

PUBLIZIERBARER ENDBERICHT

A) Projektdaten

Kurztitel:	CLIP-IN
Langtitel:	Climate Policy Integration in Federal States: Adaptation, Mitigation and Sustainable Development in Austria, Germany and Switzerland
Programm inkl. Jahr:	ACRP, 2. Call 2010
Dauer:	01.10.2011 bis 31.08.2014
KoordinatorIn/ ProjekteinreicherIn:	Universität für Bodenkultur Wien, Department für Wirtschafts- und Sozialwissenschaften, Institut für Wald-, Umwelt- und Ressourcenpolitik
Kontaktperson Name:	Reinhard Steurer
Kontaktperson Adresse:	Feistmantelstr. 4
Kontaktperson Telefon:	+43-1) 47654-4401
Kontaktperson E-Mail:	reinhard.steurer[at]boku.ac.at
Projekt- und KooperationspartnerIn (inkl. Bundesland):	Freie Universität Berlin, Deutschland
Schlagwörter:	Klimapolitik-Integration, Mitigation, Raumwärme, Föderalismus
Projektgesamtkosten:	241,193.18 €
Fördersumme:	232,883.00 €
Klimafonds-Nr:	B060385 (bzw. K10AC0K00054)
Erstellt am:	04.03.2015

B) Projektübersicht

1 Kurzfassung

Das übergeordnete Ziel des CLIP-IN Projektes war es, die Integration der Anpassung an den Klimawandel und Klimaschutzmaßnahmen sowohl horizontal (d.h. sektorübergreifend) als auch vertikal (d.h. über Regierungsebenen hinweg) in föderalen europäischen Ländern (vor allem in Österreich) besser zu verstehen und nach Möglichkeit zu fördern. Die Arbeitspakete und deren Ergebnisse können wie folgt zusammengefasst werden:

In WP1 wurde anhand von Literatur ein analytischer Rahmen erstellt der die Arbeiten von CLIP-IN angeleitet hat. Dabei wurden u.a. die folgenden Fragen behandelt: Was sind die wichtigsten Themen der Umwelt- bzw. Klimapolitik-Integration im Allgemeinen und was sind die Besonderheiten in Bundesländern? Ist Umweltpolitikintegration in föderalen Ländern schwieriger als in Einheitsstaaten? Wenn ja, was sind die wichtigsten Herausforderungen des "Umwelt-Föderalismus" und wie kann man sie lösen? Die Antworten auf diese und andere Fragen führten zu einem konzeptuellen Analyserahmen, der die spätere Forschung angeleitet hat. Diese WP wurde wie geplant abgeschlossen.

Die Sekundärforschung in WP2 verengt den Forschungsschwerpunkt auf integrierte Strategien als Schlüsselinstrumente der Politikintegration. Dabei verglichen wir normative Richtlinien für integrierte Strategien zu den Themen nachhaltige Entwicklung, Anpassung an den Klimawandel und Eindämmung des Klimawandels. Darauf aufbauend haben wir die Prävalenz und die Performanz dieser drei Arten von integrierten Strategien in EU-Mitgliedstaaten analysiert. Die Ergebnisse wurden im „Journal of Public Policy“ und als Diskussionspapier veröffentlicht. Da wir reichlich Material über Klimaschutz-Strategien (das zentrale Thema des CLIP-IN-Projekt) hatten, schrieben wir einen zusätzlichen Artikel über Minderungsstrategien (nicht im Antrag vorgesehen). Dieser wurde in der Zeitschrift "Climate Policy" veröffentlicht.

Die Fallstudien zur Klimapolitik in Deutschland, Österreich und der Schweiz in WP3 und deren Vergleich in WP4 bilden den Kern des CLIP-IN Projekts. Der CLIP-IN Antrag sah vor, dass wir uns vor allem auf die Koordinationsfunktion der in WP2 untersuchten integrierten Strategien konzentrieren. Aufgrund unserer Forschungsergebnisse in WPs 1 und 2 mussten wir jedoch folgende Änderungen vornehmen: Unsere Ergebnisse deuteten darauf hin, dass es nicht sinnvoll ist, integrierte Strategien eingehend zu analysieren weil die meisten von ihnen nur eine marginale Rolle bei der Politikgestaltung spielen. Deshalb haben wir die Fallstudien neu auf die Akteure und Mechanismen der Klimapolitik-Integration in einem bestimmten Sektor ausgerichtet. Wir wählten aus zwei Gründen Klimaschutz im Gebäudesektor: Erstens ist der Gebäudesektor einer der wichtigsten Emittenten von Treibhausgasemissionen. Zweitens sind die Zuständigkeiten für die Gebäudepolitik in allen drei Ländern stark föderal organisiert. So konnten wir analysieren, ob der Föderalismus bei der Klimapolitik-Integration hinderlich oder förderlich ist. Die Fallstudien aus WP3 wurden nicht wie geplant in drei sondern in fünf Manuskripten dokumentiert: zwei Papiere zur österreichischen Fallstudie (in Englisch in der Zeitschrift "Policy Sciences" veröffentlicht, in Deutsch in der Zeitschrift "Der moderne Staat" veröffentlicht), ein Papier über die Schweizer Fallstudie und zwei Papiere zur deutschen Fallstudie. In WP4 haben wir schließlich zwei Vergleiche durchgeführt. Zum einen verglichen wir die Ergebnisse der österreichischen Klimaschutzfallstudie mit jenen zu Anpassung in Österreich aus einem andern Projekt (FAMOUS). Zum anderen verglichen wir die drei Länderstudien zum Klimaschutz im Gebäudesektor.

Unsere zentralen Erkenntnisse und Schlussfolgerungen lassen sich folgendermaßen zusammenfassen:

- Integrierte Strategien (ob Anpassungs- oder Mitigationsstrategien) haben große Probleme, Klimapolitik über Sektoren und politische Ebenen hinweg zu koordinieren. Anstatt sie weiterhin auf deren Koordinations-Funktion zu fokussieren sollten sie in Zukunft als Kommunikations-Instrumente eingesetzt werden.
- Bei der Integration von Klimaschutz in sub-nationale Gebäudepolitik haben sich föderale Strukturen in allen drei Ländern als problematisch erwiesen. Während die für Gebäudestandards und

Wohnbauförderung zuständigen österreichischen Bundesländer und Schweizer Kantone wenig Interesse an Klimaschutz hatten, taten sich Akteure des Bundes mangels Kompetenzen schwer, das Thema zu forcieren.

- Bei der Anpassung an den Klimawandel könnten föderale Strukturen eine positivere Rolle spielen, u.a. weil es hier nicht um bundeseinheitliche Standards sondern um optimale Anpassung an lokale Gegebenheiten des Klimawandels geht. Dabei können dezentrale Organisationen helfen.

Einen Überblick über die im CLIP-IN Projekt erstellten Veröffentlichungen bietet Abschnitt 8.

2 Executive Summary

The overall goal of the CLIP-IN project was to facilitate the integration of climate change adaptation and mitigation policies both horizontally across sectors and vertically across levels of government in federal European countries, most notably in Austria. The work packages and the work we have accomplished can be summarised as follows:

In WP1 we conducted a desk research that reviewed the scholarly literature on policy integration, with a focus on environmental and/or climate policy integration and respective differences between federal and unitary state settings. It aimed to summarise and advance existing research by answering the following questions: What are the key issues of environmental/climate policy integration in general and what are the particularities in federal states? Is environmental policy integration in federal states more difficult than in unitary states? If so, what are the key challenges of ‘environmental federalism’ and how to address them? The answers to these and other questions resulted in a theoretical/conceptual part of the analytical framework that guided the subsequent research steps. This WP was finalised as planned.

The *desk research in WP2* narrowed the research focus on integrated strategies as key instruments of policy integration. We first reviewed and compared normative guidelines for integrated strategies on sustainable development, climate change adaptation and mitigation. We then analysed the prevalence as well as the performance of these three types of integrated strategies in EU Member States. The findings are documented in a long journal manuscript with 12.000 words (see Annex 2) that is already published in the Journal of Public Policy (listed in the SSCI). Since we had abundant material on climate change mitigation strategies (the key theme of the CLIP-IN project), we wrote an extra paper on mitigation strategies (not foreseen in the proposal). This paper has recently been accepted for publication by the Journal “Climate Policy”.

The *case study research conducted in WPs 3 and 4* marks the core of CLIP-IN. The CLIP-IN proposal foresaw that we look in particular at the coordination/integration functions of integrated strategies on sustainable development, climate change mitigation and adaptation. Thus, the research steps detailed in the proposal were as follows. We planned to analyse all three strategies for each of the three countries in single case studies as follows:

- Three within-case analyses for each country,
- One cross-case analysis for each country, i.e. a comparison of strategies within a country (both in WP3), and
- A cross-country comparison, i.e. a comparison of climate policy integration patterns across the three countries in WP4 (see also below).

