Multi-party competition offers a very strong temptation for state governments that are led by one of the opposition parties at national level to implement controversial national law reforms incorrectly or even to act beyond them, as this would put their political opposition into a better position.

Böcher and Töller (2016) illustrate similarities and differences in environmental and nature conservation policy between states. Some of the differences can be fully explained by partisan effects and changed power resources for environmental and nature conservation interests. The most recent development of some climate protection laws and the establishment of national parks can be imputed to Green government participations. Additionally, state governments with Greens appear to lay more emphasis on reforming hunting laws (see below). By and large, a watering-down of environment and nature conservation can be seen within the overall development across all Länder, but some individual measures could also be ascribed to changed government compositions (CDU/FDP in Lower Saxony 2003–2013). The authors stress that it has not yet been sufficiently investigated whether partisan effects, regional specifics or socio-economic factors could be responsible for the differences between Länder.

2.2.4 Agricultural policy, genetic engineering, animal protection and hunting policy

This section covers political fields of ecological relevance which have historically been mostly to be found within the remit of the agriculture ministries. The central point here is the field of agriculture policy, which in Germany mainly consists of regulatory measures, influencing market processes and creating a framework to secure production in the production of food using plants and animals. The directly related political field of animal protection policy ranges from livestock farming and animal testing or hunting rights through to private animal ownership, zoos and circuses. Distinctions can be drawn between positions relating to animal protection, animal rights and animal liberation. Since the mid-1980s, genetic engineering has played an increasing role in the use of plants. Since then, the diverse and wide-reaching application

potential in plants, animals and humans has been on the agenda in Germany, with relatively restrictive political and court decisions at national level.

In general, Green government participation is strongly associated with a modernisation of hunting legislation and ambitious animal protection. Within agriculture policy, the regionalisation of the European funding pools has increased the scope for Land governments to focus their own agriculture policy more on ecology (Ewert 2016).

Hartung and Hörisch (2017) analyse the variations in the genetic engineering policies of the Länder from 2010 to 2015. They note that Green ministers appear to be the main driving force behind the (mostly symbolic) decisions of Länder to join GMO³-free networks. However, the results do not confirm that Green government participations have led to stricter regulations on GMOs. The authors impute this to the fact that overall, the Länder have little scope to regulate GMOs.

Tosun and Hartung (2017) look at the agriculture and consumer protection policy of the green-red coalition in Baden-Württemberg between 2011 and 2016. The authors analyse the manifestoes of SPD and Alliance 90/The Greens, the coalition agreement and legislative activities. By and large, they report that agriculture and consumer policy became considerably «greener» under Green-Red. During the election campaign, the Greens presented an extensive programme and secured the inclusion of their ideals in the coalition agreement. The coalition partners appear to have agreed on many points, but the Greens won through with more ambitious objectives. Their assertiveness can partly be attributed to their role as the larger partner. Additionally, agriculture policy is of greater importance to the Greens and their supporters than to the SPD. The environment and agriculture ministers, both Greens, ensured a new political focus, in which the case study of genetic engineering in particular shows that a broad change of political direction took place under Green-Red.

Amongst other things, **Ewert** (2016) examines the extent to which a government participation for Alliance 90/The Greens influences the agriculture policy of the Länder. Analysing coalition agreements with and without Green participation shows that the party makes a considerable difference: the case for animal protection concepts is made more strongly and the accession decision of a Land to the «European Network of GMO-Free Regions», for instance, more likely. Furthermore, the focus in the coalition agreements is on the paradigms of sustainability instead of productivity and the economic efficiency of agricultural production. Effects can also be seen in the policy outcomes. For instance, laws on the right to bring class actions in the field of animal protection have been introduced in seven Länder, in five of which the Greens supplied the agriculture minister. All of these Länder joined the «Network of GMO-Free Regions». Overall, the effect and manifestation of political will are clearer in the coalition agreements than in the actual political output, although the author ascribes this to limited data. Other causes of differences in the agriculture policy of the Länder include the influence of Land farmers' associations and their network structures

3 Genetically Modified Organisms

and overlapping offices, economic framework conditions and the action mechanisms of the individual aid and subsidies traditions.

Vogeler (2017) evaluates the election manifestoes of the ruling parties in state governments for animal protection policy and examines coalition agreements, Bundesrat initiatives and measures at Land level. The assessment, which covers the period from 2011 to 2017, shows that in comparison to the established parties, Alliance 90/The Greens put greatest emphasis on animal protection in their manifestoes. These set out several animal protection policy objectives, together with very detailed measures in some cases. This is consequently also reflected in the coalition agreement. This appears to be particularly clear-cut in Saxony-Anhalt: with the Green government participation in 2016, many animal protection-related points found their way into the coalition agreement of the so-called Kenya coalition (black, red and green, the colours of the Kenyan flag), even though animal protection had played a marginal role under the previous government, made up of CDU and SPD. Similarly clear findings were observed in North Rhine-Westphalia, where the red-green coalition in power until spring 2017 implemented several measures to improve animal protection in livestock farming. The coalition agreement of the following black-yellow government between CDU and FDP contains no specific animal welfare requirements. It suggests that a «complete about-face» could be expected (Vogeler 2017, p. 645; our translation). Looking at the Federal Council as well, a clear tendency emerges. Most parliament initiatives during the investigation period 2011–2016 aiming to improve animal protection in livestock farming were initiated by Rhineland-Palatinate, North Rhine-Westphalia, Lower Saxony and Schleswig-Holstein – all of which included Alliance 90/The Greens in the Land governments and provided the responsible minister. While parliamentary legislative work for this policy field played a comparatively minor role in the Länder selected for the study, ministerial decrees and financial incentive systems open up the possibility of bolstering animal protection. State governments with Green participation compensate farmers for not amputating pigs' tails or the beaks of laying hens (Lower Saxony) and support investments in especially animal-friendly sheds (Schleswig-Holstein) and pasture rearing (Schleswig-Holstein, North Rhine-Westphalia). Even though there are other variables⁴ that influence a state government's animal protection policy, Vogeler (2017) concludes that there are considerable differences between the parties' positions on animal protection and that these are reflected in government conduct. The composition of state governments in terms of political parties is of considerable importance in this political area. Animal protection in livestock farming has been increased mainly in Länder in which Alliance 90/The Greens have seats and are responsible for the ministries with competence in the field of animal protection.

4 E.g. different regional interests and power constellations, different types of economic and social structures.

2.2.5 Transport policy

Transport policy deals with all political and planning measures aimed at overcoming geographical distance. This covers the transportation of people and goods as well as of information. This policy area thus includes all infrastructure for individual and pedestrian, bicycle, road, rail, water-borne and air transport. All political levels in Germany, from town councils to the federal government and, increasingly, the European Union as well, are responsible for and therefore bearers of transport policy. The State objective in transport policy is forward planning, development and maintenance of the existing transport infrastructure as part of public service in general through direct interventions, as well as regulating market access and prices for potential providers in the transport sector in direct interventions. Compared to other disciplines, political science has long neglected transport policy, which is still not a separate political field within political science (Schwedes et al. 2016).⁵ Accordingly, only one study on transport policy was found to be evaluated for this chapter.

Gebhardt (2016) carries out an interim review of transport policy in Baden-Württemberg since 2011. By promoting sustainable forms of mobility, the green-red Land government has, to an extent, reversed the trend of the black-yellow predecessor government. For instance, the share of spending on local public passenger transport (ÖPNV) in the municipal transport infrastructure has increased from 40 to 60 percent. Additionally, most investments in road-building are now channelled into maintenance rather than development and expansion. Overall, however, the study shows that the regulatory scope of a state government is limited in this policy field.

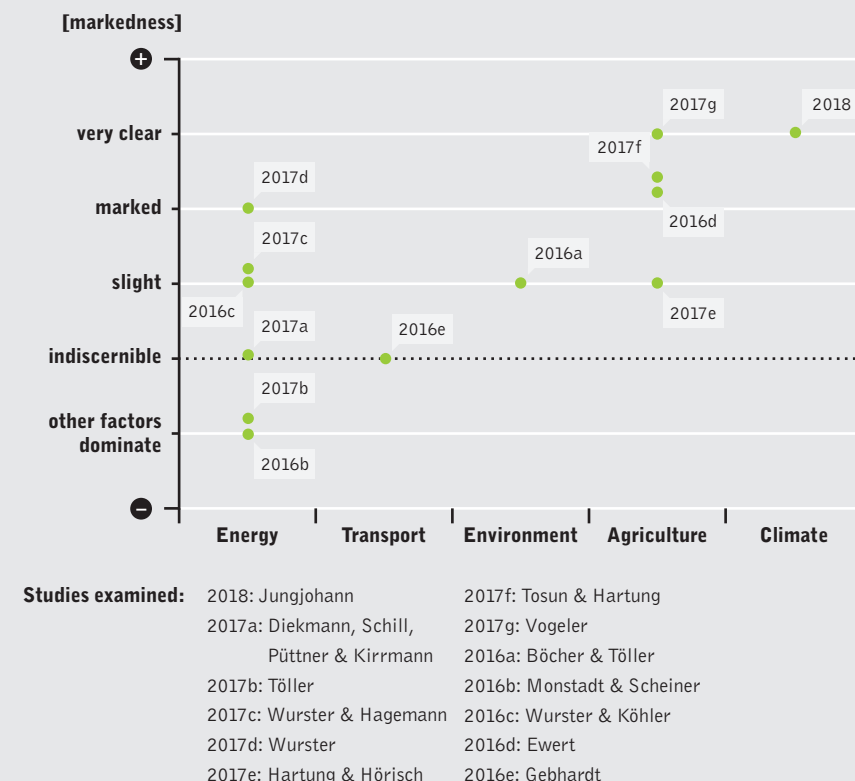
2.3 Conclusion on ecological modernisation policies in the Länder

Coalitions in which Alliance 90/The Greens take part pursue more ambitious policies for ecological modernisation than governments without them. This is shown by assessing a dozen political science studies investigating the period from 2005–2018 (see fig. 4). The effect is particularly prominent in policy fields in which the Länder have a relatively large amount of political scope: energy policy (particularly renewables), climate policy, agriculture policy (especially animal welfare). But even in fields in which the Länder have less leeway, the Greens are at least placing some emphasis. For instance, state governments with Green participation stand out because even though – or possibly even because – they have few competences to regulate on genetic engineering, they enter into voluntary agreements and support highly symbolic social alliances. The fact that studies in policy fields in which the Länder have few powers to act have in a small number of cases led to clear value choices such as a substantial policy change (*Politikwechsel*) (Tosung/Hartung 2017 on green-red genetic engineering policy in Baden-Württemberg) may have more to do with the contrast to the previous government than with the material content of the policies.

⁵ Chapter 4 looks in greater depth at the policy field of transport and why political sciences has neglected it for a long time.

Fig. 4: Effectiveness of Green government participation in policies of ecological modernisation

Marks show studies and their finding in regard to a more ambitious ecological policy as a result of a Green government participation.



Source: own research, categorisation and chart.

Compared to the policy areas listed above, the results in terms of environmental and transport policy are much less marked. For environmental policy, this may seem surprising at first glance. After all this is the key competence of the Greens. In this field, the challenge lies in the fact that only one study exists at all, but even that touches upon the subject only marginally. The poor data situation may be explained by the fact that environmental policy has now been split into several thematic fields whilst climate protection, for instance, has established itself as a separate political area. Additionally, Länder may have passed fewer controversial projects in recent years, on protecting water, soil and nature, which might trigger partisan controversy and thus awaken research interests. An exception to this is air pollution control, which constitutes an experimental field for legislative acts in the Länder due to regularly exceeding requirements under EU law and the threat of driving bans in many German inner cities, which have allowed it to become the subject of future analyses. The reasons why transport policy has been the subject of so little research to date is discussed

in Chapter 4. Closing the political science research gap would be a useful basis for discussing the difference made by individual governments, coalitions and parties.

When evaluating studies concerning individual Länder, it is clear that a policy change or shift in matters of ecological modernisation is observed only after a complete change of government. The best example of this is the (center-left) green-red coalition in Baden-Württemberg, which took over from the previous (center-right) black-yellow coalition in 2011. In cases in which only one coalition partner changes, research does not note a fundamental change of policy. For instance, in 2014 Red-Red-Green displaced the previous CDU-SPD coalition in Thuringia (2009–2014). Despite slight changes of emphasis in environmental and energy policy, the red-red-green coalition since 2014 has pursued «broadly the same environmental policy objectives» as those of the CDU-led Land governments ever since reunification. «A change of policy or even a reversal of political decisions of earlier Land governments has not happened in either environmental policy or in energy and climate policy» (Langer 2018, p. 392; our translation).

In Saxony-Anhalt, for example, the grand coalition of CDU and SPD lost its majority in the elections of 2016. Alliance 90/The Greens joined as the third coalition partner in Germany's first-ever Kenya coalition. Shortly after it began, research suggested that the Greens did «push forward a few important points (including the expansion of organic farming) in the coalition negotiations». However, with the exception of the decision not to authorise any new brown coal mines, «no fundamental new direction for environment policy» is to be expected (Franke 2017, p. 398; our translation).

Government composition shows that parties never act independently, but that their specific proposals must always be implemented against path dependencies, in other words socio-economic (the economic structure of the state) or political factors (coalition partner, opposition parties). To this extent, other factors may overlay party-political effects, as the study on the positioning of the Greens in Lower Saxony on fracking illustrates (Töller 2017).

An evaluation of the studies provides indications of an interplay between the Bund and Land levels in questions of ecological modernisation. On the one hand, the Länder seem to make very little use of the possibility of pushing forward innovative policies at national level. On the other hand, the federal system is often described as hampering environment policy (Wolf/Hildebrandt: 2016). The lack of rigour at federal level in the policy programmes seems to be created by the patchwork of nature conservation policy measures, which often fail to take sufficient account of boundaries between Land and Bund. However, this analysis shows that conversely as well, the states can take a pioneering role and set the pace for the national level. In this way, several Länder with Green government seats have passed their own climate laws or at least introduced them, before a national law has been submitted, which has been announced by the Federal Environment Minister for 2019 (Schulze 2018).

3 Comparing ministries of environment between Länder

When in government, parties are most likely to implement their political objectives if they also hold the ministry responsible for the respective policy field. Responsibility for a ministry increases a party's political leeway over that of the coalition partner. In theory, a simplistic «exclusive power of decision-making in the political area in question» (Müller 2004, p. 285; our translation) is assumed. The policy of the individual ministries and the directions these take seem to correspond most broadly to the ideals of the party that supplied the minister. It is the responsibility of the competent ministry to draft legislation and thereby to lay the first foundation, which will be fed into by not only policy considerations, but also party-political ones. To this extent, responsibilities and how these are allocated provide the scope for parties in power. As a rule of thumb, the more areas a coalition partner has within its ministries, the more leeway it has.

How influential are specific ministries? This depends on the point of view of the observer and on what the objectives are. If one were to ask senior politicians from the Länder what makes a ministry relevant, five factors emerge across all parties: the influence on the personnel policy of the ministry and its subordinate agencies; influence on political decision-making in that field; the possibility of executing cross-sectional responsibilities for the government overall; the chances of gaining a reputation and public attention through the ministry; and the possibility of distributing subsidies and funds (Linhart/Raabe 2015).

Which party heads up a ministry and exactly what its remit will be is a matter of negotiation between the coalition partners. During the coalition negotiations, parties have an interest in satisfying their own preferences, thereby achieving the most positive possible relative position of power for their own players whilst ensuring a certain proportionality between partners (Sieberer 2015). This process can lead to areas of responsibility shifting between ministries, which cannot be explained by reference to policy content. Decisions on allocating responsibilities do always have a political justification. This process can set priorities in terms of content and optimise organisational processes. Not least a precise description of the ministry can express prioritisations and symbolically transport content (Heindl/ Böhme 2013, p. 186).

Against this backdrop, the question arises as to whether government participations for Alliance 90/The Greens have any effect on the direction and structure of

environment ministries and if so, what? To answer this question,⁶ the next section compares the states' environment ministries using three formal indicators taken from the relevant organigrams: their names (3.1), their size in the form of number of departments and units (3.2) and their structures in the sense of thematic responsibilities (3.3).

3.1 Names of ministries of environment

Environment ministries' names vary between Länder (see table 1). In 12 out of 16 cases, the word «Umwelt» (environment) comes first in the ministry's name. In the other four cases, other political fields are named first: «Energiewende» (energy transition; Schleswig-Holstein), «Ländliche Entwicklung» (rural development; Brandenburg), «Landwirtschaft» (agriculture; Mecklenburg-Western Pomerania) and «Klima» (climate; North Rhine Westphalia). In point of fact, the word order of the name has no material influence on the areas covered by a ministry. However, it is to be assumed that it constitutes an expression of political priorities. In cases in which a change of name for a ministry was decided upon during coalition negotiations, the coalition partners explain this by way of the underlying political will.

At Bund level as well, examples can be found of ministries' names having been changed to express a new political priority. Ever since the Federal Republic was created, the ministry for agriculture bore the official name «Bundesministerium für Ernährung, Landwirtschaft und Forsten» (Federal Ministry for Food, Agriculture and Forestry). When, in the wake of the BSE crisis in January 2001, Renate Künast (Alliance 90/The Greens) took over the ministry, it was renamed the «Bundesministerium für Verbraucherschutz, Ernährung und Landwirtschaft» (Federal Ministry for Consumer Protection, Food and Agriculture). This reflected the red-green coalition's intention of triggering a fundamental change in the field of agriculture and consumer protection. When the grand coalition came in after the next change of government in 2005, the change of name was reversed again.

The strong importance attached by Alliance 90/The Greens to climate protection is reflected in their government participations. Only ministries in those Länder in which Alliance 90/The Greens are part of the coalition include the term «Klima» or «Klimaschutz» (climate or climate protection). This is the case in five Länder. Conversely, the term «climate protection» is not part of the name in any of the governments without Greens. Through this, the Greens occupy a policy field that is newly being established at the Länder level and which is acquiring more presence and greater value in domestic political discourse, precisely due to their political actions.

