

Instruments and actions of the German Federal States towards climate protection

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1. SYNOPSIS

Research was undertaken to examine how climate protection policy is currently established in all 16 German Federal States (*Laender*) and what future options exist.

2. ABSTRACT

Studies regarding climate protection are already undertaken for the local and national level. But what activities are currently carried out and what options exist at the administrative level of the German Federal States (*Laender*) has not yet been examined in detail, although this level is a very important one at the point of intersection between national and local policy.

An in-depth study was undertaken to examine how climate protection policies are established in practice in all 16 German *Laender*. The evaluation concentrated on the identification of starting-points and processes of climate protection policies as well as current goals and their implementation by the different *Laender*. The legal framework of climate protection policies was analysed, and has been the focal point in the sectors energy, transport, agriculture/forestry and waste management. Together with policy stakeholders of the *Laender*, their problems arising while integrating the national CO₂ reduction goals into the day-to-day political work were discussed.

It was discovered that although the *Laender* are working well in the field of climate protection, they will not reach the national emission reduction goals. Necessary activities are not prevented by the legal and constitutional framework but rather by the lack of political and social relevance of climate protection policy. To make it a more important and successful issue, the actors at the level of the *Laender* must link their climate protection activities with other policy sectors to make them more relevant. As result of our analysis, possible future options for political and administrative measures were developed.

3. INTRODUCTION

Within our research we analysed how climate protection policy is established in practice in all 16 German Federal States (*Laender*) and how it could be further developed. The aim of this in-depth study was to examine in detail what current activities and future options exist at the administrative level of the *Laender*, because this level is a very important one, being at the point of intersection between national and local policy in Germany. Additionally, it seemed to be a very interesting subject to compare the climate protection policies of the different *Laender*.

For a better understanding of the analysis, some short remarks about the German constitution and the legal basis for conducting climate protection activities could be helpful. The German federal administrative system comprises a hierarchical system with three main constitutional (as well as political and administrative) levels:

- The national (= central) level with the Federal Parliament and Government,
- The Federal State (= *Laender*) level with 16 *Laender* parliaments and governments (Annex 1),
- The local level with numerous municipal and city councils, many with different constitutional constructions.

What the 16 *Laender* can generally do in the field of climate protection is more or less regulated in the German Constitution, the *Grundgesetz*. The legal basis of those potential actions can be summarized as follows:

1. The exercising of the public jurisdiction lies within the competence of the *Laender* level if not defined otherwise by the *Grundgesetz*.
2. “Climate protection” is not directly named in the constitution as a separate field of activities. But there are other fields that are also of relevance for climate protection, such as traffic and energy.
3. Many national laws have to be executed by institutions of the *Laender*. But these activities have to be executed within the limits and along the rules set by national law in order to limit the scope for diverging interpretations.
4. The important fields of activities belonging to the concurrent legislation, i. e. primarily the National Parliament (= *Bundestag*), which has the complete power of legislation. But not all fields of activities with relevance for climate protection are completely defined by national laws. So there are several legal gaps that can be filled and are to some extent filled by *Laender* laws.
5. Establishing administrative acts is mainly within the competence of the *Laender*. They can support climate protection by giving money, by disseminating information, by implementing marketing programmes, by founding institutions, etc.

As can be seen, there are several – including legal – possibilities for the *Laender* to become active in the field of climate protection. So it was interesting to examine in our research how the *Laender* use their possibilities.

4. RESEARCH METHODS

Climate protection is a very complex research area. To be able to handle it, in the beginning of the research activity, sectors with importance to climate protection were defined: energy, transport, agriculture/forestry and waste management. Additionally, instruments suitable for realising emission reduction goals were identified. As a result, a matrix consisting of activity sectors and instruments could be extracted, which helped to understand climate protection measures of the *Laender* (Annex 2, Annex 3).