However, based on the research conducted in WPs 1 and 2, changes in our research design were necessary: As explained in more detail in the next section, our findings of WP2 indicated that it does not make sense to analyse integrated strategies in-depth because most of them play only marginal roles in policy-making. We therefore refocused the case studies on how climate policy integration progressed in a particular sector, due to integrated strategies or other instruments. We choose to look at climate policy integration in the building sector for two reasons: first, the building sector is one of the most important emitters of greenhouse gas emissions; second, responsibilities for building policies are strongly decentralised in all three federal countries under scrutiny. This enabled us to analyse how federalism shaped climate policy integration – a key concern for the CLIP-IN project.

The case studies conducted in WP3 resulted not in three but in five journal manuscripts: two papers on the Austrian case study (one in English already published in the Journal “Policy Sciences”, one in German forthcoming in the journal “der modern Staat”), one paper on the Swiss case study (currently under review), and two papers on the German case study (one focussing on the role of mitigation strategies, one focusing on all aspects of climate policy integration in the building sector; both papers are currently under review). For an overview of the publications produced in the CLIP-IN project see the table below and the Annexes.

In WP4 we conducted two comparisons. First, we compared the findings of the Austrian climate change mitigation case study with findings on a very similar adaptation case study we conducted in another ACRP project (currently under review). Second, we compared all three country studies.

Section 8 provides an overview of the CLIP-IN deliverables.

3 Hintergrund und Zielsetzung

a) Challenges and concepts addressed in CLIP-IN:

Governments are increasingly confronted with cross-cutting challenges that “do not fit the ministerial boxes into which governments, and policy analysts, tend to place policies” (Peters 1998, 296), and that also transcend the vertical levels of government (international, national, regional, local) which organise competencies in the public sector. The adaptation to and the mitigation of climate change are among the most serious challenges that cut horizontally across policy sectors and vertically across levels of government. Among the sectoral policies concerned with climate change are, inter alia, energy, economic, finance, environmental and transportation policies. Regarding different levels of government, climate policies depend on international agreements (such as the Kyoto Protocol in the case of mitigation) and guidance (in the case of adaptation) as much as on national emission taxation (mitigation) or adaptation subsidy schemes and local spatial planning (for adaptation, see Urwin & Jordan 2008, Amundsen et al. 2010; Cimato & Mullan 2010). This applies in particular to federal states which are characterised by an additional regional level of policy making, i.e. the “Laender” in Austria and Germany and the Cantons in Switzerland (Benz 1999, 2000, 2004; Scharpf 1993a, b, 2000).

As a response to the emergence of complex cross-cutting environmental challenges such as climate change, several concepts have been developed and applied across Europe in recent years. The most popular concepts addressing the ministerial fragmentation of governments are ecological modernisation (Hajer 1995; Mol 1996; Mol & Sonnenfeld 2000, Mol & Spaargaren 2000), horizontal policy integration (Steurer & Martinuzzi 2005), or environmental policy integration (Nilsson & Persson 2003; EEA 2005a, b; Jordan & Lenschow 2008; Lenschow 2002). Environmental policy integration is usually defined as the integration of environmental aspects in other policy fields (Mickwitz 2009). When environmental policy integration aims to minimise trade-offs and maximise synergies between environmental, economic and social policy issues, one can also speak of sustainable development. In the EU, the concepts of environmental policy integration and sustainable development were given legal status, first in Article 6 of the Amsterdam Treaty and more recently in Article 11 of the Lisbon Treaty. Both state that “Environmental protection requirements must be integrated into the definition and implementation of the Union policies and activities, in particular with a view to promoting sustainable development” (European Council 2008).

Since “the sphere of competence of authorities in charge of environmental protection [...] does not always match with the boundaries of the affected environment” (Liberatore 1997, 116), integrative concepts have also been developed with regard to this vertical challenge. Among the most prominent concepts are multi-level governance and vertical policy integration, both implying that policy making ought to be coordinated (top-down and/or bottom-up) across different levels of government (Corfee-Morlot et al. 2009; Amundsen et al. 2010; Benz 1999, 2000, 2004).¹ By using a slightly different terminology, European policy makers acknowledge also the importance of this challenge. The European Commission and the European Council have adopted “policy coherence” as a policy guiding principle according to which Member States should “Promote coherence between all European Union

¹ If policies are also coordinated with non-state actors, one can speak of ‘multi-centred governance’ (Hooghe & Marks 2003).

policies and coherence between local, regional, national and global actions in order to enhance their contribution to sustainable development” (European Council 2006). In the EU Green Paper on adaptation, multi-level governance is explicitly acknowledged as follows: “Multilevel governance is therefore emerging on climate change adaptation involving all actors from the individual citizens and public authorities to the EU level. Action should be taken at the most appropriate level and be complementary, based on joint partnerships” (European Commission 2007, 11). In its White Paper on climate change adaptation, the European Commission (2009, 7) emphasises that successful adaptation policies require that “the EU, national, regional and local authorities must cooperate closely” (see also Amundsen et al. 2010; Corfee-Morlot et al. 2009; Mickwitz et al. 2009).

b) Defining climate policy integration:

The proposed research on climate policy integration is concerned with both cross-cutting challenges introduced above in the context of federal states. By combining definitions of environmental policy integration (Lenschow 2002, Lafferty & Hovden 2003; Berger & Steurer 2009; Jordan & Lenschow 2008), and of vertical policy integration in the context of sustainable development (OECD 2001; OECD 2002; European Commission 2004), **climate policy integration is here defined as the incorporation of climate change adaptation and mitigation policies in other environmental and non-environmental policies (horizontal climate policy integration) and/or across different levels of government (vertical climate policy integration)**. If climate policies are integrated horizontally across sectors and vertically across levels of government at the same time, we speak of diagonal climate policy integration (Berger & Steurer 2009; for an illustration see figure 1). Although scholars recognise that “horizontal and vertical aspects of policy integration are strongly interconnected” (Mickwitz et al. 2009), the concept of diagonal policy integration has not been explored empirically yet.

c) Focus and objectives of CLIP-IN (according to original project proposal):

The challenge to integrate (or “clip-in”) policies horizontally across sectors is commensurably difficult for unitary and federal countries. **As the literature on environmental federalism shows, integrating environmental policies vertically across different levels of government is particularly challenging in a federal setting** (Millimet 2003; Oates 2001; Benz 1999, 2000, 2004), inter alia due to fragmented competencies, or because of interjurisdictional competition (Kunze & Shogren 2005). This applies in particular to climate policies. Federal governments commit themselves to emission reduction targets at the international level, but they face limits in implementing effective mitigation policies because key competencies (e.g. on building codes and related subsidy schemes) are in the hands of regional governments. The same applies to adaptation policies: Although national and local governments ought to facilitate the adaptation to climate change in both unitary and federal states (Amundsen et al. 2010; Urwin & Jordan 2008), adaptation policies in a federal setting also require the involvement of regional governments.

The challenges of both horizontal and vertical climate policy integration is particularly pronounced in the formulation and implementation of coordinating policy instruments such as integrated strategies (or action plans) on climate change adaptation and mitigation (Mickwitz et al. 2009). Integrated strategies are “a new kind of governance design” that aim to redesign policy regimes by employing deliberate policy instrument mixes, and by coordinating the activities of various actors. They contrast sharply to ‘policy layering’ (i.e. policy instruments and programmes being stacked on top of each other) or other forms of incremental policy change (Rayner & Howlett 2009, 100f; see also Steurer & Martinuzzi 2005). More recently, some governments have also adopted climate change laws that also aim to facilitate climate policy integration. Among them are the UK and Switzerland (in Austria a climate protection law is under negotiation and in German it is in discussion). Since integrated strategies and (to an increasing degree) climate change laws (ought to) assume a key role in climate policy integration they are at the focal point of CLIP-IN.

The overall goal of CLIP-IN is to facilitate the integration of climate change adaptation and mitigation policies both horizontally across sectors and vertically across levels of government in federal European countries, most notably in Austria. More specifically, the research proposed here aims to

- **Learn from good practices and challenges** that have been encountered in the implementation of integrated strategies (and framework laws) on climate change adaptation, mitigation and sustainable development in Austria, Germany and Switzerland;
- **Strengthen linkages between the integrated strategies** on climate change adaptation, mitigation and sustainable development by analysing their complementarity, overlap and competition (or conflict potential), and by highlighting actual and potential synergies between the three integrated strategies for each of the three countries;

- **Improve the implementation of currently or recently developed adaptation strategies by drawing lessons** from the meanwhile rich experiences with climate change mitigation and sustainable development strategies (both existing since the early 2000s).

Besides pursuing these directly policy-relevant goals, CLIP-IN also aims to **advance the scholarly work on environmental federalism and environmental policy integration**, e.g. by exploring the degree of environmental policy integration between integrated strategies within the environmental domain itself (an aspect usually overshadowed by the often dominating conflict between environmental and economic interests), and by highlighting the specifics of climate policy integration and sustainable development in federal countries.