⁶ A longitudinal examination of all political fields of ecological relevance would go beyond the scope of this study, which is why it has a cross-cutting focus (as of January 2017) on the environment ministries, with the addition of observations concerning the adjacent political fields of agriculture, energy and transport. The reference date chosen is no accident: it was then that the Greens had the highest ever number of environment ministers – 11 out of 16 – meaning that any tendencies would be most clearly visible.

Table 1: Names of the environment ministries in the Länder

Land	Ministry/Senate/Authority for
Baden-Württemberg (BW)	Environment, Climate and Energy
Bayern (BY)	Environment and Consumer Protection
Berlin (BE)	Environment, Transport and Climate Protection
Brandenburg (BB)	Rural Development, Environment and Agriculture
Bremen (HB)	Environment, Construction and Transport
Hamburg (HH)	Environment and Energy
Hesse (HE)	Environment, Climate Protection, Agriculture and Consumer Protection
Mecklenburg-Western Pomerania (MV)	Agriculture and Environment
Lower Saxony (NI)	Environment, Energy and Climate Protection
North Rhine-Westphalia (NW)	Climate Protection, Environment, Agriculture, Nature and Consumer Protection
Rhineland Palatinate (RP)	Environment, Energy, Food and Forests
Saarland (SL)	Environment and Consumer Protection
Saxony (SN)	Environment and Agriculture
Saxony-Anhalt (ST)	Environment, Agriculture and Energy
Schleswig-Holstein (SH)	Energy Transition, Agriculture, Environment and Rural Affairs
Thuringia (TH)	Environment, Energy and Nature Conservation

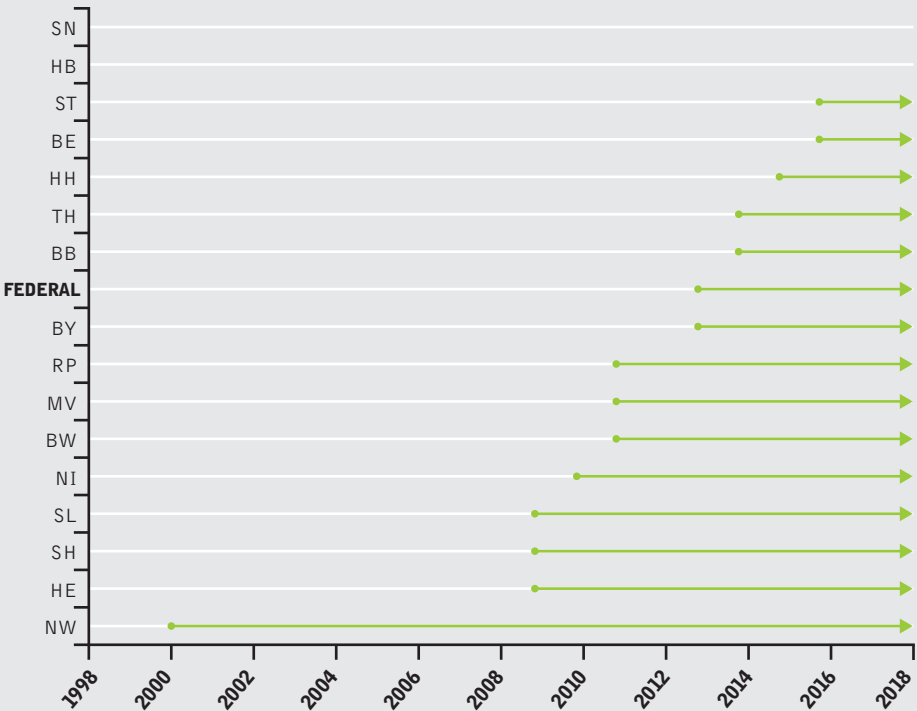
In green: Green government participation. January 2017

Source: own research; own chart.

The fact that energy policy enjoys a high priority for the Greens where they hold seats in government becomes clear from looking at the names of the ministries. In seven out of 14 cases, the term «Energie» (energy) was not explicitly used in any department name until the Greens joined the government in question. The first of these was the red-green government in North Rhine-Westphalia in 2000. The term is now used in 14 state ministries, all except Bremen and Saxony. However, the reference to energy cannot be imputed solely to the Greens, but is a reflection of the fact that the subject area of the energy transition has increased greatly in importance in the last ten years.

The Greens also place energy policy emphasis in the naming of the ministries (fig. 5). For instance, the Green Ministry for Energy, Agriculture and Rural Areas is unique in the whole of Germany. In Baden-Württemberg under the previous black-yellow coalition between CDU and FDP, the department with responsibility for the environment was called the Ministry of the Environment, Nature Conservation and Transport. Following the government change to Green-Red in spring 2011, the ministries were reshuffled. Transport was split off from the environment and its value was enhanced, due to the creation of a separate new Ministry for Transport and

Fig. 5: The first time the term «Energy» was used in the title of state ministries



Source: own chart.

Infrastructure. The new environment ministry was from that point known as the Ministry for Environment, Climate and Energy, marking great importance for climate protection. It must, however, be stressed that not all responsibilities of a ministry are reflected in its name. The environmental authority⁷ of Bremen, for instance, is also responsible for agricultural issues. As this political area is of subordinate importance within a city state, it is not referred to by name in the title of the department. Even so, the Environment Senator is able to cooperate in the national legislative process through this position via the usual mechanisms (e.g. agriculture committee of the Bundesrat, ministerial conferences, Bund-Länder working groups).

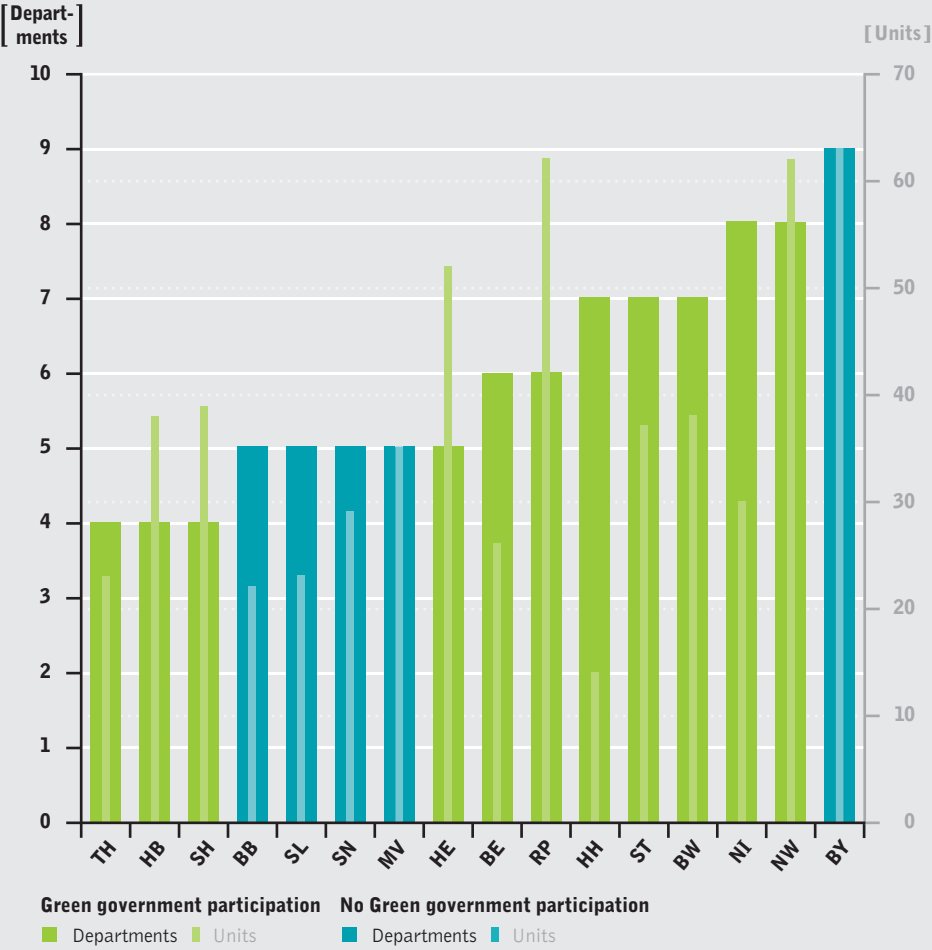
3.2 Size of ministries

To estimate the size and/or internal differentiation of environment ministries, a look at the organisational structure of the departments and units is necessary. Here, the Länder differ greatly (fig. 6). The environment ministries of the Länder consist of between four and nine departments and from 14 to 63 units. On average, an environment ministry consists of six departments and 37 units. Länder with large administrations have a greater than average number of units. These include Bavaria (63), Rheinland-Palatinate (62), North Rhine-Westphalia (62) and Hesse (52); there are considerably fewer in Hamburg (14), Brandenburg (22), Thuringia (23), Saarland (23) and Berlin (26). The number of departments does not necessarily correspond to the number of units. For instance, the environment ministries of Lower Saxony and North Rhine-Westphalia have eight departments each. But within those, the ministry in Lower Saxony has only 30 units, the ministry in North Rhine-Westphalia more than 60 units.

But is the number of departments and units a reliable indicator of how much scope a ministry has in day-to-day political life? A look at the environment ministries in Schleswig-Holstein and Bavaria makes the limitations of such a comparison clear. In Schleswig-Holstein, the environment ministry is responsible for environment, agriculture and energy (and, recently, digitalisation as well). Despite this breadth of responsibilities, the ministry consists of only four departments with 39 units. Conversely, the Bavarian environment ministry has nine departments with 63 units, although only the fields of environment and consumer protection are covered, whilst agriculture and energy are not. It is to be assumed from this that the Bavarian environment ministry is able to deploy far more resources to take care of a small number of thematic areas. The environment ministry of Kiel, on the other hand, has comparatively few resources to cover a relatively high number of areas. In practice, the latter example means that there is little time left over from core obligations (such as implementing federal laws) for other matters (such as drafting Bundesrat initiatives, awareness campaigns, regular controls, etc.).

⁷ In Germany's three city states of Berlin, Bremen and Hamburg, the departments of government are not called ministry, but authority («Behörde» or «Senat»).

Fig. 6: Size of the environment ministries in the Länder
May 2017



Source: respective organigrams, own research; own chart.

It is to be concluded that there is a wide variance in the internal differentiation between the forms taken by the environment ministries at Land level. However, the structural organisation does not allow any conclusions to be drawn as to Green government participations. The substructure of the ministries has developed historically, is strongly characterised by the individual Länder and changes take a long time to happen. The number of departments and units is moreover based not least on the budgetary framework of the individual states, which it has not been possible to investigate in greater depth in this study.

3.3 Allocation by political field

Traditional ministries, such as the interior, finance and justice, are relatively clear in their departments and competencies. Their structure is very similar from one Land to the next. Other ministries, conversely, are mapped very differently in different governments. The policy field of the environment is no exception. As a relatively young topic – Bavaria established Germany's first Ministry for State Development and Environmental Issues in 1970 (Heindl/Böhme 2013: 186) – with cross-department issues, this remit varies greatly. One reason for this are regional characteristics. The environment ministry of Rheinland-Palatinate, for example, has a viticulture department, which other Land governments with no wine-growing areas do not have. Similarly, only ministries of states with a North or Baltic Sea coastline have responsibilities for maritime waters and ports. It is probable that the greatest potential for an ecological policy lies in the environment ministries. This ministry is considered by the Greens to be the most important within the government for the party and its supporters (Linhardt/Raabe 2015). Additionally, the responsibilities of other ministries also cover political fields of great ecological relevance (e.g. road construction, agriculture), as evaluated below.

The names of the ministries already indicate different responsibilities for the environment ministries. Overall, they share the same foundation of core environmental policy themes. Upon closer examination, it appears that six core environmental policy themes fall within the scope of responsibility of the environment ministries of all 16 Länder:⁸

- nature, animal and species conservation
- water (including coasts and sea)
- soil and contaminated sites
- air pollution control and emissions protection
- climate protection
- waste and the circular economy

The environment ministries differ in the areas they add to these six core themes (Pamme/Grunow 2017). Many environment ministries cover the fields of energy and/or agriculture. It is worth noting that energy is the responsibility of the environment ministry only in Länder governed by the Greens. In the city states of Bremen and Berlin, transport has been assigned to the environment ministry. This gives four types of environment ministries (fig. 7):

⁸ Competence for climate protection sits with the Ministry for Energy, Infrastructure and Digitalisation and that for waste and the circular economy with the Economy Ministry only in Mecklenburg-Western Pomerania.

- *Environment + transport transition*: environment ministries that are responsible for transport as well as the environment.
- *Environment + agricultural transition*: environment ministries that are responsible for agriculture as well as the environment.
- *Environment + energy transition*: environment ministries that are responsible for energy as well as the environment.
- *Environment super-ministry*: environment ministries that are responsible for agriculture and energy (plus transport) as well as the environment.

These four groups can be found in Länder in which Alliance 90/The Greens hold seats. Across the Green Länder, Saxony-Anhalt, Schleswig-Holstein and, in particular, Bremen stand out with ecological super-ministries – covering the areas of energy, environment and agriculture, they encompass a broad portfolio of themes that are the cornerstones of a policy of ecological modernisation. In Saxony-Anhalt, the environment ministry is, moreover, the only ministry for the Green in this coalition. In Schleswig-Holstein, the second Green ministry is the ministry of finance, therefore not a political area of ecological relevance as such, which means that there is no splitting of ecological political fields between Green ministries. If thematically possible on the basis of the distribution of responsibilities, ecological political fields have been divided between several ministries for which the Greens are responsible.

Fig. 7: Types of Green environment ministries

Central responsibilities of environment ministries with a government participation of Alliance 90/The Greens in the Länder. January 2017

	BE	BW	HH	NI	RP	TH	HE	NW	SH	ST	HB
AGRICULTURE							Ag	Ag	Ag	Ag	Ag
ENERGY		En	En	En	En	En	and	and	En	En	En
ENVIRONMENT	Ev	Ev	Ev	Ev	Ev	Ev	Ev	Ev	Ev	Ev	Ev
TRANSPORT	Tr										Tr
	TYPE 1	TYPE 2					TYPE 3		TYPE 4		
	Environment and Transport Transition	Environment and Energy Transition					Environment and Agricultural Transition		Environment Super-Ministries		

Source: own research; own chart.

With regard to government participations of the Green Party, energy policy also has a special role. Where the Greens hold seats, competence for the **political field of energy** frequently lies with the environment ministry (in eight out of eleven cases). Where there are no Green seats, on the other hand, this is not the case. The Greens appear to take on energy policy as soon as they enter government. This is the case in ten out of the eleven Green government participations: as well as the eight environment ministries, the Green environment minister in Hesse and the Green Senator for Economics in Berlin are responsible for energy. The only exception in this circle is to be found in the former red-green coalition in North Rhine-Westphalia (2012–2017), where the responsibility for energy policy was with the SPD-led economy ministry. The SPD took great care to retain the energy department and, in particular, responsibility for coal and, with it, the traditional core voters, for itself. However, the Greens succeeded in transferring responsibilities for renewable energy to the environment ministry (Westfälische Nachrichten 2012).

In energy policy, coalitions at Land level do not act in a vacuum, but national policy factors influence their government composition and parties can also make use of this. When the grand coalition of CDU/CSU and SPD was formed in 2013 on the national level, responsibility for renewable energy was moved from the federal environment ministry to the federal economy ministry. Since then, the economy ministry alone has had leadership in energy policy matters nationally (Ehlerding 2018). The Länder take their cues from this. Following this decision at the federal level, the Greens joined five more coalitions. In all cases, they took responsibility for the field of energy. In three cases, this was through the environment ministry (Hamburg, Thuringia, Saxony-Anhalt); in the other two cases, via the economy ministry (Hesse, Berlin). The fact that the last of these occurred could be due to the senior political figures. Both Tarek Al-Wazir and Ramona Pop established an economic policy profile as lead candidate of their own party right from their days in opposition. Conversely, they were also able to make a more convincing case for the economy ministry because the Greens were by then deemed to have the greatest competence out of all parties in energy policy – a central field within the economy ministry (infratest dimap 2016). This suggests that the Greens use national policy development in order to supply the economy minister or senator for economic affairs in the Länder. The Greens use the leverage of energy policy to claim the economy ministry and this has allowed them to extend their thematic portfolio towards economic policy.

For **agricultural policy**, it appears that the link between agriculture and environment is not a Green preserve in a ministry, but the general rule in the Länder. In nine out of 16 Länder, the responsibility for agriculture policy lies with the environment ministry: in four out of five governments with Green seats (Berlin-Brandenburg, Mecklenburg-Western Pomerania, Saarland, Saxony) and in five of the eleven Green environment ministries (Hesse, North Rhine-Westphalia, Saxony-Anhalt, Schleswig-Holstein, Bremen). However, in the seven cases (Berlin, Baden-Württemberg, Bavaria, Hamburg, Lower Saxony, Rhineland-Palatinate, Thuringia) in which agriculture does not come under the environmental department, no connection can be identified with any particular coalition configurations. Instead, these cases

display path dependencies specific to those Länder, as agriculture was not the responsibility of the environment ministry under the previous government either. In Lower Saxony and Berlin, the responsibility for agriculture fell to a different Green ministry. This means that only in Baden-Württemberg, Hamburg, Rhineland-Palatinate and Thuringia did the Green coalition partner hold responsibility for agriculture. Incidentally, all of these are Länder in which responsibility for energy lies with the environment ministry. This suggests that the responsibility of one party for precisely one ministry cannot be explained by means of this political field alone. Instead, the distribution of various ministries within the government, the number of coalition partners and other factors influence the allocation of a ministry.