The basis for our research was a systematic evaluation of existing material from all 16 *Laender* concerning their climate protection goals and activities, e.g. energy concepts. To verify and complete this information, members of ministries of environment in the *Laender* were interviewed. To guarantee that the same issues are addressed to each of the contacted persons the discussions were not conducted in a fully open format but rather as textbook interviews. Due to the limited competence of our interview partners within those ministries that were mainly responsible for energy efficiency and renewable energies, aspects of energy policy were discussed to start with. Since co-operation between individual ministries, e. g. with the ministries of economic affairs, seems to be rather weak, it was not possible for us to obtain much information on the sector-specific climate protection policies of other ministries as was first planned. This lack of co-operation seemed to be a fundamental problem for the whole climate protection policy in the *Laender* (see below).

Another one of the project’s aims was to show possible activities for emission reduction that the *Laender* can measure at their administrative level. Therefore three to five examples of successful climate protection actions that our contact persons chose were collected for every one of the *Laender*. These measures were systematically described so that they could be compared. Again, however, the problem was the same: unlike our original plans, we received only projects carried out by the ministries of environment, and not from other ministries, although we were sure that other ministries as well are – at least indirectly - active in the field of climate protection.

In the end, a workshop with our contact persons was organised to discuss problems of the climate protection policy of the *Laender* and potential solutions. Here it was very interesting to recognise that the problems first presented in the publications and in the interviews have been narrowed during the discussion.

5. RESULTS: ANALYSIS AND FUTURE OPTIONS FOR CLIMATE PROTECTION POLICIES

Analysis of climate protection policies of the German *Laender*

Starting points and processes of climate protection policies

On the basis of material examination and interviews mainly three distinct groups of events for starting climate protection policy in the 16 German *Laender* could be identified. These are, however, not to be seen as excluding each other but rather in addition to each other.

1. In most of the *Laender*, climate protection policy is based on the public discussion about **sustainable development**. The central event for pushing the development of this policy sector was the Conference of the Parties in Rio de Janeiro in 1992. Also, the *Laender* that started their emission reduction policy before Rio have been influenced by the conference's results. The decisions made in Rio further developed the idea of environmental protection of the 80s and influenced the setting up of climate protection goals in the *Laender*. For example, the concept of Local Agenda 21 can be found in many climate or energy concepts.
2. Some of the *Laender*, however, already started their climate protection policy without any special event like the Rio conference. In these cases a kind of "ecological ethic" played a major role. In one case the importance of the climate for the future development of the *Land* and anxiety about the greenhouse effect was decisive. In other cases, concern for future generations, the limitation of fossil resources and the health of today's inhabitants were pronounced as reasons for starting a climate protection policy.
3. Besides overall sustainability or environmental protection ideas, the *Laender* had their **own specific reasons** for starting and developing their climate protection policy. For example, the fear of economic failure in agriculture, fishing and tourism due to climatic damages and increasing expenses for coastal protection played a major role in Schleswig-Holstein and Mecklenburg-Vorpommern, the two *Laender* located at the Baltic and/or North Sea.
4. In some of the *Laender*, the climate protection policy was developed in the frame of **economic and energy policy**. Starting points have been the **oil crisis** in the end of the 1970s, the nuclear accident of **Chernobyl** in 1986 and the German **reunification** in 1990. The oil crisis and the Chernobyl accident resulted in focussing energy policy on aspects of energy efficiency and renewable energies, which are still the emphasis of the climate protection policy of the German *Laender*. The reunification forced Berlin as the new German capital and, especially, the five East German *Laender* to undertake a lot of economic activities. They had to restructure the whole economic system, which led to many cases of decommissioning. The shutting down of factories, which have mostly been very inefficient and environmentally damaging, has led to decreasing emissions. Also, the restructuring provided the chance to develop a more environmentally economic system in these *Laender*.