4 Projektinhalt und Ergebnisse

The challenge to integrate (or “clip-in”) policies horizontally across sectors is commensurably difficult for unitary and federal countries. As the literature on (environmental) federalism shows, integrating (climate) policies vertically across different levels of government is particularly challenging in a federal setting (Millimet 2003; Oates 2001; Benz 1999, 2000, 2004; Scharpf 1993a, b, 2000). Federal governments commit themselves to emission reduction targets at the international level, but they face limits in implementing effective mitigation policies because key competencies (e.g. on building codes and related subsidy schemes) are in the hands of regional governments. The same applies to adaptation policies: Although national and local governments ought to facilitate the adaptation to climate change in both unitary and federal states (Amundsen et al. 2010; Urwin & Jordan 2008), adaptation policies in a federal setting also require the involvement of regional governments.

The challenges of both horizontal and vertical climate policy integration is particularly pronounced in the formulation and implementation of coordinating policy instruments such as integrated strategies (or action plans) on climate change adaptation and mitigation (Mickwitz et al. 2009). Integrated strategies are “a new kind of governance design” that aim to redesign policy regimes by employing deliberate policy instrument mixes, and by coordinating the activities of various actors. They contrast sharply to ‘policy layering’ (i.e. policy instruments and programmes being stacked on top of each other) or other forms of incremental policy change (Rayner & Howlett 2009, 100f; see also Steurer & Martinuzzi 2005). More recently, some governments have also adopted climate change laws that also aim to facilitate climate policy integration. Among them are the UK and Switzerland (in Austria a climate protection law is under negotiation and in German it is in discussion). Since integrated strategies and (to an increasing degree) climate change laws (ought to) assume a key role in climate policy integration they are at the focal point of CLIP-IN.

a) Description of difficulties, if any, encountered in the achievement of project targets

As indicated in section 1, WPs 1 and 2 were completed as planned without difficulties, but the findings of WP2 required us to alter the research focus of WP3 and 4. While the CLIP-IN proposal focused on the role of integrated strategies in climate policy integration, the desk research in WP2 clearly indicated that it does not make sense to analyse integrated strategies in-depth because most of them play only marginal roles in policy-making (for more detailed findings see below). We therefore refocused the case studies on how climate policy integration progressed in a particular sector, due to integrated strategies or other instruments. We choose to look at climate policy integration in the building sector for two reasons: first, the building sector is one of the most important emitters of greenhouse gas emissions; second, responsibilities for building policies are strongly decentralised in all three federal countries under scrutiny. This enabled us to analyse how federalism shaped climate policy integration – a key concern for the CLIP-IN project.

Based on analytical frame we have developed in WP1 and the desk research on these three integrated strategies we conducted in WP2 we re-focus our research for the most part on mitigation policies and strategies in the three countries in depth and exclude sustainable development as well as adaptation strategies. The following considerations stand behind these proposed changes:

i) In the desk research of WP2 we discovered that sustainable development strategies have failed completely to coordinate policies horizontally and/or vertically. Consequently, the instrument is more or less dead and it is no use to analyse it anymore in depth in case studies. We could not foresee this rather recent development when we wrote the proposal.

- ii) When working on the analytical framework of the CLIP-IN project we found that assessing the degree of climate policy integration that has been achieved with cross-sectoral/integrated strategies and other coordinating activities requires not only a look at the strategies as such (as foreseen in the proposal) but also into a particular sector. By analysing in how far the policies in a particular sector have changed we can say more about how horizontal and vertical policy integration is actually functioning. Although the CLIP-IN proposal does not foresee such a “sectoral focus” we now plan to include it in the case studies for a policy field in which Länder/Cantons have significant responsibilities (e.g. the housing sector). This sectoral part will help us to highlight in-depth how mitigation policies have been integrated across levels of government and what role strategies play in this respect.
- iii) When we developed the interview guide templates we realised how comprehensive and rich our research questions were, although they focused on mitigation issues only. We realised that if we want to cover climate policy integration for mitigation issues thoroughly we could not manage to also cover sustainable development and adaptation issues with the time available. Since the mitigation policy field is more advanced than the adaptation policy field (in particular when it comes to the implementation of measures) we propose to shift the emphasis of CLIP-IN towards mitigation.

Overall, the changes we made enhanced both the number and quality of the project deliverables. We produced five instead of three papers on climate policy integration in the three countries (see section 1 and the Annex), and we have produced two comparison papers as foreseen in the proposal (although with different foci). Overall, we conclude that the changed research focus made it easier to produce and publish high-quality and policy-relevant findings. If we did not change the focus based on the findings of WP2 the case studies would have analysed an increasingly marginalised aspect of policymaking. Research is a dynamic process and it would have been wrong to ignore key findings of WP2 and the need for changes they entailed

b) Activities performed within the framework of the project, including methods employed

The activities performed in the CLIP-IN project can be summarised as follows (note that the following paragraphs are a shortened version of section 1):

In WP1 we conducted a desk research that reviewed the scholarly literature on policy integration, with a focus on environmental and/or climate policy integration and respective differences between federal and unitary state settings. It aimed to summarise and advance existing research by answering the research questions stated in section 1. The findings of this WP were summarised in an analytical framework that guided the subsequent research steps (see Annex 1). This WP was finalised as planned.

In WP2 we conducted a classical desk research on integrated strategies as key instruments of policy integration. We first reviewed and compared normative guidelines for integrated strategies on sustainable development, climate change adaptation and mitigation. We then analysed the prevalence as well as the performance of these three types of integrated strategies in EU Member States. The findings are documented in a long journal manuscript with 12.000 words (see Annex 2) that is already published in the Journal of Public Policy (listed in the SSCI). Since we had abundant material on climate change mitigation strategies (the key theme of the CLIP-IN project), we wrote an extra paper on mitigation strategies (not foreseen in the proposal). This paper has recently been accepted for publication by the Journal “Climate Policy” (see Annex 3).

In WP 3 we conducted three country studies on climate policy integration. Based on the research conducted in WPs 1 and 2, we refocused the case studies on how climate policy integration progressed in a particular sector, due to integrated strategies or other instruments. We choose to look at climate policy integration in the building sector for two reasons: first, the building sector is one of the most important emitters of greenhouse gas emissions; second, responsibilities for building policies are strongly decentralised in all three federal countries under scrutiny. This enabled us to analyse how federalism shaped climate policy integration – a key concern for the CLIP-IN project. The case studies conducted in WP3 resulted not in three but in five journal manuscripts: two papers on the Austrian case study (one in English already published in the Journal “Policy Sciences”, one in German forthcoming in the journal “der modern Staat”), one paper on the Swiss case study (currently under review), and two papers on the German case study (one focussing on the role of mitigation strategies, one focusing on all aspects of climate policy integration in the building sector; both papers are currently under review). For an overview of the publications produced in the CLIP-In project see the table below and the Annexes.

In WP4 we conducted two comparisons. First, we compared the findings of the Austrian climate change mitigation case study with findings on a very similar adaptation case study we conducted in another ACRP project (currently under review). Second, we compared all three country studies (to be submitted soon).

WP5 was concerned with project management and dissemination activities. The main project management task was to accommodate for personnel changes and for prolonging the project period accordingly (see section 2.4). Dissemination efforts were dominated by publishing journal articles and by giving conference presentations. As section 5 summarises, we have published already four journal articles and we have written 5 more which are currently under review. In total, we wrote 3 extra publications not foreseen in the proposal. Regarding conference presentation we also doubled our output compared to what has been planned (see also section 2.4). These extra outputs were possible because we cancelled the concluding project workshop with decision-makers (since we encountered very limited interest in such events in this and other projects we made better use of the project resources by publishing additional papers), the project staff worked very efficiently, and the project leader Reinhard Steurer contributed much more time in-kind as planned.

c) Description of the results and project milestones

Since the main project milestones are the journal articles/manuscripts produced in CLIP-IN, we summarise the key project results for each journal article/manuscript and we indicate to which WP the publications belong.

- *WP 2: Casado-Asensio, J. & Steurer, R. (2014): Integrated strategies on sustainable development, climate change mitigation and adaptation in Western Europe: communication rather than coordination, in: Journal of Public Policy, 34/03, 437-473 [listed in the SSC].*

Complex environmental challenges cut horizontally across sectors and vertically across levels of government. To address them in coordinated and integrated ways, governments have resorted to integrated, multi-sectoral strategies since the 1990s. After introducing this new governance approach, this paper describes the policy rationale, prevalence, governance characteristics and performance of three distinct yet thematically related, integrated strategies on sustainable development, climate change mitigation and adaptation in the EU-15 countries. Based on this literature-based synthesis, we highlight their similarities and differences and the lack of linkages between them. The concluding discussion explores options on how to develop integrated strategies further. Since all three integrated strategies failed as comprehensive governing processes that aim to better coordinate policies, we suggest recalibrating them towards communication so that they can be more effective in pursuing the functions they can realistically fulfil: providing direction and raising awareness.

This paper analysed how governments in Western Europe orchestrate their policies on sustainable development, climate change mitigation and adaptation by means of integrated strategies. It has shown that the scholarly literature and practical guidance issued by international organisations envision integrated strategies not primarily as policy documents but rather as cyclical governing processes and capacity building efforts, all three aiming to better coordinate sectoral policies. As we have shown, most strategies go beyond being mere policy documents that provide guidance, which we acknowledge as progress compared to the one-off environmental planning of the 1970s and 80s. However, while their capacity building and communication efforts are difficult to assess and require the study of public discourses, it is clear that they usually fail as integrative governing processes. The integrated strategies reviewed here have proved to be comparatively weak administrative routines (or informational policy instruments) and preoccupied with low-key communication rather than high-profile policy coordination. Consequently, they are usually not capable of implementing the policies necessary to meet the targets they specify.