The allocation of Land ministries for the **transport policy** indicates a certain spread, arising from characteristics specific to a given region, among other things. In a number of cases, there is a transport ministry that focuses solely on transport policy. In other cases, the transport department is combined with other policy fields, such as environment or economy. At Land level, the Greens are responsible for transport in Berlin, Bremen, Hesse and Baden-Württemberg. What this actually covers, however, differs greatly between these Länder. In the city states of Berlin and Bremen, both environment authorities are also responsible for transport. In Bremen, the competence takes in coastal protection, flood risk management plans and construction in sea dike areas. Baden-Württemberg has a standard transport ministry in a large rural state. In Hesse, the transport department is located within the economy ministry, which is also responsible for energy policy. Due to the great economic relevance of Frankfurt airport for the Land, air traffic plays a predominant role in Hesse's transport policy.

Responsibilities for individual political areas are continually being split up and distributed among several ministries. One example of this already referred to in this work is energy policy in the red-green coalition of North Rhine-Westphalia. A second example of how a department can be divided up between several ministries is organic farming and forestry, both of which can be thematically allocated to the policy field of agriculture. Within the current so-called «traffic light» coalition in Rhineland-Palatinate (green, yellow and red), both organic farming and woods and forestry come under the Green environment ministry, whilst conventional farming is the responsibility of the FDP-led Ministry for Economic Affairs, Transport, Agriculture and Viticulture. In the red-red-green coalition in Thuringia, responsibility for forestry lies with the environment ministry, while other agriculture policy issues are dealt with by the Ministry for Infrastructure and Agriculture, which is led by Die Linke. Splitting departments between several ministries is nothing unusual and is always agreed between coalition partners. This distribution procedure can, for instance, ensure proportionality between partners. It also allows a partial shared responsibility for individual political areas. If energy and renewable energy are split between two ministries, for instance, the two responsible ministers must hold exchanges and compromise before the Cabinet makes its decision. In this way, the coalition partners can resolve differences of opinion at an early stage – at the level of government, between two ministries. Discourse between coalition partners can also promote

public discussions, allowing both government partners to enhance their profiles. It can of course also have negative effects, if the increased need for discussion is seen as conflict and and unfitness for government.

3.4 Conclusion on Länder comparison of environment ministries

The government participations of Alliance 90/The Greens have clear consequences for the orientation and allocation of environment ministries in the Länder, from three points of view.

Firstly, the Greens lay emphasis on climate protection. This can be seen in the fact that the term climate or climate protection is included only in the names of environment ministries if the Greens hold seats in the government. This is the expression of a political priority that is in most cases that covered by agreements on content laid down in the coalition agreement.

Secondly, the Greens demonstrate a focus on energy policy. Where the Greens govern, responsibility for energy lies mostly with the environment ministry. Where there is no Green government participation, on the other hand, this is not the case. This can be deduced from the ministries' names.⁹ In seven out of 14 cases, there was no specific reference to an energy department until the Greens joined the government. The names of Green-led environment ministries in Schleswig-Holstein (Ministry of Energy, Agriculture, the Environment and Rural Affairs) and Baden-Württemberg (Ministry for the Environment, Climate and Energy) reflect the great importance which the Greens attach to the energy transition and the challenge of climate protection.

Thirdly, Green-led environment ministries have different focuses in the attribution of other departments beyond environment policy (e.g. agriculture, energy, transport). Across all Länder, the remits of the environment ministries of Saxony-Anhalt, Schleswig-Holstein and Bremen are particularly worthy of note. With the breadth of their responsibilities, they stand out as ecological super-ministries.

The examination does not conclude that a government participation by the Greens also influences the size or internal differentiation of the environment ministry and therefore its capacity for action. This would require a longer investigation period, to note changes over the course of several legislative periods. The question of whether any medium-term increase in administrative resources for the ministries in question, in the form of departments, units or personnel, coincides with the name change is a subject worthy of closer examination.

⁹ At the same time, the observation includes the ministry for economic affairs as well as the ministry for the environment, as it is responsible for the energy department in many Länder.

4 Transport policy in the Länder: cycling policy case study

Political science has long neglected research into transport policy. This is slowly changing. But transport policy is still not a stand-alone policy field within political science. The publishers of a current handbook on the subject even have serious doubts as to whether it ever will be (Schwedes et al. 2016, p. 5). There are many reasons for this. The research gap can firstly be explained by the fact that the actual transport policy of the 20th century has traditionally lain within the distribution of considerable financial resources to build roads, railways, airports and waterways, which has directed scientific curiosity to the economic output by economists. Secondly, transport policy is harder than other policy fields to pin down, because it is characterised by a high degree of multi-level governance (Bandelow 2017, p. 174) and is also so complex, due to the economic, technological, ecological and social dimensions, that it can be measured only as a cross-cutting issue by means of an interdisciplinary approach (Rösener 2011). This explains why there is currently so little scientific research into transport policy at the Land level. It is still «mostly unknown how great the taxation possibilities of the Bund are in transport policy and how much leeway is retained by the lender» (Schwedes/Ruhrort 2016, p. 212; our translation). The very few existing studies draw an ambivalent picture of the scope for action available to the Länder in transport policy (Schwedes/Ruhrort 2016).

Transport policy pursues a whole range of objectives such as prosperity, promoting economic growth and regional structures, international cooperation, increasing road safety and protecting the environment (Grandjot/Bernecke 2014: 58). Many of these objectives compete with each other. Although they all concern the public interest, different influencers and decision-makers have different transport policy objectives. For instance, unions may call for secure jobs, logistics companies for the expansion of the motorway network, environmental associations for climate-friendly drive technologies and citizens' initiatives for or against the construction of a new bypass.

For the purposes of this report on the policy field of ecological modernisation, it is the environment and climate policy objectives within transport policy that are of particular interest. The idea of sustainable mobility had emerged as a concept by the end of the 1990s. Initially, the focus of this was on climate protection and noise. In the years that followed, and with the increased application of the motif of sustainable development, criteria such as land use were also taken into account (Held 2007, p. 858 et. seq.), but also the use of resources, light pollution, soil acidification and, last but not least, emissions of air pollutants such as nitrogen oxides and particulates,

which endanger human health. In view of the number of challenges at hand, it is no surprise that the literature lists more than two dozen measures to reduce the environmental impacts (Becker 2016).

In scarcely any other policy field is the gap between the manifesto calls for «sustainable mobility» and actual implementation so large. The actual development is, with very few exceptions, moving quantitatively and qualitatively in the opposite direction of the political goals. The sobering conclusion is that current transport policy is not up to the job of dealing with forecast transport development (Schöller 2007; Held 2007, p. 870; Schwedes et al. 2016, p. 24). A prime example of this undesirable development is the discourse on the emissions scandal and driving bans for diesel vehicles in city centres. The Bund, Land and municipal level disagree over who carries the can. Since many municipalities exceed the legal limits for pollutants, the environmental organisation Deutsche Umwelthilfe has brought legal proceedings for «clean air» in more than 30 German cities (DUH 2018).

The diesel scandal, but also technical developments (e.g. electronic cars, batteries, driverless cars, digitalisation), have contributed to the increased relevance of transport policy in recent years and the fact that party manifestoes differ more markedly from each other on this subject. A comparison of the national policy positions taken by the parties on this matter over the period 2013–2017 shows clearly that for years, the Greens have been the most vociferous proponents of electric vehicles and environmentally friendly drive technologies. Whilst all other parties are discussing the development of «conventional» combustion engines, only the Greens would rather call time on this technology as quickly as possible (Thiele et al 2018, p. 377).

With the successful increase in the use of renewable energy in the electricity sector, the growing requirements of climate protection and developments in the energy transition overall, the role of transport is increasingly under the political spotlight. Transport must become electrified if, as anticipated at political level, is to be able to take on a storage and buffer function for surplus electricity from renewable energy. At the same time, it is called upon to make its own contribution to climate policy and drastically to reduce climate-damaging emissions (Knie 2016; Agora Verkehrswende 2017).

4.1 Transport and cycling policy

With a few exceptions, cycle policy has only been part of transport policy strategies at Bund, Land and municipal level for a few years. It has taken on an important role as a healthy and energy-saving mode of transport that offers advantages concerning climate and noise protection as well as air purity (Bracher 2016).

The **Bund** is responsible for the legal framework, for building cycle paths along trunk roads and for neighbouring policy areas such as environment, climate, health, research and economy (Bracher 2016). For 2016, the federal government made nearly 100 million euros available to expand the cycle path network along federal roads and waterways. In 2017, there was an extra 25 million euros to expand cycle highways and 27 million euros for «climate protection through cycle transport» (Greenpeace 2017).

The Bund chairs a Bund-Länder working group with representatives of the Land governments and municipal umbrella organisations.

In addition, it supports research and pilot projects. At national level, the most important legal framework is the Nationale Radverkehrsplan (National Cycle Transport Plan), which was issued by the federal government for the first time in 2002. The second National Cycle Transport Plan (BMVBS 2012) forms the basis of cycle policy from 2013 to 2020. It gives the Länder a considerable implementation role. They are responsible for setting the legal and infrastructure framework in place and supporting the municipalities (Bracher 2016, p. 269). The Bund could further strengthen transport policy by developing uniform standards for cycle highways and modernising traffic law so that it takes the needs of cycle transport into greater account (Gastel 2016).

The **Länder** are responsible for building cycle paths along the roads for which they are responsible. They can also bolster cycling by supporting the activities of their municipalities, communities and regions, both organisationally and financially. This includes construction and refurbishment of cycle paths in cities and cycle highways between cities, providing public bicycle borrowing systems, supporting Pedelecs, providing bicycle parking and better communication and information on cycle transport (Bracher 2016, p. 278). As well as direct support for the municipalities, the Land governments also have a coordination role. Consequently, more and more Länder have issued their own overall transport policy strategies.

So far, Berlin is the only Land to have passed a mobility law, which aims to safeguard the «priority of the Umweltverbund¹⁰ (ecomobility)» (SUVK 2018; our translation) and lay emphasis on bolstering cycle transport. Some states have initiated or supported working groups on bike-friendly municipalities. An expression of this support is the increasingly popular cycle highway network. The successful implementation of these fast connections for commuter traffic requires coordination and financial resources beyond community borders. Overall, the Verkehrsclub Deutschland, an NGO promoting ecomobility, reports considerable differences in support for cycle transport between Länder (VCD 2017).

Alongside these approaches at Land level, the Länder also have the opportunity to get involved in federal legislation. Through the Bundesrat, they can influence transport policy decisions at Bund level (Fichert/Grandjot 2007: 139). They also carry out the administration of federal motorways and trunk roads, in air transport and airports, on behalf of the Bund. The conference of transport ministers (Verkehrsmministerkonferenz, VMK) represents an important tool for the Länder to find common ground on their collaboration on transport policy and to set out joint stances to be put before the Bund. The Länder transfer some of their responsibilities to the municipal authorities in turn.

¹⁰ Umweltverbund refers to the group of «environmentally friendly» means of transport: non-motorized modes of transport (pedestrians and public or private bicycles), public transport (train, bus and taxi), car sharing and carpooling.

4.2 Cycling policy in Bremen and Baden-Württemberg

By way of example, the next section investigates cycle transport policy in Bremen and Baden-Württemberg. In both of these Länder, Alliance 90/The Greens have been in power for more than one legislative period and are also in charge of the ministry of transport. Bremen is known to be Germany's leading Land in cycling (e.g. it had Germany's first *Fahrradstraße*, «bicycle boulevard»). Like Berlin and Hamburg, Bremen is a so called city state. As a city state, synergies of action can be generated between Land and municipal levels. In Baden-Württemberg, municipalities such as Freiburg, Tübingen and Karlsruhe have made strides in cycle transport in recent years. It is worth looking at how the Land government of an agricultural state supports its municipalities with overarching programmes. Additionally, transport policy in Baden-Württemberg is the responsibility of a minister who is himself a passionate cyclist and has a strong expertise in this area due to his previous duties.¹¹ This section sets out the cycling policy of both Länder in recent years, by examining both coalition agreements and describing the department with its cycle responsibilities and policies. It also contains an overview of how the representatives of both Länder coordinate between Bund and Land through internal party structures to influence federal policy.

The **examination of the coalition agreements** in Bremen and Baden-Württemberg shows that cycling policy in both Länder has increased in relevance over the years. Comparing Baden-Württemberg's green-red coalition agreement from 2011 to that of its green-black successor five years later reveals growing importance for cycle transport. The green-red agreement sets out the joint goal of turning Baden-Württemberg into a «pedestrian and cyclist-friendly Land» (Alliance 90/The Greens/SPD 2011, p. 27; our translation). To this end, three measures are listed: making the cycle path network attractive and safer, creating a standalone budgetary heading for building cycle paths and increasing investments for pedestrian and cycle transport. In the coalition agreement four years later, the green-black coalition expresses the intention of continuing the «successful support of cycle transport in everyday and leisure transport» and «making Baden-Württemberg even more cycle-friendly» (Alliance 90/The Greens/CDU 2016, p. 115; our translation). The coalition agreement refers to the green-red cycling strategy of 2015. Five measures are set out to achieve the aim: the design and implementation of cycle highways, adding cycle paths to main roads (including network design and systematic maintenance), supporting municipal cycle and pedestrian transport infrastructure, building safe bicycle parking and improving possibilities to carry cycles on buses and trains (free of charge) (Alliance 90/The Greens/CDU 2016). The comparison shows the green-black coalition to be more detailed and specific than its green-red predecessor, as well as listing more measures which the coalition aims to implement.

¹¹ Between 1998 and 2011, Transport Minister Winfried Hermann represented the constituency of Tübingen in the Bundestag, where he was responsible for transport and in particular cycling policy within the Alliance 90/The Greens parliamentary group. From 2009 to 2011, he chaired the Transport Committee of the Bundestag (Ministry of Transport 2018b).

In *Bremen*, Alliance 90/The Greens have been in power alongside the SPD since 2007, for the party a record three legislative periods. A comparison of the three red-green coalition agreements (2007–2011, 2011–2015 and 2015–2019) shows a similar picture as in Baden-Württemberg. The first red-green coalition went no further than the aim of «creating better conditions so that more people can get around Bremen on foot and by bicycle» (SPD/Alliance 90/The Greens 2011: 38; our translation). The second coalition made calls to «considerably increase the proportion of pedestrian and cycle transport in Bremen». To do this, the «conditions for pedestrians and cyclists should be further [improved]» (SPD/Alliance 90/The Greens 2015, p. 35; our translation). In the current coalition agreement, the partners call for Bremen to play a leading role at international level and set out to «make cycling in Bremen even easier and more pleasant [...]. We must put Bremen on the national and international map of the foremost cycle cities» (SPD/Alliance 90/The Greens 2015, p. 49; our translation). Over the three coalition agreements, ambitious aims have been formulated for cycle transport. The same is true of the measures listed in Bremen's coalition agreements to achieve these aims. The first coalition agreement is somewhat vague over the wording and starts by identifying problems, with a view to «tying up a package of measures to allow more people to get around safely on roads, paths and public places» (SPD/Alliance 90/The Greens 2011, p. 38; our translation). For the following legislative period, the next coalition agreement set out five specific measures that specifically support cycle transport (taking greater account of cycle transport in planning and construction, bicycle parks and cycle paths), reducing car traffic (pilot shared spaces projects, car-free Sundays) and removing barriers in transport (SPD/Alliance 90/The Greens 2015, p. 35). The current coalition agreement lists as many as ten measures to support cycling transport, such as continuing the programme for the cycle-friendly reconstruction of traffic junctions, more cycle roads and creating a model cycle district (SPD/Alliance 90/The Greens 2015, p. 48 et seq.). Across the three red-green coalition agreements, it emerges that in matters of cycling policy, each coalition agreement is more extensive and specific than its predecessor. The aims have become more specific. The measures to achieve them have become more specific and have increased considerably in number. What stands out is that the more recent measures build on the previous work of the previous coalition. This indicates that cycling policy is a political field for which considerable time and a certain political development and learning process are necessary in order to achieve substantial changes.

Comparing the transport ministries in Bremen and Baden-Württemberg flags up differences between the two in terms of responsibilities and remit. The organigram of the transport ministry of the Land of *Baden-Württemberg* (2018a) reveals – in addition to the administrative department – three thematic departments: for road transport and road infrastructure, for public transport and for sustainable mobility. The three transport policy-related departments have a total of 18 units between them. Responsibility for cycling policy comes under the unit «Municipal mobility concepts, cycle and pedestrian transport». Baden-Württemberg's transport ministry also holds responsibility for air pollution, which is unusual compared to other *Länder*.

This means that there is a direct dovetailing of transport and clean air policy within the ministry, for instance concerning the use of bus lanes or ramp meters¹² for the purposes of air pollution control. Overall, the ministry's remit is marked by its clear focus on transport policy. The responsible department head sees the advantages of this: «with our department, its responsibilities and the leadership of these, we are in a good pole position to act strategically. This gives us an advantage over other Länder» (Erdmenger 2017; our translation). Transport ministries are often the departments that are discussed, and therefore allocated, last in the coalition negotiations. This was not the case in the negotiations between Alliance 90/The Greens and the SPD in 2011, because with *Stuttgart 21* (a massive construction project to re-build the city's train station), a transport policy issue was central to the election campaign and therefore to the coalition negotiations.

Compared to Baden-Württemberg, the transport department in *Bremen* is thematically broader, as can be seen already from the name Environment, Construction and Transport (SUBV 2018). In addition to a general department, there are five departments working on the themes under these headings: environmental economics, climate and resource protection; nature, water and agriculture; transport; city planning and building regulations as well as regional and urban development, urban redevelopment, housing. The transport department consists of only four units, none of which is named as responsible for cycling on the organigram. Within the existing structure, there is a local mobility team with a staff of three or four, which is responsible for specific projects and for bolstering pedestrian and cycle transport. In addition to the transport department, two other departments, town planning and urban development, are highly relevant to transport and cycling policy. This broad structure offers opportunities of synergies in subjects of a cross-cutting nature. This is the case with climate protection or land-use, for instance, where environmental, climate, transport and urban development concerns are of the greatest relevance and can be dovetailed with each other. In some cases, differing specialist interests must be weighed up against each other. If these are represented by two departments within one ministry, they can be moderated largely outside the public gaze. The latter is more difficult, if interests are weighed up not within one ministry, but between two ministries and, in some cases, even between two coalition partners.