The beginning of climate protection policies in the *Laender* was organised in different ways. In most of the *Laender*, **new institutions** were founded, for example climate protection and energy agencies or interdisciplinary working groups. These new institutions were often involved in setting up the first climate protection programmes and concepts of the *Laender*. At the same time, there have been **institutional changes** within the governments of the *Laender*. Energy issues were integrated into environmental ministries and were therefore not only seen as an economic subject but also as a subject important for emission reduction and climate protection. In other *Laender*, organisational units responsible for climate protection have been set up in the ministries, or inter-ministerial working groups were founded.

Besides institutional innovations many *Laender* started their climate protection policy by working out climate protection **programmes and concepts** or corresponding studies. On the jurisdictional side some **new acts** have been set up, mostly regarding subjects of energy saving and energy efficiency. And especially after the oil crisis and the Chernobyl accident, many *Laender* established **financing programmes** for energy-efficiency measures and utilisation of renewable energy sources.

Mainly in the five East German *Laender*, **necessary economic steps** have been undertaken that also had positive side-effects for climate protection. In this way the renewal of old and inefficient industrial installations, district heating grids and heating facilities, as well as the new orientation of the structure of energy sources, have been

very important. For example, in Thuringia this led to an overall utilisation of natural gas and the substitution of brown coal as an energy source. Additionally, the necessary renovation of buildings was combined with heat insulation measures.

By comparing the decisive events and the first steps in the *Laender's* climate protection policies it could be seen that they are generally linked to each other. For example, the Rio conference has given the impulse for working out the "Bavarian Agenda 21", and after the Chernobyl accident, the establishment of the Energy Board in Bremen and the setting up of support programmes for renewable and efficient energy use in Hamburg followed. Although these were originally intended as energy policy measures, they also had positive effects for climate protection and have been a milestone for its further development.

Climate protection goals and their implementation in the Laender

Nearly all of the *Laender* have oriented their climate protection policy on the goals of the German Federal Government, i. e. they want to decrease their CO₂ emissions by 25 % by the year 2005 compared to 1990. The *Laender* have, however, some doubt if this goal can be realised under the given political conditions. They see it as the responsibility of the Federal Government and the European Union to establish necessary preconditions for climate policy.

Therefore, some of the *Laender* set up their own emission reduction goals. For example, on the basis of some scenarios, Bremen reduced their original targets to a decrease of CO₂ emissions by 11.6 %. Saxony-Anhalt set up the goal to stabilise their emissions at the 1994 level, as emissions were reduced very much in the years before, due to economic restructuring and the closing down of industry. Thuringia has nearly the same targets.

An exception to this tendency is Brandenburg. It wants to surpass the climate protection goal of the Federal Government by reducing CO₂ emissions by 42 % within the same time. But in this case it should be pointed out that – as in the other East German *Laender* – a lot of inefficient and energy and emission-intensive industries have been closed during economic restructuring, and therefore high emission reduction could already take place but without the objective of climate protection. Therefore, it is indeed possible to realise the strong target.

The emphasis of the *Laender* in their climate protection policies lies in the **energy sector**. Mainly measures concerning the thermal insulation of private and public buildings and of energy saving and efficient energy use in enterprises and public institutions are carried out because they have the biggest effect on emission reduction. Additionally, in all of the *Laender* the utilisation of renewable energy sources is supported to reach market maturity, primarily by financing programmes. At the moment, mainly biomass is said to have the greatest exploitation potential. But the expansion of combined heat and power (CHP), district heating (DH) and, partially, the increasing share of natural gas are supported, too. Also, new low-emission energy technologies like hydrogen energy are discussed within the climate protection policy of some *Laender*.

Besides financial support the *Laender* have established consulting and information programmes as well as training and development programmes for architects, planners, engineers and technicians. With those actors the idea of energy efficiency and the use of renewables shall be promoted and necessary skills shall be developed. In addition, many *Laender* carried out regulative measures like setting up standards for thermal insulation in buildings or designating priority areas for the exploitation of wind energy in their regional plans.