Even though integrated strategies are a relatively novel instrument to govern complex policy areas, they perpetuate many of the dilemmas raised by the implementation literature for decades (see e.g. Moran et al. 2006; Mulgan 2009). Like environmental policies in general, integrated strategies also remain constrained by three sets of variables. First, despite their win-win rhetoric, the economy-environment axis usually ranks the environment second, in particular when global economic competitiveness is at stake. Second, integrated strategies were not able to change the fact that policymaking remains compartmentalised and the actors involved continue to think along sectoral and regional lines. Finally, institutional, social and cultural factors (including path dependency and inertia) continue to thwart timely and adequate implementation. When viewed from the implementation literature, integrated strategies remind us of “new skins for tainted wine”. Unfortunately, the “new skins” themselves have several design faults that reinforce these dilemmas. Above all, most integrated strategies lack a clear prioritisation of what to do, because they aim to be as comprehensive as possible, have failed to engage adequately with

economic realities, and failed to secure high-level political commitment and adequate resources. According to Mulgan (2009), every single one of these factors is crucial for strategies to be successful.

- *WP2: Casado-Asensio, J, & Steurer, R. (2014): "Bookkeeping" rather than policymaking: National climate change mitigation strategies in Western Europe, in: Climate Policy, online first.*

Climate change mitigation is a wicked problem that cuts horizontally across sectors and vertically across levels of government. To address it effectively, governments around the world, in particular in the EU, have developed several generations of multi-sectoral national mitigation strategies (NMS) since the early 1990s. Although NMS became the main effort to systematically coordinate mitigation policies, few works have studied them comparatively so far. The present article fills this gap by analysing how the EU-15 group of countries operationalised climate protection through NMS. First, we introduce the three roles policy strategies usually aim to fulfil: besides being policy documents they also represent governance processes (supposed to coordinate sectoral implementation), and capacity-building efforts. Empirically, we then explore the rationale, origins and prevalence of NMS. Subsequently, we characterise them as policy documents (with regards to their contents and structures) and as governance processes that address capacity building only implicitly. Based on existing assessments we finally review some performance indications of NMS. We find that in particular second- and third-generation NMS aimed to take their governance function seriously but resembled "lacklustre bookkeeping" of emissions, targets and mitigation options. Instead of approximating NMS towards their obviously overcharging governance function, we suggest to recalibrate them towards their communication and capacity-building function in a way that goes beyond bookkeeping.

The present article shows that NMS fail to effectively govern climate change mitigation across a broad range of sectoral policy domains. Since most European countries have adopted not one but up to three generations of NMS since the 1990s, this finding is highly relevant for them - and for all others aiming to adopt similarly broad strategies. Instead of piling one strategy on top of another irrespective of their implementation, and instead of abolishing mitigation strategies altogether, we recommend recalibrating them towards what they can realistically accomplish: effective communication and capacity building so that NMS can advance from lacklustre bookkeeping to actively promoting a government-wide climate change mitigation vision. The article can help governments to realise that renewing integrated strategies such as NMS without overhauling them comes close to logging a dead horse.

National mitigation strategies emerged in the 1990s and spread widely in the early 2000s as a response to respective calls in the UNFCCC, the Kyoto Protocol, and EU policies. Besides being policy documents that are supposed to formulate emission reduction targets and measures to reach them, NMS also represent relatively novel governance approaches that are supposed to coordinate mitigation efforts horizontally across sectors and vertically across levels of government in reflexive ways. As capacity building efforts, NMS are supposed to build a knowledge base for policy formulation and implementation, raise awareness for mitigation needs via communication, and establish policy networks. However, as the present article has shown, actual NMS of the EU-15 countries resemble all three functions, but they have fallen short in meeting them adequately. Although it is impossible to say in how far NMS as policy documents were able to provide guidance, we can summarise that their objectives are most often vague and the policy portfolios they propose are usually messy packages that pay little attention to trade-offs and synergies between measures, sectors and levels of government. With regard to capacity building, NMS focused on cyclical monitoring and reporting, and they played limited roles in facilitating research. Raising awareness for critical mitigation issues was usually not among their concerns. As governance processes, NMS served as catalysts for innovative means of policy integration (such as inter-ministerial coordination bodies) but largely failed in implementing medium-term policy objectives and long-term visions across sectors. Since NMS hardly played a role whenever governments made significant progress towards CPI in recent years, we conclude that they resemble "lacklustre bookkeeping" rather than strategic policymaking. In other words, NMS provide accounts of GHG emissions, targets and arbitrary portfolios of policy options that have little (or at best informative) relevance for sectoral policy decisions on the ground. Obviously, the governance of climate change mitigation is either in a poor state, or takes place elsewhere (e.g. at the EU level, through other, more focused strategies, or in an ad-hoc manner in key sectors).

Since climate change was relatively high on political agendas approximately until 2009 (Dubash et al. 2013; Carter 2014), the failure of NMS to become effective governance and capacity-building processes cannot be blamed on a lack of political interest. The fact that NMS always had a close linkage to international reporting (see section 3) certainly played a role in framing them as bookkeeping tools, but as similar findings on other multi-

sectoral strategies suggest (for sustainable development and climate change adaptation see Casado-Asensio & Steurer 2014; for climate change adaptation see also Bauer & Steurer 2014), the instrument as such is problematic. Apparently, encompassing multi-sectoral strategies have major difficulties in fulfilling one of their three key functions, namely to solve complex problems by effectively orchestrating policies across sectors and levels of government (not to mention non-state actors). Obviously, the challenges of policy integration are too serious to be overcome with a single instrument (for a similar conclusion see Mulgan 2009), in particular when this instrument is in the hands of relatively few administrators from comparatively weak environment ministries.

- *WP3: Steurer, R. & Clar, C. (2014): Is decentralisation always good for climate change mitigation? How federalism has complicated the greening of building policies in Austria, in: Policy Sciences, online first [listed in the SSCI].*
- *Steurer, R. & Clar, C. (2014): Politikintegration in einem föderalen Staat: Klimaschutz im Gebäudesektor auf Österreichisch, in: der moderne Staat, forthcoming.*

This paper addresses two related puzzles. The first puzzle is that parts of the environmental federalism literature suggest that federal states are ill-equipped to solve nation-wide or global environmental problems such as climate change, but climate policy scholars usually emphasise the opposite. The second puzzle is that Austria (a federal EU Member State) is regularly praised as an environmental policy leader but has missed its Kyoto target by about 19%. The paper addresses both puzzles by analysing to what degree federalism is responsible for Austria's poor mitigation performance. Since the nine Austrian provinces are mainly responsible for regulating the building sector that accounts for about 25% of total energy consumption and 13% of the greenhouse gas emissions, the analysis focuses on the integration of climate change mitigation in building policies. The empirical core of the paper analyses all major EU, federal and provincial policies that aimed to green the building sector since the signing of the Kyoto Protocol in 1997. After showing that these policy outputs cannot explain considerable sectoral emission reductions, we conclude that Austrian federalism did not facilitate but hinder climate change mitigation because it added a vertical dimension to an already complex horizontal integration challenge. However, since federalism can by far not explain Austria's failure to reach its Kyoto target domestically, we also conclude that it is only one of many independent variables that shape climate change mitigation. Finally, we show that Austria is neither an environmental policy leader nor a laggard, but an opportunist.

The present paper has analysed CPI in the Austrian building sector since the signing of the Kyoto Protocol in 1997. It was concerned with multi-sectoral coordination (such as climate strategies, programmes and a climate protection law) and with sectoral approaches aiming to integrate climate change mitigation into building policies. As noted in the introduction, building policies make an interesting case for studying CPI in federal state settings because mitigating GHG emissions here is usually economically beneficial, and because provinces hold key competences in Austria and in many other federal states (for Switzerland, see Casado-Asensio & Steurer 2013). The fragmentation of responsibilities requires coordination and integration not only horizontally between sectors (here climate and building policies) but also vertically between levels of government (here federal and provincial). Yet, how does the Austrian federal system interfere with climate change mitigation?