A **comparison of the cycling policies of the two Länder** shows the role that Land governments can play in boosting cycle transport. In *Baden-Württemberg*, the Land government has set itself the objective of increasing the share of cycling in transportation to 16 % by 2020 and to 20 % by 2030. In 2017, it made around 40 million euros available to extend the Land's cycle paths (Millenet/Blaue 2017). Municipalities were also supported in the construction of municipal cycle infrastructure. Initially, the Land supported the municipalities' feasibility studies on where in the Land cycle highways should be built. This programme aims to stimulate a competition of ideas, as it is in the interests of many districts to have a cycle highway through their

¹² Ramp meters are traffic lights installed on the slip roads of motorways/highways to control flows of incoming vehicles under heavy traffic conditions.

own area. From planning to completion, however, such a cycle highway takes at least five years. More resources are therefore required in the coming years for the actual construction of the cycle routes. The Government's *RadSTRATEGIE* (MfV 2016) provides the conceptual and strategic basis for the promotion of cycle transport up to 2025. Investments will focus mainly on cycle paths along main roads and on municipal cycle paths, better signage and new cycle highways. The fact that almost all Land ministries were involved in the preparatory work has been hailed as a success (Erdmenger 2017). The Baden-Württemberg cycle network *RadNETZ* (MfV 2018a) is working for existing cycle paths to be linked up to each other. Working with the municipalities, the Land government intends to build a 7000 km network with well-signposted routes. 700 municipalities have signed up to *RadNETZ*. The transport ministry sees the work programme as a watershed, as the public works department of the municipalities were asked for their opinions on the current structure of the cycle paths and how they might work best in the future. If the competent department head talks of «enormous amounts of experience gained for all departments» (Erdmenger 2017; our translation), this refers to the long-term effects promised by this approach. The initiative *RadKULTUR* (MfV 2018b) was launched in 2012. It aims to provide information about cycling and to encourage people to get on their bikes.

Cycling is also of particular importance in *Bremen*. Here, for instance, the concept of the bicycle boulevard (Fahrradstraße) – a road in which cyclists take priority and are allowed to cycle alongside each other – which originated in Bremen, has since served as an example across the whole country. A quarter of all thoroughfares in the city have had a cycle path added. A comparison at European level puts Bremen into third place behind Copenhagen and Amsterdam (Keuer 2017). By 2019, Germany's first model cycle (Fahrradmodellquartier) district will be built in Bremen. Construction projects to increase cycle transport are an important objective of the Land government's cycle transport policy in this legislative period (Polzin 2017). The Bund has subsidised the project with funds of 2.4 million euros. This support comes not – as one might expect – from the federal ministry of transport, but from the climate protection fund of the federal environment ministry. In 2014, Bremen's Senate launched the awareness campaign *BIKE IT*. It hopes to encourage visitors as well as locals to cycle more often. As part of the campaign, anybody can download maps for Bremen, Bremerhaven and surrounding areas of Lower Saxony free of charge from the *Bike Citizens App* and also make use of the provided tours (Keuer 2017).

4.3 Federal cycling policy

The **Bund-Länder coordination system** is the greatest leverage at the disposal of the Land governments to influence federal policy. The representatives of the transport departments of Baden-Württemberg and Bremen also engage in coordination between Bund and Länder, to increase cycle transport across Land borders and create momentum for an improved federal policy framework. The most important committees for the coordination of policies between Länder and Bund are the so-called conferences of the ministers (in this case, VMK – Verkehrsministerkonferenz (conference

of the transport ministers)¹³). They are chiefly an opportunity to exchange information, but may also have political significance beyond this due to their composition. The VMK relevant to this study is generally held twice a year. Its decisions may be of great symbolic importance and therefore wield political influence. However, a lot of effort is needed to organise majority or even unanimous support in favour of a decision, particularly if the potential effects remain open-ended.

Across the whole of Germany, the Greens hold the transport ministries of four Land governments (Baden-Württemberg, Berlin, Bremen, Hesse). The transport ministers of these Länder consult with each other regularly. This takes place on the sidelines of the VMK and sometimes also ahead of plenary sessions of the Bundesrat. Within this group, Baden-Württemberg is takes a lead for this subject on behalf of the Green Länder (Polzin 2017). Furthermore, preliminary discussions on the current political situation take place before the Bundesrat. The ministers of the SPD-led Länder coordinate with each other on the so-called A-side, the CDU/CSU-led Länder on the B-side. The Green transport ministers in turn take part in these preliminary discussions on their own specific sides: the Transport Senators of Bremen and Berlin take part in the meeting on the A-side, the transport ministers of Baden-Württemberg and Hesse on the B-side.¹⁴ As the Greens are in a minority in the transport committee of the Bundesrat, it is easier to push transport policy issues through the environment committee of the Bundesrat.

4.4 Cycling policy between (party-)politics and administration

In political science, cycling policy was long seen as an uncontroversial theme in party politics, as all parties basically considered that it was necessary to support and expand it. For the Land of Thuringia, for instance, it was noted that in the Land's transport policy over the last 25 years, there were only a few notable party-political controversies. Accordingly, a «clear party-political profile» (Gather 2018, p. 297; our translation) was acknowledged at the time only in the question of a climate-friendly transport system – even though the fundamental objective was recognised by all parties.

- 13 Conferences of Transport Ministers are generally held twice a year and are attended by the ministers and senators of the Länder with responsibility for transport issues. The Federal Transport Minister is invited as a guest. The VMK deals with all transport policy issues of importance and discusses transport policy issues of particular relevance to the inter-relationship between the Länder and between the Länder and the Bund and leads to a solution. As well as a mutual exchange of information and experience, the VMK serves the purpose of discussing common political action at Land level or with regard to the Bund and to lay down corresponding decisions. VMK sessions are prepared by the Joint Conference of the Heads of the Transport and Road Building Departments (GKVS). Five permanent Länder working groups (e.g. on rail policy or roadbuilding policy) and Bund-Länder expert committees carry out the groundwork for the GKVS. Unanimous decisions of the VMK are binding. Majority decisions simply reflect the majority opinion of the conference (MfV 2018c).
- 14 The terms A- and B-states have been in use since the 1970s. They stand for states that are led by an SPD majority (A-states) or by a CDU/CSU majority (B-states).

There is no research into whether cycling policy has become a stronger element in multi-party competition. Currently, however, there are indications to suggest that this is the case. At national level, the Greens criticise the lack of resources for cycle transport and accuse the federal government of being «road-building crazy» (Gelbhaar 2018; our translation). Examples from the Länder clearly show that parties in government sometimes delay plans for tactical reasons, to gain an advantage over their coalition partner. «One could get the impression that one partner wishes to deny the other a successful project implementation and the success that goes with it», said the head of department of the Bremen transport authority, Gunnar Polzin (2017; our translation), looking back over several cycle transport plans in recent years. Another example was provided by the red-red-green coalition in Berlin, where the Greens head up the transport authority and are therefore the lead partner in the mobility law. This law aims to support ecomobility, as expressed by the creation of a separate section on public transport (ÖPNV) and cycle transport. In May 2018, the law appeared to the coalition to be a done deal. But during the home straights of parliamentary consultations, the SPD surprised everybody by calling for a separate section for car transport (Beug 2018). Admittedly, the SPD was unable to push this proposal through and the law entered into force on 5 July 2018 without a separate section car transport (SUVK 2018). However, the intervention did the job of positioning the SPD as the advocate for the car driver. It is to be assumed that the party-political clash over cycle transport will increase in the short term. One reason for this is recent citizens' initiatives in many German cities such as Berlin, Hamburg, Frankfurt, Munich and Stuttgart, in favour of a better cycle infrastructure. Activists use public petitions to increase the pressure on the political level to shake up the transport policy of many cities, which have for a long time focused on cars. Citizens' initiatives are now linking up across the whole country to create synergies and increase their muscle (Changing Cities 2018). Multi-party competition could thus increase as part of this «transport transition from the bottom-up», because the parties must act on these challenges and take position – as can be seen in Berlin, for example.

The extent to which the difference between the parties' manifestoes is also reflected in government actions is another matter. Agreement between coalition partners is not the most important thing for the expansion of cycle paths and parking facilities, but the «interplay of politics and administration», according to Albrecht Genzel, a transportation expert for the Bremen branch of the German Cycling Club (ADFC; our translation). If the competent road traffic authorities regulate cycle transport too restrictively, it is also the case that the transport ministers' «generous ideas get stuck for years while the road traffic authorities pussy-foot around interpreting them, or even disappear forever» (Genzel 2018; our translation). The relevance of the administration leads to changes being implemented very slowly. Cycle transport is hence still mainly dealt with as a lower priority «in the rulebooks, in financing, in official personnel and in assessments on the ground» (Bracher 2016, p. 289; our translation). Car-centric structures are cemented by the construction of more roads and car parks. Additionally, shortages of staff and/or planning capacities at administrative level are a hindrance to a swifter roll-out of cycle transport infrastructure.

Because many municipalities across Germany are working on new cycle infrastructure, skilled planners are currently hard to come by (Genzel 2018).

The fact that transport planning appears so sluggish is also to do with the long time periods between political decision and actual implementation. In Thuringia, for instance, the Greens called for greater support for pedestrian and cycle transport from the opposition benches, which was reflected in the red-red-green coalition agreement in 2014. To increase the cycle network, it was proposed that roadbuilding resources be used to support cycle transport outside build-up areas and «to earmark at least 10 % of the resources for maintenance, redevelopment and expansion» (Thuringia coalition agreement 2014, p. 72; our translation). The fact that implementation of these objectives has not been a speedy process is also down to the fact «that – unlike with road-building – the previous government bequeathed no plans that are ready to be built and each construction measure takes a considerable amount of time» (Gather 2018, p. 295; our translation). These long lead times go some way to conceal the differences between the parties in cycle transport policy.

4.5 Conclusion on cycling policy

The example of cycle transport policy makes clear that there are a number of factors that make it difficult to implement party-political manifestoes to bolster cycle transport. Firstly, the political scope of a Land government is limited by the fact that responsibilities are divided between various players and administrative levels, which either set the framework, like the Bund, or are responsible for implementation on the ground, like the municipalities. Here, the Länder are caught in a thankless sandwich position between the two. Whether their policy of increasing cycle transport is successful depends mainly on the framework set by the Bund and how the municipalities plan to forward the subject themselves. Secondly, it is clear that in this political area, the subordinated authorities – such as the road building authorities – play a considerable role in implementation. They have a relatively large amount of discretion as to how laws and regulations can be implemented in practice. The government has only limited influence on this. This means that politicians are highly dependent on cooperation with the administration. The construction of every single road, bridge and crossroads increasingly determines how cycle-friendly the construction of the infrastructure will be. It is obvious that long-term reform will be possible only through an integrative approach, which must also include trained personnel in the road-building authorities who are completely on board with the objectives. These limitations make it clear that the amount of scope for Land governments to improve cycle transport is limited and generally less than publicly believed. A party joining a government cannot «simply push its own agenda through». Its margin for action is limited. The long lead times in traffic planning demonstrate that changes cannot be made overnight. A longer-term approach will be needed to bring about a transport transition.

In spite of the limitations described above, the coalitions in Baden-Württemberg and Bremen managed to exploit the scope available to them to strengthen cycle transport. They play their part to increase the networking of cycle transport within

the Land; they increase coordination between municipalities and raise funding from the Bund to support cycle transport. This case study also provides evidence that the Greens increase their influence in the political field of cycle transport if they are in power for more than one legislative period. Both cases show that the coalitions have set themselves ambitious targets to expand cycle transport over the years and that the subject has gained prominence (e.g. in the coalition agreements of the Länder). Some path dependency, in the sense of a positive development towards ecological modernisation, can be noted the longer the Greens stay in power. It would therefore be interesting to examine how successfully the Greens in Baden-Württemberg and Bremen are able to lay the groundwork in favour of cycle transport compared to Länder in which the Greens were in power for just one legislative period and were responsible for transport policy. The consequences of a departure of the Greens from a government in terms of the continuation of the cycle transport policy are another question worthy of attention.

5 Energy policy at Bund level: 2014 EEG reform case study

To what extent have the Greens succeeded in influencing federal legislation in policy fields of ecological modernisation through their government participations in the Länder? To answer this question, two characteristics of the German federal system are of particular importance. Firstly, the demarcation of so-called «executive federalism» highlights the dominant role of the Land governments (compared to the Land parliaments). Secondly, relations between Bund and Länder should be seen as a system of cooperative federalism, which is marked by mutual dependencies (Blätte/Hohl 2013).

Through their participation in nine Land governments at the moment (as per January 2019), Alliance 90/The Green Party have become an active negotiating partner in the various committees that coordinate decisions between Bund and Länder. They have set in place informal structures between the Greens in government at Land level and the Greens at Bund level over the last ten years (Jungjohann 2018). This so-called G-coordination prepares the daily business of the Bundesrat. On top of this, coordination is increasingly used to create synergies. Finally, the coordination also offers a central location to deal with differences within the party. These necessarily arise from an overall configuration for the party that is characterised by an opposition role at Bund level and government seats in the Länder. Additionally, the fact that the Greens govern in eight different constellations across the political spectrum – in center-right and center-left coalitions – increases the need for Bund-Länder consultations and is what makes it so complex.

5.1 The EEG reform 2014

To answer the question as to the degree of Green influence of the Länder on federal legislation, let us look at the case study of the reform of the Renewable Energy Law (EEG) in 2014. This is a suitable example, not only because it fits in thematically with the lead question of the study. The reform was a central legislative piece of the Grand Coalition in power at the time and received correspondingly high public attention. Additionally, due to the time lapse, a few political science studies have been carried out, to which this study will refer. At the time of the reform, the Greens held seats in seven coalitions in the Länder. In each coalition, they provided the energy or

environment minister responsible for the issue¹⁵ (Jungjohann 2018). Unlike the other two opposition parties on the national level, FDP and Die Linke, the Greens had a considerable influence on the discourse surrounding the 2014 EEG reform (Bahnsen et al. 2016, p. 117).

Compared to earlier reforms, the starting position for the EEG amendment was shaped by three characteristics. Firstly, sole responsibility for it within the national government was held by Sigmar Gabriel (SPD), who, as Federal Economy Minister, Vice Chancellor and SPD party chair, held an influential position and, with a view to possibly running for Chancellor, was keen to prove that he could push a large legislative package through. In the coalition negotiations, the SPD had made a point of removing renewable energy from the scope of the environment ministry and transferring the subject to the ministry of the economy, which it led. With this new allocation of responsibilities, the conflicts that are so often played out between the economy and environment ministries would be a thing of the past. The fact that the economy ministry alone was in charge meant that this reform was relatively undisputed between the ministries of the federal government. The fact that Gabriel appointed – of all people – a Green, Rainer Baake, as his State Secretary can be considered a smart move. As a previous State Secretary under then Federal Environment Minister Jürgen Trittin (Alliance 90/The Greens) between 1998 and 2005, Baake had not just many years of experience, but also knew many of the Green environment and energy ministers of the Länder personally. This put the Greens on the horns of a certain dilemma at Bund level, as his party membership book made their opposition work harder (Haas 2017: 194).

Secondly, the EU Commission played an influential role in the consultations. Although it had no formal role in the legislation as a supranational player, it influenced the reform from behind the scenes. It had been trying for years to harmonise national support systems for the expansion of renewables and to push a switch to tendering systems across the EU. With the revision of its guidelines on State aid, the Commission turned up the pressure on the member states to move in this direction (Ohlhorst 2016: 8). Consequently, in December 2013, it brought infringement proceedings against the German system with fixed feed-in tariffs. As well as the change of system, the generous industry rebates under the EEG were another thorn in the Commission's side (European Commission 2013).

Thirdly, precisely these State aid procedures put the government in a difficult position. This was because without an agreement with the Commission, the rebates for the industry could no longer be paid the following year (Bauchmüller 2014). To avoid being ruled against, it was Minister Gabriel's aim to conclude the legislative process before the summer break, to allow the reform to enter into force on 1 August 2014 (BMW 2014). The goal increased the time pressure. Certainly, as the EEG is a so-called «objection law», Gabriel was not reliant on the agreement of the Bundesrat.

¹⁵ Only in the red-green coalition in North Rhine-Westphalia were the responsibilities divided between the ministries and therefore also between the coalition partners. The SPD Economy Minister was responsible for energy policy, the Green Environment Minister for the sub-area of renewable energies.

However, an objection from the Land governments could have forced a time-consuming conciliation procedure (Rave 2016). To avoid jeopardising the planned timetable, the federal government had to seek common ground with the majority of the Länder. Against the backdrop of similar negotiations breaking down in the previous legislative period under the environment minister at the time, Peter Altmaier, Minister Gabriel and Chancellor Angela Merkel were prepared to compromise (Scheiner 2016: 223).

On top of this came the fact that almost all Länder had set objectives to expand renewable energy that added up to more than the federal government's target. Consequently, the Länder urged the Bund to adopt a bolder expansion of renewable energies. As the windy Northern Länder (Brandenburg, Bremen, Hamburg, Mecklenburg-Western Pomerania, Lower Saxony) were all SPD-led, Economy Minister Gabriel could rely on them as allies for an ambitious reform. They had, furthermore, set out in the coalition agreement through the SPD that the federal government would first have to seek consensus with the Länder before amending the draft legislation, meaning that the reform was «from the beginning a key theme between the Chancellor, the Federal Economics Minister and the Minister Presidents of the Länder» (Studt 2018; our translation). This was opposed by the CDU/CSU parliamentary group, among whose ranks the economic wing dominated the debate and sceptically opposed a rapid expansion of renewables. Due to the time pressure and the need to get the Länder on board, it was clear that the Conference of Minister Presidents (MPK)¹⁶ would play a central role in the consultations. This was nothing new, as the energy transition had risen to become a top political issue in the wake of the nuclear accident in Fukushima, Japan. Between March 2011 and December 2017 alone, there were seven major energy summits between the federal government and the Länder (Scheiner 2016: 221).