But the kinds of activities within the energy sector have changed in the last few years. Besides those "typical" activities, the *Laender* have started using instruments like contracting, requests for tenders of energy supply, as well as voluntary agreements and co-operation with economic and other actors. Some of them are reducing the importance of their policy of financing programmes and are changing their priorities rather to co-operation with industry. This is partially due to the fact that some energy technologies such as wind energy are no longer in need of financial support because they have already become profitable. In addition, the *Laender* can save money, which they always have a lack of.

Within their climate protection policy, the *Laender* also focus on the **mobility or transport sector**. The targets in this sector are similar in all *Laender* and concentrate on traffic reduction and the substitution of individual transport. To realise the target of traffic reduction, the priority task is seen in a suitable development of cities and settlement structures. In the sector of passenger traffic, the use of individual transport shall be decreased by increasing the share of public transport, i. e. bus and railway system, as well as the share of transport by bicycle. Goods traffic shall be shifted from streets to transport by railway and ship.

Traffic management is also seen as an important area in reducing traffic. Reduction of emissions by optimisation of vehicles, e.g. by alternative motive force technologies, and a change in people's mobility conduct have likewise received high priorities in the *Laender's* climate protection policies.

These are, however, the targets of the *Laender's* ministries of environment. But since the mobility sector is mainly the responsibility of the ministries of economic affairs and there is only limited co-operation between these two ministries, climate protection has no priority within the policy and activities in the transport sector, although this would be a very relevant issue.

Also, the **agricultural and forestry sector** has relevance for the climate protection policy of some *Laender*, but mainly for those that have a more rural structure. For all other *Laender* this sector is less important. The same can be said for the **waste management sector**, which is of rather little importance within the climate protection policies of the *Laender*. The reason is that the emission rates of both these sectors are very small compared with the energy and mobility sectors. Activities are carried out mainly in protecting green areas for CO₂ reduction, in using biomass for energy production and in producing district heating at waste incinerating plants.

Interesting outcomes

The first aim of the project was to compare the climate protection policies of all 16 German *Laender* and to examine in which parts and for which reasons they differ from each other. But during the project it became obvious that there are not many differences at all. All *Laender* started their climate protection policy by restructuring their administrative organisation. Currently, they have generally the same targets and are doing mostly the same things, which is giving financial support for climate protection projects, organising information and training programmes, and carrying out energy saving projects in their own public buildings. This is the case regardless of the party affiliation and/or the ruling coalition of the Federal State (*Laender*) governments, mainly because these are the very activities which the *Laender* have a legal competence to carry out and where no legal problems are to be expected.

Only small differences exist between the climate protection policies of the *Laender*, mainly in details, especially on the subject of nuclear power utilisation. While the *Laender* that are governed by the social-democratic party alone or in coalition with the green party want to phase out nuclear energy use, the *Laender* with conservative governments see a need for further use of this technology for reasons of reliability of energy supply but also for reasons of climate protection.

On the whole, the German *Laender* do quite a lot within the field of climate protection. The bulk of the activities lies in financing and information measures. Furthermore, the *Laender* play a crucial role at the intersection between national politics and activities at the grassroot or local level. On the one hand they are a part of the national climate protection policy. This is for constitutional reasons and for reasons of factual policy co-operation between the national level and the *Laender* in politics and especially administration. However, most of the activities to meet the goals of the national climate protection policy are actually carried out at the local level. The *Laender* very often support directly those activities with their own money or with money originally paid at the central state level. This is by building up organisational and institutional infrastructure, setting up programmes or giving money to associations, groups of citizens etc.

Problems of climate protection policy

As can be seen from the description above, the German *Laender* are indeed very active in the field of climate protection. Nevertheless, there are many doubts (also from the *Laender* themselves) that it will be possible to reach the CO₂ emission reduction goals within the given time set by the Federal Government and supported by the *Laender*.