Since the decentralised building sector is one of the few sectors in Austria that has reduced its GHG emissions, a quantitative study would most likely be misled to conclude that the Austrian federal setting facilitated mitigation. In contrast, our qualitative analysis leaves no doubt that it was a major obstacle for greening the building sector in at least three intertwined respects. First, the number of sceptical actors complicated CPI as governance. While integrating climate change mitigation horizontally into other sectors is always challenging (Peters 1998; Steurer 2007), it was particularly difficult in the Austrian federal setting because the only driving force (the Federal Environment Ministry) was confronted not with one or two critical ministries but also with nine (often adversarial) provinces. Instead of experimentation, learning from each other and positive competition (or a race to the top) between sub-national entities, we found overall passive (or obstructive) provinces usually doing only what is required by EU policies and federal agreements. Of course, the Federal Environment Ministry would have struggled with greening building policies also in a unitary state setting because respective responsibilities would have been in another ministry. However, the challenge of horizontal policy integration between two ministries within the same government seems parsimonious compared to negotiating CPI diagonally with nine provincial governments. This is particularly the case because each one of them is also prone to other political deliberations, among them the following two. Second, CPI in the building sector sometimes became subject to federal politics games: the provinces delayed or hindered CPI not necessarily because they disagreed with objectives and measures proposed by federal actors but because of turf wars, power struggles and resource allocation conflicts

not even related to climate issues. Third, while Hudson asserted that “[f]ederal systems present more difficulties for international treaty formation than perhaps any other form of governance” (Hudson 2012, 1), we found that Austria had no difficulties in negotiating and adopting the Kyoto Protocol but in implementing it afterwards. Since the federal government had adopted the Kyoto Protocol and the EU burden sharing agreement on its own, the provinces had no reason to contribute to targets they neither negotiated nor approved.

Overall, our findings and other cases (such as the decentralised implementation of the early EU Emission Trading System²) suggest that federal (or decentralised) political settings can be disadvantageous in solving global public goods problems such as climate change mitigation (Oates 2001; Adler 2005). Since this finding is in clear contrast to the US climate policy history (see section 1), we cannot generalise it for all federal countries and settings, but we can highlight that the relationship of federalism and mitigation policy-making is more complex as climate policy scholars usually assume. Consequently, we caution against high hopes assuming that decentralized or polycentric governance can fully compensate for failed international and national climate policies. Polycentric governance arrangements can certainly be effective, but according to our findings, decentralised policy-making is not necessarily the ideal way to solve global environmental problems.

Can the obvious disadvantages of federalism in climate change mitigation also resolve the puzzling fact that Austria as an alleged environmental policy leader is lagging far behind in curbing GHG emissions? Federalism obviously hindered climate change mitigation in the building sector, but considering that emission trends have been worse in other, centrally governed sectors such as transport, we must not overestimate the importance of federalism. Since federalism is only one of many independent variables that shape climate change mitigation, less of it does not automatically entail more climate change mitigation. Obviously, other variables such as the popularity of climate change in multiple societal arenas or streams such as businesses, the media, the electorate, government and opposition parties at federal and provincial levels (Carter 2014; Carter & Jacobs 2014), the availability of technological (win-win) solutions, economic or fiscal wealth, etc. are as (or more) important as political system features such as federalism (see also Wälti 2004). This requires alternative explanations for why an alleged environmental policy leader lags far behind in climate change mitigation, and we solve this puzzle by questioning the too simplistic leader-laggard scale used in most comparative studies. Since Austria demonstrates environmental leadership when it is geographically opportune (e.g. high ratios of hydropower and organic farming, both also owed to alpine landscapes) and economically promising (e.g. clean air and water as prerequisites for tourism) but lags behind in most other instances we regard it neither as a leader nor as a laggard but as an ‘environmental policy opportunist’ that oscillates somewhere between the two poles. In concurrence with the case study presented above, the following story from the transportation sector illustrates the rationale of what we coin as an ‘environmental policy opportunist’ very well: Austria borders to eight countries with higher fuel prices. The ‘fuel tourism’ triggered by the price differences accounts not only for almost 1/3 of the sector’s GHG emissions (or for about 7% of total domestic GHG emissions); it also resulted in 1.3 billion Euro of annual tax revenue. If we compare this amount with the 700 Million Euro for emission certificate purchases for the entire Kyoto period, as the Austrian Transport Minister (later Chancellor) did publicly,³ the opportunistic rationale for not adequately curbing greenhouse gas emissions in the transport sector is evident.

- *WP3: Klaus Jacob, Hannah Kannen (forthcoming): Integrated Strategies for Climate Policy Integration and Coherence: the Case of Germany, currently under review.*

Climate change mitigation is a cross-cutting policy issue that requires coordination between policy departments and different levels of governance. However, the constitutional division of responsibilities (polity) and changing political constellations in government and society (politics) are constraining factors for achieving a horizontal climate policy integration and vertical coherence. This is especially the case in the federal system of Germany which is characterized by high degree of independence of departments and interdependence of the federal and subnational level.

² As van Asselt (2010) shows, the decentralised allocation of emission certificates through Member States resulted in an over-allocation driven by national competitiveness concerns. The European Commission still seeks to resolve the repercussions of this through centralisation.

³ <http://www.oeamt.at/?id=2500%2C1394632%2C%2C>; accessed on 7/19/2013;
<http://derstandard.at/3145423>; accessed on 9/25/2014.

In recent years, integrated climate mitigation strategies were increasingly employed as a new governance mechanism to cope with the challenges of climate policy integration, coherence and long-term planning. This paper analyses and assesses the impact of three integrated climate mitigation strategies in Germany, namely the 2007 federal government's "Integrated Energy and Climate Program" as well as regional strategies from Baden-Wuerttemberg and Hamburg.

The findings of the paper illustrate that horizontal coordination is rather based upon turf wars leading to lowest common denominator decisions than coordinated action towards a commonly agreed goal. Furthermore, vertical cooperation is virtually inexistent, resulting in a certain degree of incoherence of policy activities from different governmental levels. Progress can rather be explained by reference to high public pressure, party constellations in government coalitions, individual preferences of leaders, or external circumstances and in particular international and European developments. In light of the enormous challenge posed by climate change, these patterns are not sufficient to ensure that climate mitigation policy continues on the chosen track and achieves long-term GHG emissions reduction targets. This sheds light on remaining gaps in existing climate mitigation strategies, especially at the federal level. It is argued that this is a result of gaps in terms of strategy processes and capacities. The problem of climate change has been described extensively, requirements for action have long been identified, and medium and long-term GHG reduction targets have been set. However, problems arise when it comes to the formulation of measures and their actual implementation, i.e. during the legislative process. Strategies have to provide for mechanisms that ensure the integration of long-term visions in everyday policymaking, when competing interests and worldviews clash against each other. On the basis of our interviews, we argue that such mechanisms in German climate mitigation strategies can be grouped into three categories: institutionalization, codification, and participation.

Institutionalization is a means to enhance both the quality of the process of a strategy and its capacity. Different institutional innovations, such as a management body like the LSK in Hamburg and Baden-Wuerttemberg for inter-ministerial cooperation at administrative level or a State Secretary Committee at political level, could ensure that relevant public actors are continuously involved in the different stages of a strategy process, resulting in proper implementation and early recognition of necessary adjustments, thus enhancing strategic capacity. While such mechanisms would not necessarily guarantee effectiveness in achieving a CPI, they would at least keep up the momentum of strategy processes. Moreover, codification is a further means to increase strategic capacity. A climate protection law with general and sector-specific targets is primarily a self-commitment. Even though this precludes suability, it can represent more than symbolic policy. Periodic monitoring and evaluation could be prescribed by the law, for instance, thereby contributing that climate change mitigation remains on the agenda and continuous strategy updating takes place. One could even think of sanctioning options prescribed by the law, similar as in EU legislation. Sector-specific action plans could be prescribed by a climate protection law. Also, a federal climate protection law could emphasize the need for vertical CPI and coherence. Even though the constitutional division of responsibilities is hard to be changed, it could contain appeals to regional governments to contribute to climate change mitigation within their areas of responsibility, and offer assistance with regard to enforcement or advisory services. Within Germany, the states of North Rhine-Westphalia and Baden-Wuerttemberg take on a pioneering role with their climate protection laws adopted in 2013. Other states and the federal level might well benefit from first experiences with these laws. Finally, extended participation is potentially a key to a strategy's process dimension, made possible by new modes of participation which enable involvement of a wider range of interested stakeholders. For instance, the EU Commission frequently carries out online consultation procedures on concepts that tackle specific or general problem contexts. Baden-Wuerttemberg has equally tried to involve as many interested actors as possible in its current process of strategy formulation. Another option would be the set-up of an independent Advisory Council on Climate Protection to give the issue more visibility, contribute new ideas and impulses, and perform a watchdog function. With its SDS, Germany has already gained experience with such a body composed of actors from society, industry and academia (Rat für Nachhaltige Entwicklung).

All these possible innovations in enhancing the process and capacities of strategies are not a guarantee for effective integration and coherence as the example of national strategies for sustainable development has shown. Policies need to be developed and legitimized in the existing institutional apparatus. But the potentials of strategies are so far underutilized in providing the necessary momentum.

- *WP3: Klaus Jacob, Hannah Kannen (forthcoming): Climate Policy Integration in Federal Settings: the Case of Germany's Building Policy; currently under review.*

The paper analyzes the degree of climate policy integration (CPI) in Germany's building policy, an area highly relevant for climate change mitigation. The basic assumption of CPI is that the cross-sectoral and multi-level challenge of climate change necessitates the integration of climate concerns into non-environmental policy fields (horizontally) and across different levels of governance (vertically). There are at least three dimensions in which CPI can be analyzed, namely a conceptual, a procedural, and an output/outcome dimension. Following this distinction, the authors find that in all three dimensions, CPI appears to be at a fairly low level, leaving much room for improvement in terms of prioritization, coordination, and coherence. In the absence of a comprehensive strategy, current German building policy does not reflect the need for coherent and long-term climate policymaking.