5.2 The Greens' crunch question: cooperation or opposition?

The 2014 EEG reform forced the Greens to answer a fundamental question. Should they take a seat at the negotiating table and seek to use their coalitions in the Länder to push for a reform of the EEG in their preferred direction? Or should they sharpen their profile ahead of the 2017 national elections as an opposition party, by means of attacks on the Grand Coalition for a reform that would not be ambitious enough? Whilst the Party's leadership from the Bund level argued in favour of a more aggressive opposition approach, the Greens in government in the Länder were in favour of a dual strategy, negotiating through the Länder governments and being in opposition in Berlin at the same time (Kade 2014).

After weeks of internal party consultations between the federal party board, the parliamentary group and the ministers of the Länder, the Greens presented a detailed concept entitled *Energiewendeagenda 2020* (Energy Transition Agenda 2020)

16 Minister Presidents' Conference (German: Ministerpräsidentenkonferenz, MPK) is an informal body of self-coordination of Germany's 16 states. Its members are the Minister Presidents and the Federal Chancellor. It addresses solely issues with federal-state-relationships that are not being dealt with in the Bundesrat, such as media policy or federal fiscal relationships.

(Alliance 90/The Greens 2014) on 17 January 2014. «The energy transition is a success story of Green politics» (our translation). With this opening sentence, the Greens chose not to leave the subject to the Grand Coalition. The document included concrete proposals for the development of the EEG. This in itself is an achievement as the Länder interests differ considerably when it comes to energy policy (despite overall similar goals like shifting completely to renewables). Should wind power be supported as a priority in the wind-rich and therefore cheaper locations in the North, or also in the less windy South? What should be the role of biomass and solar power, which are used principally in Baden-Württemberg and Bavaria? To what extent should the privileges of the energy-intensive industries, many of which are located in North Rhine-Westphalia and Rhineland-Palatinate, be scrapped? Although these questions conflict with each other, the Greens agreed on a party line for the majority of issues.

The Green document was an offer to the federal government to work together. It also allowed the Greens to achieve the objective of disclosing their position to Federal Economy Minister Gabriel, who followed two days later with key points of his own (Bauchmüller 2014). Additionally, the tone taken by Green politicians from the Länder in the following days showed that they saw their role not as total opposition, but as a constructive negotiation partner. For instance, Schleswig-Holstein's then minister for the energy transition, Robert Habeck (2014), stressed that Gabriel's plans contained «points of reference». The environment and energy minister of Baden-Württemberg, Franz Untersteller (2014), reacted to the first draft of the amendment in February by saying that it «needs improvement».

In the weeks between the publication of the key points and the MPK set for 1 April 2014, officials from the Federal Economy Ministry worked on the draft legislation under high pressure. Among them, the Minister and his State Secretary sounded out lines of compromise with the Land governments in consultation with the Federal Chancellery. In this context, State Secretary Rainer Baake met Green environment and energy ministers from the seven Green Länder in the last week of March. At the same time, Gabriel sought agreement with the EU Commission on the necessary reform aiming to put an end to the State aid procedures. In the days leading up to the MPK, the government heads of several Länder called for «wide-reaching improvements» to the version of the plans that had been made public at the time and even threatened to block it (Balser 2014). Finally, on 31 March, the economy ministry presented a revised draft bill and created a political presentation ahead of the MPK.¹⁷

A Conference of the Minister Presidents is a matter for the parties of the Grand Coalition. At the MPK on 1 April 2014, Minister President Winfried Kretschmann (Baden-Württemberg) was the only representative not from the ranks of the CDU/CSU or SPD. On the other hand, the government heads chiefly represented the interests of their Land or of their Land government during these negotiations. As the

¹⁷ This is what is known as a non-paper, but it did provide information for officials of the Federal Ministry for Economic Affairs. However, it has not been lodged in the usual ministry files (anonymous 2018).

Greens held responsibility for environment and/or energy for each coalition in all government participations, they were the main drivers behind the negotiating positions of their Minister Presidents. The internal coalition coordination for the MPK differed between Interviews conducted for the purposes of this study show that the SPD-led State Chancelleries in Lower Saxony, Schleswig-Holstein and Rhineland-Palatinate closely involved their Green coalition partners. Conversely, the internal coalition in North Rhine-Westphalia was particularly strongly formalised through the creation

Table 2: Chronology of the 2014 EEG reform

	Federal government	Bundestag (Parliament)	Bundesrat (Federal Council)	MPK (Minister President Conference)	Bündnis'90/ Die Grünen
7 January					Energy Transition Agenda 2020
21 January	Cabinet's key points				
4 March	Draft bill				
in March					Meeting with StS Baake
1 April				Special session MPK	
8 April	Cabinet bill				
8 May		Bundestag 1st reading			
23 May			Recommendations of the Bundesrat		
28 May	Federal govern- ment's response				
24 June		Economic Com- mittee decision			
26 June		Bundestag 2nd and 3rd readings			
11 July			Decision of the Bundesrat		
24 July	Findings of the European Commission on compliance with EU State aid law				
1 August	Entry into force of the EEG reform				

Source: Bundesrat, Bundestag, BMWi, own research; own chart.

of a steering group headed up by the State Chancellery with the participation of the ministries for the economy and the environment, but the interests of the coalition partners were a long way apart. In such complex negotiations between the federal government and 16 State Chancelleries, it was obvious that the Minister Presidents had picked out one, two or three points of greatest relevance to them which they hoped to sway in their direction. Each Land can push its claims only to a limited extent. Ultimately, the Minister President of North Rhine-Westphalia used her address to the MPK mainly to make the case for retaining the industry rebate, a matter of importance to the SPD, but not at all to the Greens (anonymous, 2017).

At the end of the MPK, Bund and Länder agreed on a compromise, which in sum resulted in a faster expansion of renewables. The Länder were able to «enforce many of their claims» (Kreutzfeldt 2014; our translation), such as higher expansion targets for wind power, greater support for wind power onshore and offshore and better conditions for the expansion of biomass-fired power stations. These were all improvements that went the Greens' way. With the agreement, the federal government had cleared the most important hurdle to concluding the procedure before the summer break. Schleswig-Holstein's Minister President, Thorsten Albig, indicated after the MPK that the reform would pass the Bundesrat (*ibid.*).

A decision of an MPK develops strong cohesion, which is not without its constitutional dangers.¹⁸ Politically, it is scarcely imaginable that the Bundesrat or the Bundestag can call an agreement reached in that framework into question. There is, however, some leeway in the details, on which the MPK decision remains imprecise. For this reason, the decision was a success for the federal government that would put a stop to any further calls for amendments by the Greens, but also the coalition fractions in the Bundestag and thus the economic wing of the CDU/CSU parliamentary group that had taken a critical stance towards the EEG. In the week that followed, the federal cabinet passed the amended draft legislation that included the MPK compromise. This was immediately followed by consultations between the federal government, the coalition groups, the Land governments and the EU Commission. Towards the end of the procedure, the party and group heads of the Grand Coalition revisited the draft EEG at a summit held in the Chancellery on 22 June 2014, before the economic committee of the German Bundestag approved the final amendments (Haverkamp/Dehmer 2014).

On 26 June, the Bundestag agreed on the reform by a large majority in a roll-call vote. While the coalition party groups voted almost unanimously in favour, all members of the Greens who were present (along with the Left-wing party members) voted against the reform (Deutscher Bundestag 2014b). The Greens had nothing but criticism for the reform and the economy minister. The party group deputy leader Oliver Krischer described Gabriel as the «wrecking ball smashing renewable energy

¹⁸ The Conference of Minister Presidents is not set out in the constitution. Its significance for policy-making in individual political fields has increased enormously in recent years, which its participants see in a negative light. The former head of the Chancellery of Schleswig-Holstein, Stefan Studt, (2018) for instance said that it was «amazing that so little has so far been said about this development».

in this country» (Deutscher Bundestag 2014c; our translation). The bill was on the agenda of the Bundesrat less than two weeks later. The Greens from the Länder slammed the reform as insufficient, but in a noticeably milder tone of voice than their party colleagues in the Bundestag. The environment minister of North Rhine-Westphalia, Johannes Remmel, increased the time pressure that the federal government had exercised in bringing its amendment, regretting the fact that the Bundestag appeared to have accepted only a few of the amendments advised by the Bundesrat (PV Magazine 2014). The Green environment minister of Lower Saxony, Stefan Wenzel, criticised the fact that the EEG reform had not tackled the actual problems of the energy transition. He spoke in favour of the improvements that the Länder had achieved in the amendment process, such as slight improvements for photovoltaics (ibid.). As is the case with objection laws, the draft legislation was not subject to a vote in the Bundesrat. The session chairmanship noted that no Land governments had tabled a motion of objection.¹⁹ The reform thus passed through the Bundesrat and entered into force on 1 August 2014, as planned.

5.3 Conclusion on EEG reform

The Greens succeeded in their goal of influencing the EEG reform 2014 in their own favour through the Länder. Although only in opposition at Bund level, the Greens actively helped to shape federal legislation for this policy of ecological modernisation. In this specific case, they can lay claim improvements for photovoltaics and the expansion of offshore wind power, particularly for wind-poor locations in the country. Slippages for efficient cogeneration plants in the industrial sector were blocked (anonymous 2017). Nevertheless, it should be noted that the central pillars of the reform – switching to a tendering system, the generous industry rebate – were left untouched. One of those involved (anonymous 2017) attests that a lot of time was taken up in the party-internal coordination procedure in drafting a joint position paper and, in particular, setting out detailed proposed amendments to the draft legislation, which were ultimately not used. On the back of this experience, the Greens avoided channelling too much time into the positioning work when the EEG was next reformed, two years later, and used their coordination mainly to develop a standard line of communication. This lesson learnt is also an indication that the legislative procedure in question may have been atypical. The fact that the reform of a sectoral law not subject to a vote was hammered out in detail at the highest political level between Bund and Länder and that the negotiations played out under the public gaze over several months will probably remain an exception. In the policy field of ecological modernisation, no other legislative procedure has received similar attention in the last five years.

¹⁹ Successful appeals for objection require a simple majority vote of at least 35 in the Bundesrat. As CDU/CSU and SPD support the reform and the Land governments will abstain from voting in the event of doubt, it was clear to the Greens from the beginning that there was no prospect of a successful motion of objection.

Overall, the Greens succeeded in bridging the substantive differences between their Länder and between themselves at Bund and Land levels in the 2014 EEG reform. In the view of one of the individuals involved in the negotiations from a ministerial bureaucracy background, this bolstered the Greens' position in the face of the Grand Coalition: «this allowed the Green Länder to push a couple of points through, meaning that they also contributed to the reform as a whole» (anonymous 2018; our translation). In situations in which the political situation breaks down, the Greens clearly succeeded in playing their part as a «hinge party» in federal and Land politics (Scheiner 2016: 419) to their advantage in the Bund-Länder negotiations.

It should be borne in mind that potential influence on federal legislation in laws such as the EEG, which are not put to the vote, is considerably less than in laws that are. A party that is in opposition in the Bund and in (joint) power in many Länder can certainly have a considerable blocking influence on legislation at federal level, but probably only a small say in actually shaping it (Leunig/Träger 2017: 268). This case study confirms the assumption, in that the Greens undoubtedly achieved identifiable improvements, but no substantial amendments to the law.

It also shows the limits of Green coordination, which cannot simply «coordinate away» the competing perspectives and interests of the Greens at Bund and Land levels. With their undisguised hostility towards what they considered a highly reprehensible EEG reform, the Greens in the Bundestag sent out a different signal from the Greens in the Länder, who could credibly claim to have made some things better. This indicates that the attempt at a dual strategy across the board – in power in the Länder and in opposition in the Bund – remains a tough balancing act for the party.

The analysis shows that informal Bund-Länder coordination has an important role to play in legislation and offers the Länder a forum for getting their interests across to the Bund, thus confirming earlier findings concerning energy policy (Schreiner 2016). The Greens were forced to exercise their influence outside the formal intervention frameworks of the Bundestag and the Bundesrat. More to the point were the informal Bund-Länder meetings of the competent ministers and the Conference of Minister Presidents. At the MPK, the Greens were in some cases largely independent of their coalition partners.

6 Conclusion

The starting point of this study was whether Alliance 90/The Greens successfully use their core competence of ecology when in office and exploit the leverage of its governmental participation in the Länder. Participation in coalition governments and the ensuing responsibility for thematically central ministries should give the party leeway to push through policies in support of its ecological modernisation objectives – in other words, environmental policy covering a wide range of fields from environmental and nature protection policy (air, water, soil, marine conservation, flood protection, species protection, biodiversity), to agricultural policy (including regional issues such as viticulture and fisheries), hunting policy, genetic engineering, animal protection, energy policy, climate policy and transport policy.

Policy outcome: This analysis shows that the German Greens do use their leeway to promote policies in favour of ecological modernisation – both in the Länder and at federal level. Coalitions the Greens are in pursue a more ambitious ecological modernisation than governments without their participation. The Greens leave their mark particularly in policy fields where the Länder have a larger mandate, such as energy policy (particularly renewable energy) and agricultural policy (most notably animal protection). In climate protection, the Greens not only use their influence, but also drive the establishment of climate policy as a new, stand-alone policy field at the level of the Länder. On issues in which the Länder have less scope, the Greens have at least managed to place emphases; genetic engineering is one example. In other policy fields of ecological relevance, the influence of a Green government participation is less visible or harder to assess. Whether a Land government succeeds in increasing cycling, for instance, depends to a considerable extent on the framework set by the Bund and how the municipalities in each Land go about promoting the issue themselves. The case study investigated here at the very least clearly shows that the Greens are unquestionably able to use all available scope to strengthen cycling where they handle transport policy, such as in Bremen and Baden-Württemberg. They interconnect cycling infrastructure within the Land, step up intrastate coordination between municipalities, and secure federal funding to promote cycling. The Greens have also succeeded several times in influencing federal policy through the Länder. One prominent (albeit unusual) example is the search for a final repository for nuclear waste, which was made possible to a considerable extent by the cooperative attitude of Minister President Kretschmann (who set aside his Land's own interests). The case study of the 2014 EEG reform also shows that the Greens impact federal policy and, in this specific case, succeeded in securing moderate improvements for the expansion of renewables. In this process, they smoothed out the substantive differences between their Länder and within the party at Bund and Land level. They achieved

this by means of internal party coordination and a not inconsiderable amount of work. This examination also shows the limits of party-internal coordination, which cannot simply remove the different perceptions and interests of the Greens at federal and state level through coordination. When the political situation breaks down, the Greens increasingly play their role as a «hinge party» in federal and Land politics to their advantage in the Bund-Länder negotiations.

Formal effects: The Greens tend to get mandates that reflect their will to promote ecological modernisation. In all of their coalitions, they have held the environment ministry – the starting point for their core competence to work. Political priorities in climate protection and the energy transition can be seen in the remits of the ministries, as well as in their names. Where the Greens govern, competence for energy lies mostly with the environment ministry. Where they do not, energy is never in the environmental ministry. In seven out of 14 cases, the term energy was not mentioned in the name of the environmental ministry until the Greens joined the government. The names of the Green-led environment ministries in Schleswig-Holstein (Ministry of Energy, Agriculture, Environment and Rural Affairs) and in Baden-Württemberg (Ministry for the Environment, Climate and Energy) express the great importance the Greens attach to the energy transition and the challenges of climate protection. It is worth noting that the term «climate» or «climate protection» is used only in the names of the environment ministries in Länder in which the Greens have seats and are responsible for this office. The Greens also increasingly hold other ministries of high ecological relevance, such as transport, agriculture and economics (energy). The remits of the Green-led environment ministries of Saxony-Anhalt, Schleswig-Holstein and, in particular, Bremen are noteworthy as ecological super-ministries due to the scale of their responsibilities.

New opportunities: the high number of government participations gives the Greens an opportunity to improve and expand medium and long-term institutional structures in favour of ecological modernisation. In particular, the second term of office in a given government is an opportunity for a longer-term effect on the organisation, process, and personnel development in ministries and subordinate authorities. In this way, the Greens increasingly shape the organisational structure in administration, influencing personnel policy and creating new substantive focal points. The Greens then have a lasting influence on the German political landscape, allowing them to improve the preconditions for ecological modernisation at an institutional level as well. It is to be assumed that the political competitors will not wish to undo everything when the Greens are voted out of office and will not in any case be able to do so in the short term.

The problem of political interplay: the analysis of this study runs into brick walls wherever overlaps in competences between the political levels (federal-state-municipal) make it difficult to trace political decision-making processes and clearly delimit responsibilities. This is particularly true in transport policy. The example of cycling policy shows how hard it is to initiate policy change when the responsibilities are divided between different players and levels of administration, which may, like the *Bund*, set the framework or, like municipalities, hold responsibility for

implementation on the ground. The *Länder* and their governments are caught between a rock and a hard place. In addition, they depend much on local administrations – the road building authorities in this specific case – which have a relatively strong position and have any discretion in implementing the political guidelines of a Land government. This case study also provides evidence that the Greens increase their influence in cycling policy if they govern for more than one term. In both Bremen and Baden-Württemberg, the coalitions have laid down more ambitious goals for the expansion of cycling over the years, and the subject has gained prominence, for instance in the coalition agreements of the *Länder*. This suggests that a policy cannot be re-orientated to the extent of a political change overnight following a change of government, but that this takes time.