The *Laender* see themselves as being obstructed in their climate protection policy mainly by an ineffective regulative framework prepared by the Federal Government and by the EU as well as by missing competencies at *Laender* level. But looking closer at it, the *Laender* have a lot of possibilities and competencies for being active in the field of climate protection as has already been pointed out above. The real problem is the rather low position of environmental issues within the day-to-day policy. At all political levels – Federal, Federal State (*Laender*) and municipal level – a comprehensive sustainability policy including reliable objectives for climate protection is missing. Although there is the goal of reducing CO₂ emissions by 25 %, there is no overall strategy

for all actors saying how this should be realised and which tasks individual actors have to fulfil for it. This very limited political pressure is the main reason for all other problems that occur in the climate protection policy of the *Laender*. One of them is the lack of financing for climate protection activities. But again this is a question of political decisions to distribute limited money to different policy areas. These decisions, however, are dependent on the position of the policy areas. The *Laender* are mainly free to increase the share of money given to environmental policy.

Another problem is the lack of co-operation between individual ministries, which also hindered us during our examinations. Indeed, the responsibility of the ministries of environment for climate protection policy is widely acknowledged, but a co-ordination of climate protection aspects with other sectoral policies such as traffic, industrial and technology policy, which would be very important for the success of climate protection, is missing. This is mainly due to conflicts of interests between departments. But it is also due to the fact that there are no binding targets for climate protection that all departments (and other actors) have to contribute to.

As to the lack of competence for climate protection that the *Laender* described in their publications as being the main problem, during the workshop it became clear that they do not really want more responsibility. Rather, they claim that the Federal Government should take more care of the competence given to this level, such as the organisation of liberalising the energy market and creating the prerequisites for environmentally friendly mobility. On the other hand, the *Laender* had to submit that they have a lot of possibilities to be active in the field of climate protection within their sectoral policies, especially within regional and municipal spatial planning.

Future options for political and administrative measures

In spite of all these problems, within our research we identified different climate protection activities that have been successfully carried out in several *Laender*. Taking them as a basis, we could define the following “guideline activities” that the *Laender* are competent in and responsible for:

1. Initiating information campaigns to make the broad public sensitive to the issue of climate protection and for being active itself;
2. Dissemination of experience about best-practice projects and programmes;
3. Evaluation of climate protection activities to optimise the use of limited financial and personnel resources;
4. Using synergy effects in day-to-day work regarding CO₂ reduction, regional development, economic development, as well as providing jobs;
5. Paying attention to aspects of climate protection during settlement, landscape and regional development;
6. Co-operation with economic actors and setting up voluntary agreements for promoting climate protection;
7. Establishment of projects for demonstrating innovative solutions;
8. Creation of networks between *Laender*, enterprises and public institutions for information dissemination and co-operative activities; and
9. Testing new financing models for realising climate protection goals.

These activities might not be enough to reach the CO₂ emission reduction goal. But because of the quite low position of climate protection in government policy (at all political levels), it is very difficult to find additional concrete starting points for a future organisation of climate protection policy in the *Laender*. And because of the very fact that climate protection has a low position it cannot be the climate protection actors themselves that can push it to a priority position. They are not central political actors, they have relatively limited competence, and their suggestions are mainly of an appealing character and concentrate on the demand to pay more attention to climate protection in policy and in the government’s administrative work.

Taking this as a basis, there are mainly two options for the future development of climate protection policy at the *Laender* level. These options do not exclude but rather complement each other.

Option 1: The *Laender* do the same as they did before, i. e. they concentrate on activities such as giving financial support and information dissemination. This option has the advantage that there is already some experience in this area and that there will not be any problems regarding the legal competence of the *Laender* in these activities because they are already proven. At the same time, however, it has the disadvantage that it will hardly be possible to mobilise new actors and that there will be only limited additional success in climate protection policy, especially since the financial situation will become even more difficult.