The paper also seeks to understand the role of federalism in this regard: federalism might have both, a positive as well as a negative impact on the prospects of CPI. It is argued that in the specific case of building policy, a number of negative hypotheses regarding the relation between federalism and CPI – incoherence, veto players, enforcement deficits – seem to materialize. Even though coordination between federal and Länder level is deemed necessary, reality shows that it happens only to a very limited extent. The Länder partly oppose more ambitious policies, a stronger integration and vary considerably regarding the implementation of federal policies. On the other hand, potential advantages from federalism for CPI are limited in the field of building policy.

With regards to the potentials of increased Climate Policy Integration (CPI), the findings of the paper suggest that competition between the relevant departments prevails on the federal level. While BMU puts more emphasis on climate protection and increasing efficiency of buildings, BMVBS and BMWi are concerned with the costs and putting a brake on more ambitious targets and measures. The same holds for coordination between federal and Länder level. The Länder developed their own programs for funding and for energy audits. However, despite of few exemptions, most notably Hamburg and Baden Wuerttemberg, the Länder are hesitant to tap their potentials in regards of regulatory standards and their implementation. It appears as if the Energiewende in Germany focuses largely on the supply of energy, while the low hanging fruits of energy demand and increased efficiency receive much less attention in the German strategy. Despite rhetorical commitments to climate change mitigation and Energiewende, a comprehensive sectoral approach for GHG emissions reductions in the building sector has not been developed. On the contrary, the current policy mix has evolved rather incrementally and still features a number of gaps and inconsistencies, for example with regard to its regulatory focus on new constructions, whereas existing buildings are actually the ones with the biggest energy savings potential. Coordination between involved actors mainly takes place within existing administrative structures, which further impedes coherent policymaking. With a lack of strategic capacities which ensure that the concerns of climate protection remain on the political agenda and receive sufficient attention vis a vis other policy goals. However, it appears as if traditional, sectoral objectives like cost-efficiency and competitiveness still predominate over climate change concerns, both in the federal executive (except BMU) and in most states.

The lacking horizontal CPI across departments in particular as well as the lack of coordination across levels of decision making lead to an argument for more and better coordination between all actors involved, be they federal or state actors. Coordination needs to be firmly embedded in the whole policy cycle, starting with joint target-setting, continuing with agreement on adequate policy instruments, and concluding with an evaluation of effects. Strategic capacities, e.g. dedicated institutions or budgets, would be needed to maintain the topic on the agenda as an issue of high priority even after changes in government. The finding however, indicates that the low hanging fruits of energy demand and efficiency have not received similar attention as the supply of (renewable) energy.

- *WP3: Casado-Asensio, J, & Steurer, R. (forthcoming): Climate change mitigation in the Swiss building sector: How federalism further complicated an already complex challenge (currently under review).*

Climate change mitigation is a complex political challenge, notably because respective policies have to be integrated horizontally in numerous sectors and vertically across levels of government. Since the challenge of vertical integration is particularly pronounced in federal states such as Switzerland, we aim to understand how this shaped climate policy-making in a decentralized sector such as building policies. By analysing interactions between federal and cantonal policymakers (in particular from the three relatively active cantons Basel-

Landschaft, Basel-Stadt, Bern), we show that federalism rendered cantonal policy innovations possible, and that federal actors played a key role in improving a variety of cantonal building policies over the years. At the same time, however, we found that policy diffusion from active to reluctant cantons was insufficient, and that federal harmonisation often resulted in lowest common denominator solutions that were difficult to improve once in place. Although sectoral greenhouse gas emissions fell by almost 20% since 2008, we conclude that Swiss federalism hindered rather than facilitated more effective climate change mitigation in the building sector (inter alia because the emission decline is not only due to climate policies, and much more could have been done). Although our findings cannot be generalised to other federal countries they at least suggest that often-praised decentralised (or poly-centric) climate governance is not always an adequate substitute for central governance.

This concluding section summarises three main challenges for integrating climate change mitigation into the Swiss building sector and it highlights their policy implications. First, our case study shows that climate change mitigation is a relatively new concern that does not always coalesce well with the historically grown status-quo of policymaking in other sectors, in our case building policies. While most cantons hesitated to take traditional regulations of the building sector beyond aesthetics and safety issues, only a few pioneering cantons were more open to integrating climate change mitigation into their building policies because the new agenda was compatible with their sectoral status quo: they were the only ones that already had a tradition of embracing energy efficiency concerns in their building policies, albeit not for climate change but for energy security reasons. Thus, we conclude that climate policy integration is all the more difficult the further its concerns are remote from traditional sectoral concerns.

Second, we conclude that the ambiguous and dynamic federal governance setup for energy and climate issues was not helpful in pushing cantons towards climate change mitigation. On the one hand, the fact that several departments and offices launched new energy and climate policies without coordination resulted in partly redundant and partly competitive federal interventions. On the other hand, the fact that federal actors tried to cope with their governance problems through iterative institutional changes resulted in a lack of trust and “bad chemistry” with cantonal officials. Although the Buildings Programme adopted in 2011 streamlined the subsidising of building retrofitting throughout Switzerland, its tripartite management structure is far from ideal. While it helped accommodating power struggles between different ministries, it complicated implementation and monitoring. Although similar power struggles between environment and economy ministries are common around the world, the Swiss federal system augmented them because it gave the cantons the freedom to pick their level of ambition. This touches already on the final challenge we want to point out.

Third, we conclude that, overall, Swiss federalism was not facilitating but hindering the integration of mitigation concerns in building policies. Besides the reasons elaborated above, this is mainly due to the sheer number of national and cantonal actors involved in climate policy making: when up to 30 key actors (i.e. 26 cantons and several federal offices) are involved in negotiating, formulating and/or implementing policies. In particular when the actors come from different sectors and pursue different interests, it is no surprise that adopted policies represent lowest common denominator solutions that fall short in meeting federal targets. Once the policies were in place, they proved difficult to reform, even if they were undoubtedly problematic (see e.g. the Climate Penny). The “federal threat” to shift competencies to the federal level (an option foreseen in the Swiss constitution) reinvigorated inter-cantonal harmonisation (Strebel 2011: 470) but was not taken seriously: As a federal official noted, it was seen as “part of the game of federal politics”. Indeed, the federation aims to preserve a courteous and pragmatic relation with the cantons that benefits both parties, in particular when no major political issues are at stake. This limits federal means in greening the building sector to recommending standards, providing incentives, and monitoring emission trends (based on biased cantonal data). When the federal environment office is among the few actors who actively promote climate change mitigation (and perhaps the most important one among them), this is hardly enough.

The limitation of case studies is that their findings cannot be generalised. As similar studies for Australia, Canada and the US have shown, federal systems can also facilitate climate change mitigation under different political circumstances (see section 1). Nevertheless, our findings caution hopes that regard decentralised, multi- or poly-centric climate governance as the silver bullets that can compensate for failed national or international efforts (see e.g. Adelman & Engel 2008, 1846ff; Cole 2011). Poly-centric climate governance may be occasionally able to overcome national or international stalemate, but as the case on Swiss federalism suggests it is not always an adequate substitute for central governance.

- *WP4: Steurer, R. & Clar, C. (forthcoming): The ambiguity of federalism in climate change: How the Austrian political system complicates mitigation and facilitates adaptation (currently under review).*

Although the effects of federal political systems on environmental policy-making are contested since decades, most (predominantly American) scholars emphasise their advantages in the context of climate change. This applies traditionally to mitigation (mainly because some US states attempt to compensate for federal inaction), and more recently also to adaptation (mainly because impacts differ locally). Using the example of Austria (a small federal EU Member State that adopted the Kyoto Protocol but missed its emission reduction target by 19%), the present paper provides a more nuanced picture. By analysing how climate change mitigation has been integrated in provincial building policies and adaptation into flood protection at various levels of government, we find the Austrian federal system better suited to cope with local adaptation than with national mitigation challenges. Although we do not doubt that sub-national authorities can play important roles in climate change mitigation (in particular when federal governments fail to act), we conclude that they cannot substitute a lack of federal (or international) leadership. This casts some doubt on the enthusiasm about climate change mitigation through polycentric governance concerned with circumventing often-inadequate international and national climate politics.