Increasing party competition: the government participations of the German Greens force the competition's hands over ecology policy. Climate protection, renewables, and sustainable mobility are objectives fundamentally supported by all parties. Most often they do not disagree over whether targets should be achieved, but rather over the pace and means. If the Greens, when in office, pursue a more ambitious policy in the range of political fields for ecological modernisation, the others will have to catch up sooner or later. High levels of competence continue to be regularly ascribed to the Greens in surveys on issues such as environmental protection, climate protection and energy policy, putting them way ahead of the political competition. The other parties need to ask themselves whether they intend to continue to leave such an important future issue open to the Greens. As a reaction to Green domination, various strategies fluctuate between competition and dissociation. The first indications point to a change of mindset on the part of the Union at least.

Future challenges: Green government participations, which have been numerous and successful from the point of view of ecological modernisation, challenge the party to develop an ecological manifesto. For the energy transition, climate protection and the diesel scandal, they are currently ahead of their competitors as the majority of voters support the Green's position on these issues. However, the parties of the Grand Coalition will catch up if they agree on a coal phaseout in 2019, thereby pacifying a highly controversial issue which the Greens used to mobilize supporters. A political compromise may prompt the Greens to drop the protests against the destruction of Hambach Forest. Public perceptions could change if the federal government does its ecological homework; the Greens would then have to develop new issues to demonstrate their leadership. The environmental movement and its associations could have a major role to play here. In view of the ongoing ecological crisis – with themes such as climate change, species extinction, the consumption of meat, contaminated water and polluted air – this is necessary in any case. The question will be whether the Green Party, which is closest to the environmental associations, will be able to take up their initiatives and benefit from them, or whether other parties will succeed in embedding ecological needs in their own manifestoes and profiles. From a party-political point of view, other questions include:

- Are there any indications that certain parties are easier to work with as coalition partners in favour of ecological modernisation than others? If so, could it be easier to push forward an ecological agenda in a coalition with the SPD or with the CDU?
- Does it matter whether the Greens are in office alongside one coalition partner or two?
- What effect do coalition constellations have on the implementation of ecological content?
- And can ecological modernisation be supplied better through ministries in areas that have done the most ecological damage to date? For instance, can the conservation of nature be better safeguarded by the agriculture ministry, as it is responsible for imposing stricter environmental requirements on farming and using premiums to encourage change?

Open questions: Last but not least, there are a number of observations with research policy implications. The investigation revealed that the environment policy discourse of parties, science and the media no longer focuses on traditional environmental issues such as acid rain, the dying forests and protecting the ozone layer. Discussions on protecting the soils, clean rivers and the state of the forests play a minor role today, if they take place at all. Instead, the environment policy debate is now strongly overlaid by climate and energy policy. Climate protection in particular is highly dominant. Political science has some catching up to do here to make the political field of climate policy more of a focus, also at the level of the Länder, where the issue has established itself in recent years. Similarly, the policy field of transport is riddled by astonishingly large political science research gaps. The increasing environmental burdens of the ever-growing traffic volume along with technical developments in the field of electronic vehicles, battery technology and digitalisation make it more than likely that multi-party competition will become more intensive around this subject. The issue remains prominent and will produce sufficient illustrative material for political science to work on. Finally, this paper has unearthed the question as to whether it would be advantageous to treat ecological modernisation as an overarching and multi-disciplinary policy field within political science.

APPENDIX

GLOSSARY

Alliance 90/The Greens or the Greens (German: Bündnis 90/Die Grünen or Grüne) is a green political party in Germany. It was formed after German reunification in 1993, through a merger of the German Green Party (founded in West Germany in 1980) and Alliance 90 (founded during the Revolution of 1989–1990 in East Germany).

A-states, B-states have been in use since the 1970s. They stand for states that are led by an SPD majority (A-states) or by a CDU/CSU majority (B-states). Those states in which Alliance 90/The Greens have a share in, but not necessarily lead the government have been referred to as G-states for several years. It is important to note that a G-state can be an A- or B-state at the same time.

Black-Green Coalition (German: schwarz-grüne Koalition) refers to the coalition of CDU and Greens where the CDU is the senior partner.

Black-Yellow Coalition (German: schwarz-gelbe Koalition) refers to the coalition between the CDU and the FDP. This is the former centre-right coalition of choice of both parties and their electorates.

Bundesrat (Federal Council) is a constitutional and legislative body that represents the sixteen Länder (states) of Germany at the federal level. The Bundesrat participates in legislating, alongside the Bundestag, with laws affecting state competences and all constitutional changes requiring the consent of the body. For its similar function, it is sometimes described as an upper house of parliament along the lines of the US Senate, the Canadian Senate or the British House of Lords.

Bundestag (Parliament) is a constitutional and legislative body at the federal level in Germany. Members of the Bundestag are usually elected every four years by all adult German citizens in a mixed system of constituency voting and list voting. The Chancellor is elected by the Bundestag. The government is accountable to the Bundestag.

CDU (Christian Democratic Union, German: Christlich Demokratische Union) is a Christian democratic and liberal-conservative political party in Germany. It is the major party of the centre-right in German politics. It is associated with the colour black.

Coalition committee (German: Koalitionsausschuss) is an essential informal body for the governance of coalitions. It enables discussion between coalition partners

including representatives from the government, the party and the parliamentary groups. Decisions within coalition committees are made by consensus, which makes them particularly useful for the smaller coalition partner(s). Coalition committees might differ according to their members, their cycle of meetings, and their exact function.

Coalition agreement, treaty (German: Koalitionsvertrag) coalition partners agree on rules as to their dealings with each other, most of which are set out in coalition agreements. They determine the policy direction of the coalition, the ministerial responsibilities of the government, personnel-related decisions, regulations about voting behaviour in the state parliament, the cabinet and Bundesrat as well as mechanisms for dealing with conflict.

Conciliation committee (German: Vermittlungsausschuss) is a joint Bundestag and Bundesrat committee in which both institutions have the same number of representatives. It meets to broker compromises between the two chambers. It is convened particularly often if Bundesrat and Bundestag have diverging majorities.

CSU (Christian Social Union, German: Christlich-Soziale Union) the CSU is the Bavarian sister party of the CDU. In Bavaria one can vote only CSU, not CDU. In the Bundestag (federal parliament) CDU/CSU form a joint parliamentary group.

Department is one of several subdivisions within a ministry in the federal or state government. The next subdivision within a department is a unit.

Die Linke (Left Party) is a democratic socialist and (far) left-wing political party in Germany. It was founded in 2007 as the merger of the Party of Democratic Socialism (PDS) and the Electoral Alternative for Labour and Social Justice (WASG). It is associated with the colour dark red.

Dual leadership (German: Doppelspitze) is a core principle of the Green party. It ensures that at least one woman is leading the party or parliamentary group in parliament (state and federal level). In addition it allows a representation of the internal wings of the party. With the exception of Hamburg, all state party associations examined here apply the dual leadership principle.

FDP (Free Democratic Party, German: Freie Demokratische Partei) is a liberal and classical liberal party in Germany. The party is traditionally considered centre-right, pro-market and with libertarian currents. It is associated with the colour yellow.

Five Percent Threshold (German: Fünf-Prozent-Hürde) seats in the Bundestag and in the state parliaments are, with few exceptions, only given to parties surpassing a five percent election threshold. The clause is meant to minimize the risk of party fragmentation, which partially caused the incapacitation of the parliament in the Weimar Republic.

Fundis (see Realos)

Grand Coalition (German: Große Koalition) refers to the coalition between the SPD and the CDU, the two parties with the traditionally greatest electorate.

Green-Black Coalition (German: grün-schwarze Koalition) refers to the coalition of Greens and CDU where the Greens are the senior partner. The first and so far only green-black coalition is in Baden-Württemberg since 2016.

Green-Red Coalition (German: grün-rote Koalition) refers to the coalition of Greens and SPD where the Greens are the senior partner. The first and so far only green-red coalition was in Baden-Württemberg between 2011 and 2016.

G-coordination refers to the internal coordination of Green actors across political levels, including state governments, the federal parliamentary group, the federal party and MEPs. It serves to solve possible dissent and work towards achieving coordinated communication to prevent differences being aired in public.

G-states are states with a coalition government which includes the Green Party (see also A-states and B-states).

Head of State Chancellery (German: Chef der Staatskanzlei, CdS) is a political appointee and the highest ranking civil servant in the State Chancellery. Considered as the right hand of the Minister President the position is comparable to a Chief of Staff. His/her main responsibility is to coordinate the cabinet.

Jamaica coalition (German: Jamaica-Koalition) refers to the coalition of CDU, FDP and Greens. The three parties' colours reflect the Jamaican flag (black, yellow, green).

Kenya coalition (German: Kenia-Koalition) refers to the coalition of CDU, SPD and Greens. The three parties' colours reflect the Kenyan flag (black, red, green).

Ministerial Conferences (German: Fachministerkonferenzen) on specific policy fields (such as environment, labour, interior etc.) serve the function to provide room for exchange of the federal minister with his/her 16 peers from the state level. The conferences have to adopt decisions unanimously.

Minister President (German: Ministerpräsident) is the head of state and government of a German state. They are elected by their respective state parliaments. They represent their state in the Bundesrat and towards the federal government. The position of a Minister President is defined by the specific state constitution.

Minister Presidents' Conference (German: Ministerpräsidentenkonferenz, MPK) is an informal body of self-coordination of Germany's 16 states. Its members are the

Minister Presidents and the Federal Chancellor. It addresses solely issues with federal-state-relationships that are not being dealt with in the Bundesrat, such as media policy or federal fiscal relationships.

Realos (realists) refers to the faction within the German Green Party which is considered to be more pragmatic, government-orientated. It was formed in conflict to the Left (or previously Fundi) wing of the party. Today the Realo faction calls itself Reformer.

Realpolitik (realistic politics) refers to realistic politics including making compromises with political competitors in contrast to idealistic (unrealistic) politics. Red-Green coalition (German: Rot-Grüne Koalition) refers to a coalition between SPD and the Greens, where the SPD is the bigger partner. This is the former centre-left coalition of choice of both parties and their electorates.

Separation of office and mandate principle (German: Trennung von Amt und Mandat) the principle of separation of office and mandate results in Green Party chairs or Ministers not being allowed to be member of a parliament at the same time. The principle is applied in varying strictness by the federal and state associations of the German Green Party.

SPD (Social Democratic Party, German: Sozialdemokratische Partei Deutschlands) is a social-democratic political party in Germany. It is the major party of the centre-left in German politics. The SPD is associated with the colour red.

SSW (Southern Schleswig Voters' Association, German: Südschleswigscher Wählerverband) is a regionalist party in the state of Schleswig-Holstein in the very north of Germany, bordering Denmark. The party represents the Danish and Frisian minorities living in the state. Securing the rights of the Danish minority, the SSW is not subject to the Five Percent Threshold.

State Secretary (German: Staatssekretär) is the permanent representative of a minister in a state ministry. The position can be considered as a deputy minister.

State Chancellery (German: Staatskanzlei) is the department and administrative body of the Minister President of a state. As the center of the executive it coordinates the government's ministries and represents the state government towards the federal level.

BIBLIOGRAPHY*

- AGENCY FOR RENEWABLE ENERGIES (2017a). An overview of renewable energies in the Länder. Available to download from www.foederal-erneuerbar.de/uebersicht/bundeslaender/BW%7CBY%7CB%7CBB%7CHB%7CHH%7CHE%7CMV%7CNI%7CNRW%7CRLP%7CSL%7CSN%7CST%7CSH%7CTH%7CD/kategorie/gesetze/auswahl/325-regelungen_gesetze_u/#goto_325.
- AGENCY FOR RENEWABLE ENERGIES (2017b). An overview of renewable energies in the Länder. Downloaded on 11 November 2017 from www.foederal-erneuerbar.de/uebersicht/bundeslaender/BY%7CB%7CBB%7CHB%7CHH%7CHE%7CMV%7CNI%7CNRW%7CRLP%7CSL%7CSN%7CST%7CSH%7CTH%7CD/kategorie/politik.
- ALLIANCE 90/THE GREEN PARTY (2002). Die Zukunft ist grün. Basic programme of Alliance 90/The Green Party. Downloaded on 5 December 2018 from www.gruene.de/fileadmin/user_upload/Dokumente/Grundsatzprogramm-2002.pdf.
- ALLIANCE 90/THE GREEN PARTY (2017). Energy Transition Agenda 2020. Press conference on 17.01. Downloaded on 26 November 2018 from www.gruene.de/fileadmin/user_upload/Dokumente/Energiewendeagenda_2020_01.pdf.
- ALLIANCE 90/THE GREEN PARTY (2017). Zukunft wird aus Mut gemacht. Resolution of the states' council. Berlin. 30.09. Downloaded on 26 November 2018 from www.gruene.de/fileadmin/user_upload/Dokumente/Beschluesse_Laenderrat/Zukunft_wird_aus_Mut_gemacht_-_BUENDNIS_90_DIE_GRUENE_nach_der_Bundestagwahl.pdf.
- ALLIANCE 90/THE GREEN PARTY (2018). Neue Fragen der Ökologie. Federal executive board. Downloaded on 22 November 2018 from www.gruene.de/ueber-uns/2018/alle-informationen-zum-programmprozess.html.
- ALLIANCE 90/THE GREEN PARTY AND CDU (2016). Baden-Württemberg gestalten. Verlässlich. Nachhaltig. Innovativ. Coalition agreement between Alliance 90/The Green Party Baden-Württemberg and the CDU Baden-Württemberg 2016–2021. Stuttgart.
- ALLIANCE 90/THE GREEN PARTY AND SPD (2011). Der Wechsel beginnt. Coalition agreement between Alliance 90/The Green Party and SPD Baden-Württemberg. Stuttgart.
- BAHNSEN, O./LINHART, E. AND TOSUN, J. (2016). Wer mit wem in der Energiepolitik? Eine Analyse des öffentlichen Diskurses über die Novelle des Erneuerbare-Energien-Gesetzes 2014. dms – der moderne staat 9 (1), p. 109–134.
- BALSER, M. (2014). Wind von vorn. *Süddeutsche Zeitung* dated 01.04., p. 19.
- BANDELOW, N./LINDLOFF, K. AND SIKATZKI, S. (2016). Governance im Politikfeld Verkehr: Steuerungsmuster und Handlungsmodi in der Verkehrspolitik. In: Schwedes, O./Canzler, W. and Knie, A. (Hg.), *Handbuch Verkehrspolitik*. Wiesbaden: VS Springer.
- BAUCHMÜLLER, M. (2014). Wenn der Wind sich dreht. *Süddeutsche Zeitung* dated 20.01., p. 2.
- BERLIN ENERGY TRANSITION ACT (EWG Bln) (2016). Downloaded on 04.12.2017 <http://gesetze.berlin.de/jportal/j?sessionid=9A5946E4D5A21B7A9AC99C28ED2FF588.jp27?quelle=jlink&query=EWendG+BE&psml=bsbeprod.psml&max=true&aiz=true&jlr-EWendGBErahmen>.
- BEUG, S. (2018). Zoff im Berliner Senat. SPD bremst Mobilitätsgesetz aus – Radfahrer ist der Dumme! Downloaded on 26.11.2018 on www.bz-berlin.de/berlin/spd-bremst-mobilitaetsgesetz-aus-radfahrer-ist-der-dumme.
- BLUM, S. AND SCHUBERT, K. (2009): *Politikfeldanalyse*. Wiesbaden: VS Verlag für Sozialwissenschaften.

* All available in German only, unless specified otherwise.

- BÖCHER, M. AND TÖLLER, A. (2016). Umwelt- und Naturschutzpolitik der Bundesländer. In Hildebrandt, A. and Wolf, F. (Hg.), *Die Politik der Bundesländer*. Wiesbaden. Springer VS, pp. 259–282.
- BRACHER, T. (2016). Fahrrad- und Fußverkehr: Strukturen und Potenziale. In: Schwedes, O./Canzler, W. and Knie, A. (Hg.), *Handbuch Verkehrspolitik*. Wiesbaden: VS Springer.
- BÄUNINGER, T. AND DEBUS, M. (2012). *Parteienwettbewerb in den deutschen Bundesländern*. Wiesbaden: VS Verlag für Sozialwissenschaften.
- BREMEN CLIMATE PROTECTION AND ENERGY ACT (BremKEG) (2015). Downloaded on 4 December 2017 from http://transparenz.bremen.de/sixcms/detail.php?gsid=bremen2014_tp.c.68216.de&asl=bremen203_tpgesetz.c.55340.de&template=20_gp_ifg_meta_detail_d.
- BRÖCHLER, S. (2013). Opposition ohne Stachel. *Süddeutsche Zeitung* dated 22.10, p. 2.
- BRÖCHLER, S. (2017). Die Mini-Opposition. *taz.de*. Downloaded on 10 August 2017 from www.taz.de/Debatte-Politik-im-Bundestag/!5432808.
- BUKOW, S. (2018a). Bavarian state elections. Results and analyses. Downloaded on 26 November 2018 from www.boell.de/wahlanalysen.
- BUKOW, S. (2018b). Hesse state elections. Results and analyses. Downloaded on 26 November 2018 from www.boell.de/wahlanalysen.
- BUKOW, S. AND SWITEK, N. (2017). Ökonomie sticht Ökologie? Programmatische Reaktionen der grünen Parteifamilie als Folge der globalen Finanz- und Wirtschaftskrise. *Zeitschrift für Vergleichende Politikwissenschaft* 11 (1), pp. 104–128.
- CARSTENS, P. (2018). SPD in der Krise: Auf der Suche nach der zündenden Idee. 01.11. Downloaded on 13 November 2018. www.faz.net/aktuell/politik/spd-in-der-krise-auf-der-suche-nach-der-zuendenden-idee-15869421.html.
- CASPARI, L. (2017). Grünen-Wähler: Weitgereiste Bücherfreunde. *Zeit Online*. Downloaded on 6 September 2017 from www.zeit.de/politik/deutschland/2017-07/gruene-waehler-vergleich-spd/komplettansicht.
- CHANGING CITIES E.V. (2018). Über uns. Website. Downloaded on 30 November 2018. <https://changing-cities.org/%C3%BCber-uns>.
- DEHMER, D. (2017). Forschung für die Energiewende. *Tagesspiegel.de*. Downloaded on 1 December 2017 www.tagesspiegel.de/wirtschaft/energiewende-forschung-fuer-die-energiewende/19666858.html.
- DETERBECK, K. (2011). *Parteien und Parteiensystem*. Konstanz und München: UVK-Verlag.
- DEUTSCHE UMWELTHILFE (DUH) (2018). Deutsche Umwelthilfe erwirkt erstes Autobahn-Diesel-Fahrverbot auf der A40 im Ruhrgebiet sowie Diesel-Fahrverbote für Essen und Gelsenkirchen. Downloaded on 26 November 2018 from www.duh.de/presse/pressemitteilungen/pressemitteilung/deutsche-umwelthilfe-erwirkt-erstes-autobahn-diesel-fahrverbot-auf-der-a40-im-ruhrgebiet-sowie-diese.
- DIE LINKE, ALLIANCE 90/THE GREEN PARTY AND SPD (2014). *Thüringen gemeinsam voranbringen – demokratisch, sozial, ökologisch. Coalition agreement between the parties Die Linke, SPD, Alliance 90/The Green Party for the sixth legislative period of the Thuringia state parliament*. Erfurt.
- DIEKMANN, J./SCHILL, W.-P./PÜTTNER, A. AND KIRRMANN, S. (2017). Vergleich der Bundesländer: Analyse der Erfolgsfaktoren für den Ausbau der Erneuerbaren Energien 2017. Downloaded on 30 November 2017 from www.foederal-erneuerbar.de/tl_files/ae/Bundeslaendervergleich_2017/AEE_DIW_ZSW_Bundeslaendervergleich_EE_Endbericht_nov17.pdf.
- EHLERDING, S. (2018). Energiewende. Bundesrechnungshof watscht Wirtschaftsministerium ab. Downloaded on 26 November 2018 from www.tagesspiegel.de/politik/energiewende-bundesrechnungshof-watscht-wirtschaftsministerium-ab/23123606.html.
- ENDRES, A. (2018). Ich mache rote Umweltpolitik. Downloaded on 30 November 2018 from www.zeit.de/wirtschaft/2018-11/svenja-schulze-un-klimagipfel-diesel-kohlekommission-co2-steuer.
- EUROPEAN COMMISSION (2013). State aid: Commission opens in-depth inquiry into support for energy-intensive companies benefitting from a reduced renewables surcharge. Press release. Brussels. 18.12. Downloaded on 26 November 2018 from http://europa.eu/rapid/press-release_IP-13-1283_en.htm?locale=en.