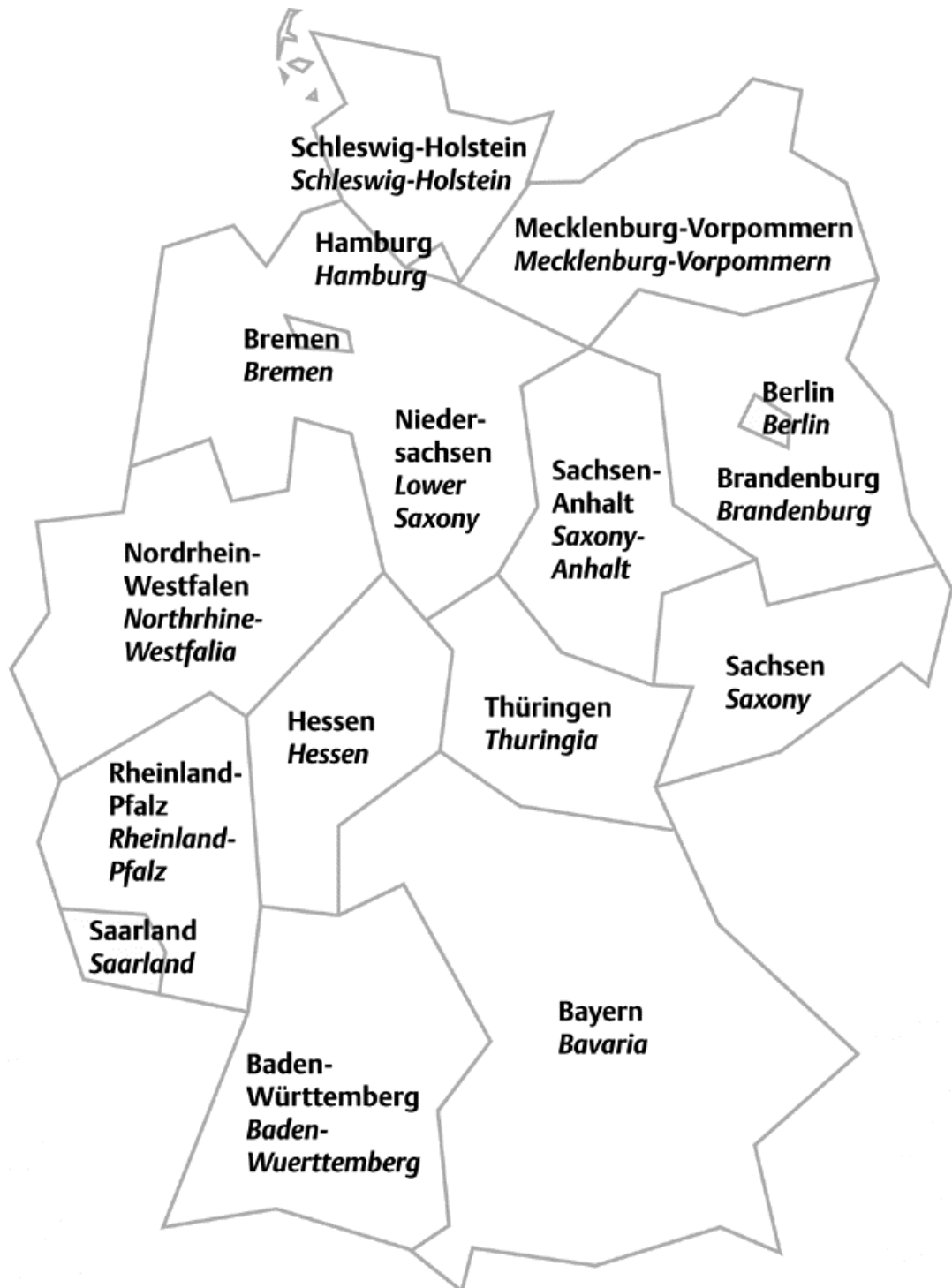
Option 2: The *Laender* open up new fields of activity whereby climate protection interests are linked with interests of other actors and institutions such as enterprises or other sectoral policies, e. g. transport and industrial policies. Thus, every side can realise its own advantages. These concern mainly economic or organisational advantages, but also political ones. This option could contribute to developing the will of several actors for integrating climate protection matters into their normal activities. One potential future activity field could be the foundation of an Energy Efficiency Trust to promote energy efficiency measures as is already done in Great Britain and Denmark. But contrary to these countries it might be possible to establish this trust in Germany at the administrative level of the *Laender*. The trust could also have the character of a climate protection trust. Another potential activity field could be the initiation of projects for use of so-called flexible mechanisms regarding the Kyoto protocol. Target groups of such pilot projects could be enterprises as well as financing institutes, insurance companies, consulting companies and so on. The aim of those projects should be the collection of relevant practical experience concerning the functioning of flexible mechanisms.