Our adaptation case study showed that federalism in flood protection means that responsibilities are strongly fragmented vertically between three levels of government, but that this was rather helpful in enhancing resilience by tailoring measures to local circumstances. On the one hand, provincial representatives assumed key roles because they have sufficient expertise and funds to cope with complex regional and local problems. In contrast, municipalities often lack these two factors but highlight needs and refine solutions bottom-up. While adaptation scholars expect municipalities to be the key actors in climate change adaptation (Urwin & Jordan 2008; Amundsen et al. 2010), our case showed that they would struggle meeting these expectations when left alone. Thus, we conclude that municipalities are not necessarily key actors in flood protection but key partners for higher governmental levels such as provinces, at least in federal states such as Austria. This emphasises the importance of coordination. Our adaptation case highlights that actors from all three levels of government turned the strong fragmentation of responsibilities into a viable network characterised by regular coordination and co-financing. Since water managers at all levels of government criticised the usefulness of the CPI concept in their sector with the same arguments, we conclude that they represent a close-knit policy community that shares core values and beliefs (or “policy cores”) and speaks with one voice, similar to what Sabatier coined as an “advocacy coalition” of like-minded state and non-state actors (Weible et al. 2009). In our case, these actors were mainly sectoral policymakers from all governmental levels and scientists. The fact that this policy community did not embrace climate change adaptation as a new concern that can ease access to additional resources may result from the fact that their funds have seen sharp increases after recent floods.

For climate change mitigation in the building sector, the picture differs starkly. Here we found neither experimentation in nor learning between provinces, neither races to the top nor to the bottom, and federalism did not prove necessary to fine-tune building policies to (irrelevant) regional specifics, or to improve the acceptance of building standards. What we found is that federalism further complicated CPI by adding a vertical dimension without functional need. Consequently, a variety of federal interventions were needed to green the sector – but unfortunately most of them were either politically irrelevant (i.e. the two climate strategies and the climate protection law), not demanding enough (the federal agreements on thermal standards), or uncoordinated federal zero-sum games (the federal refurbishment cheque that lead to provincial housing promotion cuts). The picture of ‘obstructive federalism’ in climate change mitigation is completed by the fact that the provinces did not transpose relevant EU directives directly and immediately but indirectly and delayed via federal laws or agreements. Of course, the Federal Environment Ministry would have struggled with CPI in the building sector also in a unitary state. However, the challenge of horizontal CPI between two ministries within the same government seems parsimonious compared to negotiating CPI diagonally with representatives from other sectors in nine provincial governments, in particular because the latter often played tactical federal politics games (i.e. games in which blockades were not primarily due to conflicting policy positions but to more general power struggles and turf wars between the two levels of government).

Overall, our findings partly confirm both federalism schools introduced in section 1. In line with the ‘matching school’, our mitigation case highlights that not every level of government is equally well suited to solve any environmental problem: Austrian federalism proved to be more appropriate for regional flood protection than for

national (or global) GHG mitigation. If mitigation depends mainly on sub-national policies, it may be better than federal standstill but certainly far from an ideal matching between problem scale and government response. However, in line with the dynamic federalism school, our adaptation case suggests that restricting responsibilities to one particular level of government can be inappropriate (especially when a problem does not fit into a particular geographical scale) or dysfunctional (e.g. when the ideal level of government is overwhelmed by the complexity of the problem or fails to deliver for other reasons). Reverse, we find that the matching school pays not enough attention to multi-level governance issues while the dynamic federalism school is sometimes unrealistic about leadership – and the limits of polycentrism. Consequently, we conclude that environmental federalism should be concerned neither with finding nor with blurring the one ‘ideal point of governing’ (see figures 1 and 2), but with identifying one or two ‘governing centres’ for solving particular problems, and with shaping governance patterns that radiate from these centres to other governmental levels (see figure 5).

5 Schlussfolgerungen und Empfehlungen

With regard to integrated strategies our main conclusions can be summarised as follows:

The integrated strategies reviewed here have proved to be comparatively weak administrative routines (or informational policy instruments) and preoccupied with low-key communication rather than high-profile policy coordination. Consequently, they are usually not capable of implementing the policies necessary to meet the targets they specify.

Even though integrated strategies are a relatively novel instrument to govern complex policy areas, they perpetuate many of the dilemmas raised by the implementation literature for decades (see e.g. Moran et al. 2006; Mulgan 2009). Like environmental policies in general, integrated strategies also remain constrained by three sets of variables. First, despite their win-win rhetoric, the economy-environment axis usually ranks the environment second, in particular when global economic competitiveness is at stake. Second, integrated strategies were not able to change the fact that policymaking remains compartmentalised and the actors involved continue to think along sectoral and regional lines. Finally, institutional, social and cultural factors (including path dependency and inertia) continue to thwart timely and adequate implementation. When viewed from the implementation literature, integrated strategies remind us of “new skins for tainted wine”. Unfortunately, the “new skins” themselves have several design faults that reinforce these dilemmas. Above all, most integrated strategies lack a clear prioritisation of what to do, because they aim to be as comprehensive as possible, have failed to engage adequately with economic realities, and failed to secure high-level political commitment and adequate resources. According to Mulgan (2009), every single one of these factors is crucial for strategies to be successful.

But what alternatives do governments have to the status quo of piling one integrated strategy on top of another and not caring enough about their implementation? Policymakers could first try to improve their integrated strategies, either by approximating them to the guidelines described above or to some other ideal-type policymaking approach (such as meta-governance). Obviously, this option requires a strong belief in policymaking as a rational process that aims primarily to solve problems. Second, governments could abandon integrated strategies altogether and return deliberately to disjointed incrementalism, policy layering and policy drift (Howlett & Rayner 2006a; Steurer & Martinuzzi 2005). Since integrated strategies are more than governing processes, this option implies losing their two other, more appropriate functions that lead us to the third option. Third, governments could recalibrate integrated strategies from coordination to communication instruments, so that they can be more effective in pursuing the functions they are able to fulfil. They could focus on providing direction as a policy document and to build capacities and raise awareness for the problems they cover, e.g. by systematically building knowledge bases, educating and training public administrators, informing and convincing the public in general and non-state decision makers in particular, etc. Based on the findings presented here, we recommend the recalibration of integrated strategies towards communication and capacity building instruments. By doing so, public authorities are at least better equipped to affect political and societal action indirectly by shaping the perceptions of complex environmental problems over time (Weingart et al. 2000; Sharp and Richardson 2001).

Despite our focus on integrated strategies, we finally speculate that none of these three options can replace more focused strategies that embrace sustainable development, climate change mitigation and adaptation issues on a narrower, perhaps sectoral basis. Although narrower integration strategies may have difficulties in overcoming fragmentation (in particular when not backed by comprehensive ones that provide a common roof), they seem to

be more fruitful (Adelle & Russel 2013, 9). For future research, we hypothesise that policy integration is more effective when advocates of a particular issue or problem feed into focused strategies that have clear priorities and that are owned by those who have the responsibilities and the power to implement them. If this hypothesis proved correct, a major design fault of integrated strategies would be that they aim to facilitate policy integration by “intruding into sectoral territory”, ultimately running against sectoral actors who are eager to defend their power of decision. Since “[t]here is no single formula for organising strategy in public organizations” (Mulgan 2009: 3), the environmental strategies of the future should be cautious in following global guidance and pursue tailored approaches that mirror the problems they tackle in their national context.

Regarding the role of federalism in decarbonising the decentralised building sector, our main conclusion reads as follows:

In particular our Austrian and Swiss case studies have shown that federalism further complicated an already ambitious challenge known as climate policy integration (CPI): it required a highly complex web of federal-sub-national interactions and equally complex relations between federal and provincial policies that entailed not only high transaction costs but also slow policy change. This concluding section provides two explanations for this finding that go beyond the obvious disadvantages of federalism, and it derives policy-relevant conclusions.

First, climate change mitigation is a relatively new concern that does not always coalesce well with historically grown policy sectors. While most Laender/cantons hesitated to embrace CPI in their building policies, only a few were more open. Thus, we conclude that CPI is all the more difficult the further its concerns are remote from traditional sectoral concerns - and that path dependencies (as well as resulting administrative capacities) can operate both ways: hindering and facilitating CPI.

Second, the Austrian and Swiss federal system hindered CPI in the building sector because they detached the federal Kyoto commitment to cut greenhouse gas emissions from provincial policymaking on the ground, at least in the decentralised building sector. While Laender/cantons had little reason for mitigating emissions because they did not sign the Kyoto Protocol, the federal government had good reasons but (at least initially) little means to intervene in building policies. Two conclusions follow from this. First, while federal political systems may be advantageous in countries that did not adopt the Kyoto Protocol (like the US or Australia), this explanation alone suggests that federalism is problematic when federal governments committed themselves to climate change mitigation. Second, we conclude that federal authorities should align federal obligations and sub-national policy-making, e.g. by sharing burdens or efforts via binding agreements not only internationally but also domestically. As long as they do not adopt such agreements they do not take climate change mitigation seriously.

C) Projektdetails

6 Methodik

In WP1 we conducted a desk research that reviewed the scholarly literature on policy integration, with a focus on environmental and/or climate policy integration and respective differences between federal and unitary state settings. It aimed to summarise and advance existing research by answering the research questions stated in section 1. The findings of this WP were summarised in an analytical framework that guided the subsequent research steps (see Annex 1). This WP was finalised as planned.