- EVARD, A. (2012). Political Parties and Policy Change: Explaining the Impact of French and German Greens on Energy Policy. *Journal of Comparative Policy Analysis*, 4, p. 275–291.
- EWERT, S. (2016). Landwirtschaftspolitik und die Entwicklung des ländlichen Raumes – neue Felder der Politik der Bundesländer. In Hildebrandt, A. and Wolf, F. (Hg.), *Die Politik der Bundesländer*. Wiesbaden. Springer VS, pp. 233–258.
- FAZ (2017). Thüringen will Stromtrassen-Ausbau blockieren. (Mihm, A. Redakteur) Downloaded on 12 June 2017 from www.faz.net/aktuell/wirtschaft/energiepolitik/thueringen-will-stromtrassen-ausbau-blockieren-15054088.html.
- FAZ (2018). Wahlkampf um Merkel-Nachfolge. Kramp-Karrenbauer will CDU mit neuem Stil zu neuer Stärke führen. Downloaded on 30 November 2018 from www.faz.net/aktuell/politik/inland/kramp-karrenbauer-erlaeuert-ihre-kandidatur-fuer-cdu-vorsitz-15878470.html?printPagedArticle=true#pageIndex_0.
- FEDERAL MINISTRY FOR ECONOMIC AFFAIRS AND ENERGY (BMWi) (2014). Eckpunkte für die Reform des EEG. Berlin, 21.01. Downloaded on 5 December 2018 from www.bmwi.de/Redaktion/DE/Downloads/E/eeg-reform-eckpunkte.html.
- FEDERAL MINISTRY FOR TRANSPORT, BUILDING AND URBAN DEVELOPMENT (BMVBS) (Hg.) (2012). National Cycle Traffic Plan 2020. Downloaded on 27 November 2017 from www.bmvi.de/SharedDocs/DE/Anlage/VerkehrUndMobilitaet/Fahrrad/nationaler-radverkehrsplan-2020.pdf?__blob=publicationFile.
- FRANKE, Y. (2017). Umweltpolitik in Sachsen-Anhalt: Ein vernachlässigtes Politikfeld mit großen Potentialen. In: Träger, H. and Priebe, S. (Hg.): *Politik und Regieren in Sachsen-Anhalt*. Wiesbaden: Springer Fachmedien, pp. 387–400.
- GASTEL, M. (2016). Positionspapier: Für eine aktive Radverkehrspolitik. Downloaded on 27 November 2017 from www.matthias-gastel.de/positionspapier-fuer-eine-aktive-radverkehrspolitik/#.WhvHNmDPiX.
- GATHER, M. (2017). Thüringer Verkehrspolitik seit 1990. Schnell und effizient – profitieren alle? In: Oppeland, T. (Hg.): *Politik und Regieren in Thüringen. Institutionen, Strukturen und Politikfelder im 21. Jahrhundert*. Wiesbaden: Springer Fachmedien, pp. 279–299.
- GEHARDT, H. (2016). Verkehr und Energie in Baden-Württemberg. Der Bürger im Staat. Fünf Jahre Grün-Rot., 223–230. Stuttgart: Landeszentrale für Politische Bildung Baden-Württemberg.
- GELBHAAR, S. (2018). Radverkehr. Stefan Gelbhaar zum Verkehrshaushalt 2019. Downloaded on 29 November 2018 from www.youtube.com/watch?time_continue=11&v=Yu0XocACZwk.
- GERMAN BUNDESTAG (2014a). Roll-call vote on the reform of the Renewable Energy Act. 26 June. Downloaded on 26 November 2018 from www.bundestag.de/parlament/plenum/abstimmung/abstimmung/?id=285.
- GERMAN BUNDESTAG (2014b). Bundestag billigt Reform des EEG. Text archive. Downloaded on 26 November 2018 from www.bundestag.de/dokumente/textarchiv/2014/kw26_de_eeg/283688.
- GERMAN FEDERAL AGENCY FOR CIVIC EDUCATION (BPB) (2008). Environmental policy. Downloaded on 26 November 2018 from www.bpb.de/nachschlagen/lexika/handwoerterbuch-politisches-system/202196/umweltpolitik?p=all.
- GRANDJOT, H. AND BERNECKER, T. (2014). *Verkehrspolitik: Grundlagen, Herausforderungen, Perspektiven*. Hamburg: DVV Media Group.
- GREENPEACE (2017). Die Verkehrspolitik der Großen Koalition von 2013 bis 2017. Downloaded on 27 November 2017 from www.greenpeace.de/sites/www.greenpeace.de/files/publications/2070818-greenpeace-bilanz-verkehrspolitik-grosse-koalition.pdf.
- HAAS, T. (2017). *Die politische Ökonomie der Energiewende*. Wiesbaden: Springer Fachmedien.
- HABECK, R. (2014). Das macht die Systematik der Energiewende kaputt. Interview with Deutschlandfunk 21 January. Downloaded on 26 November 2018 from www.deutschlandfunkkultur.de/umweltpolitik-das-macht-die-systematik-der-energiewende.1008.de.html?dram:article_id=275171.
- HARTUNG, U. AND HÖRISCH, F. (2017). Regulation vs symbolic policy-making. Genetically modified organism in the German states. Conference paper for policy analysis section conference in the Länder, Hamburg, 21 and 22 September.

- HAVERKAMP, L. AND DEHMER, D. (2014). Brüssel bringt Berlin ins Schwitzen. *Der Tagesspiegel* vom 25.06.2014. Downloaded on 26 November 2018 from www.tagesspiegel.de/politik/energie-wende-und-eeg-reform-bruessel-bringt-berlin-ins-schwitzen/10091502.html
- HEIMANN, U. (2015). Der Rechtsrahmen der Bedarfs- und Netzplanung im Föderalismus. In: Müller, T. and Kahl, H. (Hg.): *Energiewende im Föderalismus*. Baden-Baden: Nomos. pp. 219–250.
- HILDEBRANDT, A. AND WOLF, F. (2016). *Die Politik der Bundesländer. Zwischen Föderalismusreform und Schuldenbremse* (2. erweiterte und aktualisierte Auflage). Wiesbaden: Springer VS.
- HÖRISCH, F. AND WURSTER, S. (2017). Einleitung «Das grün-rote Experiment: Politikwechsel nach 57 Jahren CDU-Regierung?». In Hörisch, F. and Wurster, S. (Hg.): *Das grün-rote Experiment in Baden-Württemberg. Eine Bilanz der Landesregierung Kretschmann 2011–2016*. Wiesbaden: Springer Fachmedien, pp. 1–14.
- INFRATEST DIMAP (2016). *ARD Deutschland Trend. Welcher Partei trauen Sie am ehesten zu, diese politische Aufgabe zu lösen? Angaben/Zustimmung in Prozent*. Version dated: May 2016. Downloaded on 26 November 2018 from www.tagesschau.de/inland/deutschlandtrend-551.pdf
- INFRATEST DIMAP (2018a). 2018 state elections. Bavaria. Surveys on the Greens. Downloaded on 26 November 2018 from <https://wahl.tagesschau.de/wahlen/2018-10-14-LT-DE-BY/umfrage-gruene.shtml>.
- INFRATEST DIMAP (2018b). 2018 state elections. Hesse. Surveys on the Greens. Downloaded on 26 November 2018 from <https://wahl.tagesschau.de/wahlen/2018-10-28-LT-DE-HE/umfrage-gruene.shtml>
- ITZENPLITZ, A. (2012): *Klimaschutz als nationales und internationales Politikfeld. Zwischenstaatliche Kooperation und nationalstaatliche Implementierung*. Lohmar, Köln: Josef Eul Verlag.
- JACOB, K./WOLFF, F./GRAAF, L./ARNE, D. AND GUSKE, A.-L. (2016). *Dynamiken der Umweltpolitik in Deutschland: Rückschau und Perspektiven*. TEXTE 70/2016. Dessau-Roßlau. Downloaded on 26 June 2017 from www.umweltbundesamt.de/sites/default/files/medien/1968/publikationen/dynamiken_der_umweltpolitik_in_deutschl_and-ruckschau_und_perspektiven_final.pdf.
- JUNGJOHANN, A. (2018). *Grün regieren. Eine Analyse der Regierungspraxis von Alliance 90/The Green Party*. Heinrich Böll Foundation. Schriften zur Demokratie (3. Auflage). Berlin: Heinrich Böll Foundation.
- KADE, C. (2014). Das neue Problem der Grünen mit der Energiepolitik. *Die Welt*, 3 January. Downloaded on 26 November 2018 from www.welt.de/politik/deutschland/article123519229/Das-neue-Problem-der-Gruenen-mit-der-Energiepolitik.html.
- KEUER, C. (2017). 2.4 Millionen Euro für ein Fahrrad-Paradies in Bremen. Downloaded on 27 November 2017 from www.bikecitizens.net/de/2-millionen-fuer-fahrradmodellquartier-in-bremen.
- KLUSMANN, B. (2014). *Energiepolitik der Länder und ihre Bedeutung für Projektentwickler. Konferenzpapier für Mehrebenen-Governance der dt. Energiewende am 03.11.2014*. Downloaded on 4 December 2017 from www.polsoz.fu-berlin.de/polwiss/forschung/systeme/ffu/.../1-juwi-Klusmann.pdf.
- KREUTZFELDT, M. (2014). Fast überall Gewinner. *Tageszeitung*, 3 April, p. 4.
- KROLL, F. (2017). *Klimaschutz in Ländern und Kommunen*. In: Porth, M. and Schüttrumpf, H. (Hg.): *Wasser, Energie und Umwelt*. Wiesbaden: Springer Vieweg.
- KROPP, S. (2001). *Regieren in Koalitionen: Handlungsmuster und Entscheidungsbildung in deutschen Länderregierungen*. Wiesbaden: Westdeutscher Verlag.
- LANDESREGIERUNG SCHLESWIG-HOLSTEIN (2017). *Energiewende- und Klimaschutzgesetz*. Downloaded on 1 January 2017 from www.schleswig-holstein.de/DE/Fachinhalte/K/klimaschutz/energiewendeKlimaschutzgesetz.html.
- LANGER, M. (2017). *Umwelt- und Energiepolitik in Thüringen*. In: Oppelland, T. (Hg.): *Politik und Regieren in Thüringen. Institutionen, Strukturen und Politikfelder im 21. Jahrhundert*. Wiesbaden: Springer Fachmedien, pp. 279–299.
- LEUNIG, S. (2007). Rezension zu: Schöller, O./Canzler, W. and Knie, A. (Hg.) (2007): *Handbuch Verkehrspolitik*. Wiesbaden: Springer. Downloaded on 22 November 2017 from http://pw-portal.de/rezension/27775-handbuch-verkehrspolitik_32620.

- LEUNIG, S. AND TRÄGER, H. (2012). *Parteilpolitik und Landesinteressen: Der deutsche Bundesrat 1949–2009*. Berlin: LIT Verlag.
- LEUNIG, S. AND TRÄGER, H. (2017). Grüne Parteilpolitik im Bundesrat: Eine Analyse der Koalitionsvereinbarungen auf Landesebene seit der Bundestagswahl 2013. In: *Europäisches Zentrum für Föderalismus-Forschung Tübingen (EZEF). Jahrbuch des Föderalismus 2017. Band 18*. Nomos: Baden-Baden.
- LINHART, E. AND RAABE, J. (2015). Die Stärken unterschiedlicher Ministerien aus der Sicht von Politikern. *Zeitschrift für Politikwissenschaft*, 25(2), pp. 159–188.
- MEDICK, V. (2018) Streit über Klimaschutz. SPD-Chefin Nahles attackiert die Grünen. Downloaded on 26 November 2018 from www.spiegel.de/politik/deutschland/klimaschutzpolitik-nahles-greift-die-gruene-an-a-1225885.html.
- MILLENET, J. AND BLAUE, C. (2017). Der Radverkehr ist auf der Überholspur. In *Rhein-Neckar-Zeitung*. Downloaded on 27 November 2017 from www.rnz.de/nachrichten/mannheim_artikel,-Mannheim-Radkongress-in-Mannheim-Der-Radverkehr-ist-auf-der-Ueberholspur-_arid,266056.html.
- MINISTRY OF ENVIRONMENT, AGRICULTURE AND ENERGY OF SAXONY-ANHALT (2018). Draft climate and energy concept. Downloaded on 30 August 2018 from https://mule.sachsen-anhalt.de/startseite-mule/artikel-detail/news/gemeinsam-die-klimaziele-erreichen-und-treibhausgase-einsparen/?tx_news_pi1%5Bcontroller%5D=News&tx_news_pi1%5Baction%5D=detail&cHash=c13c317077ebbee321d1088299d1e378
- MINISTRY OF ENVIRONMENT, ENERGY, CONSTRUCTION AND CLIMATE PROTECTION OF LOWER SAXONY (MUEBK) (2017). Klimaschutz: Niedersachsen strebt bis 2030 Reduktion der Treibhausgasemissionen um 70 Prozent an. Downloaded on 1 December 2017 from <http://www.umwelt.niedersachsen.de/aktuelles/-klimaschutz-niedersachsen-strebt-bis-2030-reduktion-der-treibhausgasemissionen-um-70-prozent-an--landesregierung-bringt-gesetzentwurf-ins-parlament-ein-152198.html>.
- MINISTRY OF ENVIRONMENT, ENERGY, FOOD AND FORESTS OF RHINELAND-PALATINATE (2014). State Climate Protection Act. Downloaded on 4 December 2017 from <https://mueef.rlp.de/de/themen/klima-und-ressourcenschutz/klimaschutz/klimaschutzgesetz>.
- MINISTRY OF TRANSPORT AND INFRASTRUCTURE OF BADEN-WÜRTTEMBERG (MVI) (2016). Baden-Württemberg cycle strategy. Downloaded on 27 November 2017 from www.fahrradland-bw.de/fileadmin/user_upload_fahrradlandbw/Downloads/RadSTRATEGIE_Baden-Wuerttemberg_web.pdf.
- MINISTRY OF TRANSPORT OF BADEN-WÜRTTEMBERG (MfV) (2018a). Information portal on cycle transport support. RadNETZ Baden-Württemberg. Mehr Rad fürs Land. Downloaded on 26 November 2018 from www.fahrradland-bw.de/radverkehr-in-bw/radnetz.
- MINISTRY OF TRANSPORT OF BADEN-WÜRTTEMBERG (MfV) (2018b). Information portal on cycle transport support. RadKULTUR initiative. Downloaded on 26 November 2018 from www.fahrradland-bw.de/radverkehr-in-bw/radkultur.
- MINISTRY OF TRANSPORT OF BADEN-WÜRTTEMBERG (MfV) (2018c). Conference of Transport Ministers. Gemeinsam handeln. Downloaded on 26 November 2018 from <https://vm.baden-wuerttemberg.de/fr/ministerium/verkehrsministerkonferenz>.
- MINISTRY OF TRANSPORT OF BADEN-WÜRTTEMBERG (MfV) (2018d). The Minister's CV. Downloaded on 26 November 2018 from <https://vm.baden-wuerttemberg.de/de/ministerium/minister-winfried-hermann-mdl/lebenslauf>.
- MINISTRY OF TRANSPORT OF BADEN-WÜRTTEMBERG (MfV) (2018e). Organigram of the Ministry of Transport. Version dated 1 October 2018. Downloaded on 26 November 2018 from https://vm.baden-wuerttemberg.de/fileadmin/redaktion/m-mvi/intern/Dateien/PDF/181130_Organigramm_VM.pdf
- MISOCH, S. (2015). *Qualitative Interviews*. Berlin: De Gruyter Oldenbourg.
- MONSTADT, J. AND SCHEINER, S. (2016). Die Bundesländer in der nationalen Energie- und Klimapolitik: Räumliche Verteilungswirkungen und föderale Politikgestaltung der Energiewende. *Raumforschung Raumordnung*, pp. 179–197.