6. WHAT CAN BE LEARNED FROM THE PROJECT?

One problem we encountered during our research was the limitation of the responsibility of our contact persons. First of all, they are responsible for the intersection of climate protection with energy, such as energy efficiency and renewable energies, and are mainly working at the ministries of environment. But they are not responsible for the combination of climate protection with other policies such as traffic, industrial policy, etc. Those political sectors and departments are situated in more powerful ministries, which would have been interesting to examine, too. Thus, to a certain extent, we developed only got a limited perception of how climate protection policy is actually integrated in the different policy sectors at the *Laender* level.

In addition to the result that the usual climate protection policy has a rather low position within government policy, we came to the following conclusion: A follow-up study about climate protection policy at the *Laender* level, concentrating on a limited number of cases, would be useful. That would allow the researchers to cover more ministries and the very time-consuming communication between the ministries or departments. Patterns of co-operation and conflict as well as their influence on the formulation of political priorities could be identified. It could also be analysed in more detail which combination of climate protection with other political sectors helps climate protection to become more important, and which one hinders. A case study would also allow a more intense analysis of the formal and informal patterns of collaboration between the different political-administrative levels and between policy and different sectors of the society.

7. ADMINISTRATIVE ORGANISATION IN GERMANY



8. CLIMATE PROTECTION ACTIVITIES OF THE GERMAN LAENDER: ACTIVITY SECTORS AND INSTRUMENTS

Activity sectors

Climate protection policy of the *Laender* can concern the following sectors:

Energy:

- Comprehensive activities
- Industries and enterprises
- Buildings
- Settlement structures
- Energy economy

Mobility:

- Comprehensive activities
- Goods traffic
- Individual transport
- Public transport
- Settlement structures

Agriculture / Forestry:

- Comprehensive activities
- Renewable resources
- Agricultural production
- Forestry

Waste management:

- Waste avoidance
- Waste recycling
- Waste disposal
- Treatment of waste water






















Instruments

The following instruments can be used by the *Laender* Governments for their climate protection policy:

1. Legislation
2. Spatial planning instruments
3. Voluntary agreements
4. Financing instruments
5. Founding institutions
6. Information dissemination
7. Training programmes
8. Research

Others

9. CLIMATE PROTECTION ACTIVITIES IN RHEINLAND-PFALZ: EXAMPLE OF A MATRIX

		Legislation	Planning instruments	Voluntary agreements	Financing instruments	Founding institutions	Information dissemination	Training programmes	Research	Others
Energy	Comprehensive activities									
	Industries and enterprises									
	Buildings									
	Settlement structures									
	Energy economy									
Mobility	Comprehensive activities									
	Goods traffic									
	Individual transport									
	Public transport									
	Settlement structures									
Agriculture / forestry	Comprehensive activities									
	Renewable resources									
	agricultural production									
	forestry									
Waste management	Comprehensive activities									
	Waste avoidance									
	Waste recycling									
	Waste disposal									
	Treatment of waste water									