In WP2 we conducted a classical desk research on integrated strategies as key instruments of policy integration. We first reviewed and compared normative guidelines for integrated strategies on sustainable development, climate change adaptation and mitigation. We then analysed the prevalence as well as the performance of these three types of integrated strategies in EU Member States. The findings are documented in a long journal manuscript with 12.000 words (see Annex 2) that is already published in the Journal of Public Policy (listed in the SSCI). Since we had abundant material on climate change mitigation strategies (the key theme of the CLIP-IN

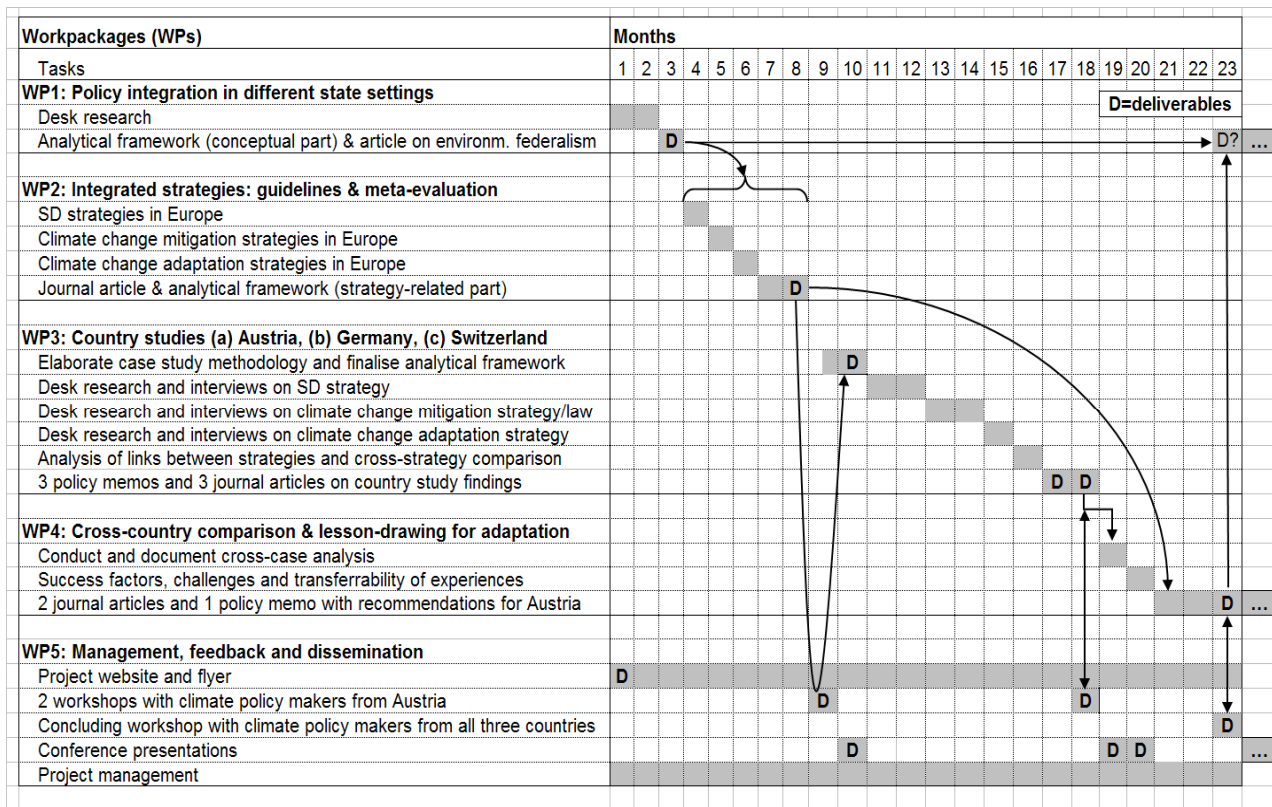
project), we wrote an extra paper on mitigation strategies (not foreseen in the proposal). This paper has recently been accepted for publication by the Journal “Climate Policy” (see Annex 3).

In WP 3 we conducted three country studies on climate policy integration. Based on the research conducted in WPs 1 and 2, we refocused the case studies on how climate policy integration progressed in a particular sector, due to integrated strategies or other instruments. We choose to look at climate policy integration in the building sector for two reasons: first, the building sector is one of the most important emitters of greenhouse gas emissions; second, responsibilities for building policies are strongly decentralised in all three federal countries under scrutiny. This enabled us to analyse how federalism shaped climate policy integration – a key concern for the CLIP-IN project. The case studies conducted in WP3 resulted not in three but in five journal manuscripts: two papers on the Austrian case study (one in English already published in the Journal “Policy Sciences”, one in German forthcoming in the journal “der modern Staat”), one paper on the Swiss case study (currently under review), and two papers on the German case study (one focussing on the role of mitigation strategies, one focusing on all aspects of climate policy integration in the building sector; both papers are currently under review). For an overview of the publications produced in the CLIP-In project see the table below and the Annexes.

In WP4 we conducted two comparisons. First, we compared the findings of the Austrian climate change mitigation case study with findings on a very similar adaptation case study we conducted in another ACRP project (currently under review). Second, we compared all three country studies (to be submitted soon).

WP5 was concerned with project management and dissemination activities. The main project management task was to accommodate for personnel changes and for prolonging the project period accordingly (see section 2.4). Dissemination efforts were dominated by publishing journal articles and by giving conference presentations. As section 5 summarises, we have published already four journal articles and we have written 5 more which are currently under review. In total, we wrote 3 extra publications not foreseen in the proposal. Regarding conference presentation we also doubled our output compared to what has been planned (see also section 2.4). These extra outputs were possible because we cancelled the concluding project workshop with decision-makers (since we encountered very limited interest in such events in this and other projects we made better use of the project resources by publishing additional papers), the project staff worked very efficiently, and the project leader Reinhard Steurer contributed much more time in-kind as planned.

7 Arbeits- und Zeitplan



8 Publikationen und Disseminierungsaktivitäten

This table summarises the 6 papers planned in the CLIP-IN project proposal and the 9 papers finally written (for summaries and the full references see section 4). Once all papers are published in journals they will also be published as discussion papers open access. Meanwhile, paper requests can be sent via email to reinhard.steurer[at]boku.ac.at.

WP	No.	Papers planned according to CLIP-IN proposal on ...	No .	Actual papers written on ...
2	1	Integrated policy strategies	1	Integrated policy strategies (“Journal of Public Policy”)
			2	National mitigation strategies (“Climate Policy”)
3	2	Case study Austria	3	Case study Austria: climate change mitigation in building policies (in English, “Policy Sciences”)
			4	Case study Austria: climate change mitigation in building policies (in German, “der moderne Staat”)
			5	Case study Switzerland: climate change mitigation in building policies
			6	Case study Germany: integrated policy strategies
4	5	Comparison on climate policy integration in the three countries	7	Case study Germany: climate change mitigation in building policies
			8	Comparison on climate policy integration in the three countries
4	6	Comparison on integrated policy strategies in the three countries	9	Comparison on the impacts of federalism on climate change mitigation and adaptation policies in Austria

Instead of the three conference presentations envisioned in the proposal we delivered the following five:

- 1) Clar, C. & Steurer, R. (2013): Klimaschutz auf Österreichisch: Wie ein Querschnittsthema in einem föderalen Staat über Sektoren und politische Ebenen hinweg politisch koordiniert bzw. blockiert wird; 3-Länder-Tagung Politikwissenschaft: Politik der Vielfalt [3-Country-Conference Political Science]; 19-21 September 2013, Innsbruck/Austria.
- 2) Casado-Asensio, J. & Steurer, R. (2013): Integrierte Strategien zu nachhaltiger Entwicklung, Klimaschutz und Klimawandelanpassung in Westeuropa: Kommunikation statt Koordination; 14. Klimatag: Klima, Klimawandel, Auswirkungen und Anpassung sowie Vermeidung [14th Austrian Climate Day]; 4-5 April 2013, Vienna/Austria.
- 3) Clar, C. & Steurer, R. (2013): Klimaschutz auf Österreichisch: Wie ein Querschnittsthema in einem föderalen Staat über Sektoren und politische Ebenen hinweg politisch koordiniert bzw. blockiert wird; 14. Klimatag: Klima, Klimawandel, Auswirkungen und Anpassung sowie Vermeidung [14th Austrian Climate Day], 4- 5 April 2013, Vienna/Austria.
- 4) Casado-Asensio, J. & Steurer, R. (2013): Climate change mitigation in Switzerland: The case of building policy coordination in a highly decentralised federal state; Jahrestagung der Sektion Policy-Analyse und Verwaltungswissenschaft der Deutschen Vereinigung für Politische Wissenschaft, 1-2 March 2013, Bamberg/Germany.
- 5) Clar, C. & Steurer, R. (2012): Climate change adaptation in a federal state setting: Policy changes in flood protection and tourism in Austria; „Tag der Politikwissenschaft“ [Political Science Day], 29-30 November 2012, Graz/Austria.

Overall, the CLIP-IN project produced more journal articles and conference presentations as hoped for the proposal. We regard this as an undoubtable indicator for a very successful research project.

Diese Projektbeschreibung wurde von der Fördernehmerin/dem Fördernehmer erstellt. Für die Richtigkeit, Vollständigkeit und Aktualität der Inhalte übernimmt der Klima- und Energiefonds keine Haftung.