- MORTSTIEF, H. AND ZAREMBA, N. M. (2017). Schleppende Umrüstung auf Elektrobusse. *Der Tagesspiegel*. Downloaded on 6 September 2017 from http://m.tagesspiegel.de/wirtschaft/innen-staedte-ohne-diesel-schleppende-umruestung-auf-elektrobusse/20187694.html?utm_referrer=https%3A%2F%2Ft.co%2FgDaQ2OVpLc.
- MÜLLER, T. (2015). Energiewende im Föderalismus. *Schriften zum Umweltenergierecht*, 18. Baden-Baden: Nomos.
- MÜLLER, T. (2018). Was ein Klimaschutzgesetz erreichen kann – und was nicht. *Der Tagesspiegel*. Downloaded on 27 August 2018. <https://background.tagesspiegel.de/was-ein-klimaschutzgesetz-erreichen-kann-und-was-nicht>.
- MÜLLER, W. C. (2004). Koalitionstheorien. In: Helms, L. and Jun, U. (Hg.): *Politische Theorie und Regierungslehre*. Campus Frankfurt/New York, pp. 267–301.
- NEUMANN, A. (2012). Die CDU auf Landesebene. Politische Strategien im Vergleich. Wiesbaden: VS Verlag für Sozialwissenschaften.
- OHLHORST, D. (2016). Die Umstellung auf Ausschreibungen im Zuge der EEG-Novelle 2014 – Auswirkungen auf Bürgerbeteiligung und Vielfalt der Akteure in der Energieversorgung. FFU-Report 01-2016. Downloaded on 26 November 2018 from https://refubium.fu-berlin.de/bitstream/handle/fub188/19772/FFU-Report_01-2016_Ohlhorst_Akteursvielfalt_final.pdf?sequence=1.
- OHLHORST, D./TEWS, K. AND SCHREURS, M. (2014). Energiewende als Herausforderung der Koordination im Mehrebenensystem. In: Brunnengräber, A. and Di Nucci, M. (Hg.). *Im Hürdenlauf zur Energiewende. Von Transformationen, Reformen und Innovationen*. Wiesbaden: Springer VS, pp. 93–104.
- PV MAGAZINE (2014). Bundesrat stimmt für EEG-Reform. 11.07. Downloaded on 26 November 2018 from www.pv-magazine.de/2014/07/11/bundesrat-stimmt-fr-eeeg-reform.
- RAVE, T. (2016). Der Ausbau Erneuerbarer Energien im Föderalismus und Mehrebenensystem. Neoklassische und neoinstitutionalistische Perspektiven. *ifo Forschungsberichte*, 75. München: ifo Institut.
- REIMER, F. (2015). Die Energiewende und die Kompetenzordnung des Grundgesetzes. In: Müller, T. and Kahl, H. (Hg.): *Energiewende im Föderalismus*. Baden-Baden: Nomos. pp. 69–99.
- RINKE, A. (2018). Rezepte gegen Grün gesucht – Union entdeckt Umweltpolitik. 30 November. Downloaded on 30 November 2018. <https://de.reuters.com/article/deutschland-union-umweltpolitik-idDEKCN1NZ0Q4>.
- RÖSENER, A. (2011). Rezension zu: Schwedes, O. (2011) *Verkehrspolitik*. Wiesbaden: Springer. Downloaded on 22 November 2017 from https://pw-portal.de/rezension/33672-verkehrspolitik_40329.
- SCHEINER, S. (2016). Interessen der Bundesländer in der deutschen Klimapolitik. *Schriften zum Föderalismus*, Bd. 5. Baden-Baden: Nomos.
- SCHULZE, S. (2018). «Ich mache rote Umweltpolitik». Interview with Alexandra Endres. 29 November. Downloaded on 30 November 2018. www.zeit.de/wirtschaft/2018-11/svenja-schulze-un-klimagipfel-diesel-kohlekommission-co2-steuer/komplettansicht.
- SCHWEDES, O. (2011). *Verkehrspolitik. Eine interdisziplinäre Einführung*. Wiesbaden: VS Springer.
- SCHWEDES, O. (2016). *Verkehrspolitik: Ein problemorientierter Überblick*. In: Schwedes, O./Canzler, W. and Knie, A. (Hg.), *Handbuch Verkehrspolitik*. Wiesbaden: VS Springer.
- SCHWEDES, O. (2017). *Verkehr im Kapitalismus*. Münster: Verlag Westfälisches Dampfboot.
- SCHWEDES, O. AND RUHRORT, L. (2016). *Länderverkehrspolitik*. In Hildebrandt, A. and Wolf, F. (Hg.), *Die Politik der Bundesländer*. Wiesbaden: Springer VS, pp. 209–232.
- SENATE DEPARTMENT FOR THE ENVIRONMENT, TRANSPORT AND CLIMATE PROTECTION (SUVK) (2018). Berlin mobility act. 5 July 2018. Downloaded on 30 November 2018 from http://gesetze.berlin.de/jportal/portal/t/1lxv/page/bsbeprod.psml;jsessionid=79BD7A387F52D4C8C1E260CDF4180613.jp24;jsessionid=88CA893B0161DA93AFDFD45090B172C0.jp24?pid=Dokumentanzeige&showdoccase=1&js_peid=Trefferliste&documentnumber=1&numberof-results=1&fromdoctodoc=yes&doc.id=jlr-MobGBErahmen&doc.part=X&doc.price=0.0#jlr-MobGBEpeLS.

- SPD AND ALLIANCE 90/THE GREEN PARTY (2007). Agreement on cooperation in a government coalition the 17th legislative period of the Bürgerschaft of Bremen 2007–2011. Bremen. Downloaded on 30 November 2018. www.rathaus.bremen.de/sixcms/media.php/13/Koalitionsvereinbarung_2007_2011.pdf.
- SPD AND ALLIANCE 90/THE GREEN PARTY (2011). Agreement on cooperation in a government coalition for the 18th legislative period of the Bürgerschaft of Bremen 2011–2015. Bremen. Downloaded on 30 November 2018. www.spd-land-bremen.de/Koalitionsvertrag-2011-2015-2.html.
- SPD AND ALLIANCE 90/THE GREEN PARTY (2015). Agreement on cooperation in a government coalition for the 19th legislative period of the Bürgerschaft of Bremen 2015–2019. Bremen. Downloaded on 30 November 2018. www.spd-land-bremen.de/Binaries/Binary1102/Koalitionsvereinbarung-2015.pdf.
- SWITEK, N. (2015). Alliance 90/The Green Party. Koalitionsentscheidungen in den Ländern. Baden-Baden: Nomos.
- THE SENATOR FOR ENVIRONMENT, CONSTRUCTION AND TRANSPORT, THE FREE HANSEATIC CITY OF BREMEN (SUBV) (2018). SUBV organigram. Downloaded on 30 November 2018. www.baumwelt.bremen.de/sixcms/media.php/13/2018-11-01%20Organisationsplan.pdf
- THIELE, J./HARTUNG, U. AND TOSUN, J. (2018). Wer steuert die Verkehrswende? Eine Analyse von Parteipositionen und Regierungshandeln. *Zeitschrift für Umweltfragen*, 3/2018, pp. 356–384.
- THURINGIAN MINISTRY OF ENVIRONMENT, ENERGY AND NATURE CONSERVATION (2017). Thüringen wird Vorreiter beim Klimaschutz. Downloaded on 4 December 2017 from www.thueringen.de/th8/tmuen/aktuell/presse/97506.
- TÖLLER, A. E. (2017). Verkehrte Welt? Parteien(in)differenz in der Umweltpolitik am Beispiel der Regulierung des Frackings. (Springer, Hg.) *Zeitschrift für Politikwissenschaft*, 27(2), pp. 131–160.
- TOSUN, J. AND HARTUNG, U. (2017). Wie «grün» wurde die Agrar- und Verbraucherpolitik unter Grün-Rot? In Hörisch, F. and Wurster, S. (Hg.), *Das grün-rote Experiment in Baden-Württemberg. Eine Bilanz der Landesregierung Kretschmann 2011–2016*. Wiesbaden: Springer Fachmedien, pp. 223–250.
- TOSUN, J. AND LANG, A. (2016). The Politics of Hydraulic Fracturing in Germany: Party Competition at Different Levels of Government. In Weible, C./Heikkilä, T./Ingold, K. and Fischer, M. (Hg.), *Policy Debates on Hydraulic Fracturing*. New York: Palgrave Macmillan, pp. 177–200.
- ULRICH, B. (2017). Mit den Grünen wäre das nicht passiert. *Zeit Online*. Downloaded on 27 July 2017 from www.zeit.de/2017/31/bundesregierung-umweltschutz-autoindustrie-die-gruenen
- UNTERSTELLER, F. (2014). EEG-Entwurf mit Schwachstellen. Press release jointly with Minister President Winfried Kretschmann on 18 February. Downloaded on 26 November 2018 from <https://um.baden-wuerttemberg.de/de/service/presse/pressemitteilung/pid/eeg-entwurf-mit-schwachstellen>.
- VERKEHRSLUB DEUTSCHLAND (VCD) (2017). Erfolgreiche Fahrradförderung – Verantwortung und Maßnahmen. Downloaded on 27 November 2017 from www.vcd.org/themen/radverkehr/fahrradpolitik/#c2303.
- VOGELER, C. S. (2017). Parteiendifferenz in der deutschen Tierschutzpolitik – Gestaltungsspielraum der Länder in neuen Politikfeldern? *Zeitschrift für Parlamentsfragen*, 3, pp. 634–656.
- VOLKERY, A. (2008). Naturschutzpolitik in den Bundesländern. In: Hildebrandt, A. and Wolf, F. (Hrsg.), *Die Politik der Bundesländer*. Wiesbaden: Springer Verlag, pp. 257–273.
- WENZELBURGER, G. (2015). Parteien. In: Wenzelburger, G. and Zohlnhöfer, R. (Hg.): *Handbuch Policy-Forschung*. Wiesbaden: Springer VS, pp. 81–112.
- WESTFÄLISCHE NACHRICHTEN (2012): NRW. Rot-grüne Koalitionsverhandlungen in NRW vor Durchbruch. Downloaded on 26 November 2018 from www.wn.de/NRW/2012/06/NRW-Rot-gruene-Koalitionsverhandlungen-in-NRW-vor-Durchbruch.
- WICKEL, M. (2015). Klimaschutz auf Länderebene. In: Müller, T. and Kahl, H. (Hg.): *Energiewende im Föderalismus*. Baden-Baden: Nomos, pp. 187–202.
- WURSTER, S. (2010). Zukunftsvorsorge in Deutschland. Ein Vergleich der Bildungs-, Forschungs-, Umwelt-, und Energiepolitik. Baden-Baden: Nomos.

- WURSTER, S. (2017). Energiewende in Baden-Württemberg: Ausmaß und Folgen. In Hörisch, F. and Wurster, S. (Hg.), *Das grün-rote Experiment in Baden-Württemberg. Eine Bilanz der Landesregierung Kretschmann 2011–2016*. Wiesbaden: Springer Fachmedien, pp. 251–278.
- WURSTER, S. AND HAGEMANN, C. (2017). Zwei Wege zum Erfolg. Der Ausbau Erneuerbarer Energien im Bundesländervergleich. Konferenzpapier für Sektionstagung Policyanalyse in den Ländern vom 21.–22.09 in Hamburg.
- WURSTER, S. AND KÖHLER, C. (2016). Die Energiepolitik der Bundesländer. Scheitert die Energiewende am deutschen Föderalismus? In Hildebrandt, A. and Wolf, F. (Hg.), *Die Politik der Bundesländer*. Wiesbaden. Springer VS, pp. 283–314.

LIST OF INTERVIEW PARTNERS

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ANONYMOUS (2017). Interview with an employee of the «Green Coordination» on 6 December 2017, Berlin.

ANONYMOUS (2018). Interview with an employee of the federal government on 7 February 2018, Berlin.

ERDMENGER, CHRISTOPH, Head of the Sustainable Mobility Department, Ministry of Transport of the Land of Baden-Württemberg, Stuttgart, 20 October 2017.

GENZEL, ALBRECHT, Allgemeiner Deutscher Fahrrad-Club Bremen, Bremen, 15 August 2017.

KATZENSTEIN, HERMINO, member of the state parliament of Baden-Württemberg, Stuttgart, 25.09.2017.

POLZIN, GUNNAR, Head of the Transport Department, The Senator for the Environment, Construction and Transport, the Free Hanseatic City of Bremen, Bremen, 15 August 2017.

STUDT, STEFAN, Chef of the State Chancellery of Schleswig-Holstein 2012-2014, telephone interview, 20 February 2018.

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TABULAR OVERVIEW OF STUDIES

Study	Dept.	Policy field	Question(s) asked	
Monstadt/Scheiner 2016	Energy	Renewable energy, climate	To what extent do distribution concerns determine the approach of the Länder to the energy transition?	
Töller 2017	Energy	Fracking	Why have the red-green state governments in North Rhine-Westphalia and Lower Saxony taken different stances towards fracking?	
Diekmann et al. 2017	Energy	Renewable energy	How ambitiously do the Länder promote the expansion of renewables and technological process? (Quantitative analysis based on indicators)	
Wurster/Köhler 2016	Energy	Energy policy	What are similarities and differences in energy policies of the Länder?	
Wurster/Hagemann 2017	Energy	Renewable energy	To what extent does a government participation of Alliance 90/The Greens and its responsibility for energy support the expansion of renewable energy in the Länder?	
Wurster 2017	Energy	Energy policy	Stock-take of energy policy with regard to energy production, distribution and consumption.	

	Result	Research subject	Research period	Does Green make a difference?
	Local regional economic interests determine the approach of Länder governments. Party-political positions take a back seat.	16 Länder	1990s–?	Other factors dominate
	The problem structure plays a considerable role. In NRW, both Greens and SPD consider that the potential damage of fracking outweighs the benefits and supported a general ban. NI has an economic interest in fracking, so that the Greens voted in favour of low levels of regulation against the views of the party grassroots and manifesto.	CDU/CSU at federal level, Red-Green in NRW, Red-Green in Lower Saxony	2011–2016	Other factors dominate
	The Länder of Baden-Württemberg, Thuringia and Schleswig-Holstein show the greatest efforts in favour of expansion and Mecklenburg-Western Pomerania, Lower Saxony and Bavaria the greatest efforts in favour of technological transition.	16 Länder	2014–2017	Indiscernible
	The Länder pursue differing and unique energy policies. In some cases, partisan effects can be seen. A Green government participation frequently has a positive effect on support for renewable energy.	16 Länder	Not clear: ca. 2011–2015	Slight
	The party-political composition of state governments plays a moderate role in expansion of renewables. In states in which the Greens are in government, a tendency towards more rapid expansion is noted.	16 Länder	2004–2014	Slight
	With nuclear phase-out, expansion of wind power and citizens' participation, the coalition has set its own priorities. In seeking final storage facilities for nuclear waste, it has also made a positive contribution to the overall energy transition in Germany.	Green-Red in Baden-Württemberg	2011–2016	Marked

Study	Dept.	Policy field	Question(s) asked	
Gebhardt 2016	Energy, transport	Renewable energy, transport policy	Interim stock-take of Green-Red transport and energy policy, particularly wind power	
Böcher/Töller 2016	Environment	Environment, nature conservation	What similarities and differences can be seen in the environment policy of the Länder? What are the reasons for this?	
Hartung/Hörisch 2017	Agricultural	Genetic engineering	What predicts a state government's decision to join network of GMO-free regions? What predicts the passing of GMO policies?	
Ewert 2016	Agricultural	Agriculture, genetic engineering, animal protection	To what extent do the Greens push through their agriculture policy proposals in coalition agreements and then implement them?	
Tosun/Hartung 2017	Agricultural	Agriculture, genetic engineering, consumer protection	To what extent where the Greens able to push through a major policy change for agriculture and consumer policy?	
Vogeler 2017	Agricultural	Animal protection	What are differences in formulation and prioritisation of animal protection policy objectives among political parties? To what extent are differing party-political preferences reflected in policy-making?	

	Result	Research subject	Research period	Does Green make a difference?
	Very little margin in transport policy is used to support sustainable mobility. Renewables are being expanded.	Green-Red in Baden-Württemberg	2011–2016	Indiscernible
	Differences can be seen in, amongst other areas, climate protection laws, national parks and hunting law. In these cases, Green government participation has a positive influence on policy-making.	16 Länder	2000–2014	Slight
	Alliance 90/The Greens and its ministers are a driving force behind joining the network. No indication that certain coalitions or parties particularly forward GMO policies.	16 Länder	2010–2015	Slight
	A Green government participation makes a difference. Animal protection, a ban on genetic engineering and sustainability have been set out in coalition agreements and implemented.	16 Länder	2007–2014	Marked
	The Green-Red government has executed a major change in this policy field. The Greens were able successfully to promote even more ambitious proposals.	Green-Red in Baden-Württemberg	2011–2016	Marked
	Broad policy differences are formulated and promoted particularly in Länder in which Alliance 90/The Greens are part of the government.	16 Länder	2011–2017	Very clear

Source: Own chart.

Governing Ecologically

How Germany's Green Party leverages its influence to promote ecological modernisation

Alliance 90/The Green Party are known as the «Party of Ecology». Protecting the environment runs through its political DNA. In voter surveys, the German Greens regularly come out as the party deemed to have by far the greatest competency in this area and in energy policy as well.

But is that justified? Does it make any difference who is in power in a country?

This study by Arne Jungjohann tries to answer these questions, as it looks at the subnational level of the federal states.

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