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Linking EU Climate and Energy Policies: Policy-making, implementation and reform

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Abstract: This contribution examines the EU's innovative climate and energy package: how this package of binding policies has been initiated, decided, implemented and reformed. The key argument is that linking climate and energy concerns can help to explain how the EU managed to adopt an ambitious package of policies aimed at achieving 2020 goals. The combination of differently valued issues, side-payments to overcome distributional obstacles and the creation of synergies contributed to a successfully negotiated outcome. The consequences for implementation and further policy development towards 2030 are explained by challenges in reproducing these joint EU-level gains at national level, and by new circumstances. This may weaken the EU's chances of realizing a low-carbon economy and 'leadership by example' in international climate policy.

Keywords: Climate; Energy; EU; Initiation; Decision-making; Implementation; Reform; Issue linkages

1. Introduction

In December 2008, the EU adopted an innovative and radical climate and energy package of binding policies, harmonizing climate and energy legislation to ambition levels unmatched by any major EU partner or competitor. With the package for achieving 2020 climate and energy goals, chances for realizing a low-carbon economy by 2050 gained traction. The package also strengthened EU leadership credibility in the international climate negotiations (Oberthür and Kelly 2008; Van Schaik and Schunz 2012).

The climate and energy package, designed jointly by the European Commission's Directorates General (DGs) for energy and transport and the environment,¹ was unanimously adopted by the 27 member states in the European Council and endorsed by the European Parliament (henceforth: Parliament), with even the most impatient green groups applauding. However, by 2014, this member-state unanimity had vanished. Many Central and Eastern European countries (CEECs) questioned the need for new ambitious climate and energy policies; Poland opposed whole idea of a low-carbon economy. This eroding support

¹ From February 2010: DG Energy and DG Climate Action.

can weaken further development of the package towards new 2030 climate and energy policies, putting the EU's long-term low-carbon ambitions at risk.

This apparent paradox of high support and subsequent resistance raises at least two key questions. How did the EU climate and energy package come about in the first place? And why has its further development been obstructed, despite widespread initial support?

Although the economic crisis might seem the obvious answer to the second question, that is only part of the explanation. In the final package compromise, the crisis was taken into account regarding burden-sharing; moreover, the hardest-hit Southern member states still support the package and new policies for 2030.² The core package negotiated throughout 2008 included a revision of the EU Emissions Trading System (EU ETS) covering large industrial emitters; a decision on effort-sharing among member states (ESD) for sectors not covered by the EU ETS, like transport and agriculture; promotion of renewable energy sources (RES); and the world's first legal framework for safe carbon capture and storage (CCS). Policies for reducing CO₂ emissions from new cars and for fuel quality, from 'well to wheel', were negotiated independently of the core package (Christensen and Gulbrandsen 2012). Further policies on energy efficiency were adopted independently and according to a different time schedule.

This article argues, first, that theories of issue-linkages are important in explaining the making of the core package. How these policies linked to create synergies, combining differently valued issues and offering side-payments to overcome distributional obstacles, helps to explain how the package came about. Second, how climate and energy policies were combined had consequences for domestic implementation and the development of new climate and energy policy for 2030. Joint gains from issue-linkages at EU level proved difficult to reproduce at the national level, particularly in the CEECs.

Surprisingly few journal articles have been published on the genesis of the climate and energy package (see, however, Morgera et al. 2011). Drawing on the literature on individual elements of the package, this article offers a broad analysis of the major components and phases. That approach limits the theoretical and empirical depth of the analysis, but enables a better understanding of the nuts and bolts linking the initiation, decision-making, implementation and reform of the 2008 EU climate and energy package.³ The article follows these policymaking phases. Special attention is paid to the Commission's role in the initiation phase, to provide a historical context to the integration of EU climate and energy policies. The concluding section briefly discusses the results of the analysis.

2. Analytical point of departure

The EU faced three key challenges in making the package: initiation and policy design by the compartmentalized Commission; adoption by the energy-economic diversified member states (and the Parliament); and subsequent implementation and development. How could the linking or combination of different policies and issues facilitate widespread support and new, ambitious EU outcomes?

² See: <https://www.gov.uk/government/news/green-growth-group-ministers-statement-on-climate-and-energy-framework-for-2030>. Accessed 19.05.14.

³ This article draws on three rounds of interviews in 2011, 2012 and 2014 with policymakers and stakeholders in Brussels and Warsaw.

Essentially, issue-linkage involves joint negotiation of two or more issues, and generally occurs because at least one actor believes that linkages will improve the chances of a favourable agreement (Sebenius 1983; Hovi and Skodvin 2008). Combining different issues for joint settlement (like climate mitigation and energy security) can raise EU-level ambitiousness without sacrificing consent among policymakers (agenda-setters and veto players) whose agreement is necessary to initiate and adopt change in policy (Tsebelis 2002). Since the Commission has the sole formal right to initiate new policies, what the Commission links together in its drafting of legislative proposals may have significant impacts on outcomes (McKibben 2010:701).

There are at least three issue-linkage mechanisms that can promote EU-level unanimity in cases departing from the status quo. First, issues that are differently valued by policymakers can be combined, creating possibilities for mutually beneficial exchange of concessions (Sebenius 1983; McKibben 2010) – as in the case of differing concerns for energy security and climate change. Second, distributional obstacles can be overcome by adding issues as side-payments, a mechanism whereby ‘winners’ can compensate ‘losers’ so that all benefit. Direct side-payments may be institutionally difficult to arrange or insufficient to fully compensate ‘losers’, but issues may serve as effective side-payments (Tollison and Willett 1979; Sebenius 1983). For example, revenues from auctioning of emission trading allowances can be used to compensate lower-income member states’ investment in low-carbon technologies. Finally, issues can be added to exploit interdependencies, and synergies may be exploited to the advantage of all parties (Sebenius 1983). For instance, policies for combatting climate change can reduce air pollution, thereby raising decisionmakers’ willingness to agree on climate policies.

Two countervailing propositions regarding the consequences of issue-linkage are considered here. The first holds that adding issues can yield joint gains that create or enhance probabilities for a successful outcome by combining values, crafting side-payments and enabling synergies – as with package deals. These mechanisms help to explain how the EU managed to agree on a new ambitious package of climate and energy policies.

By contrast, adding issues may also reduce the chances for successfully negotiated outcomes (Sebenius, 1983). Adding issues can introduce new pivotal decisionmakers and render policymaking more complex and cumbersome. Issue-linkage fails when individual issues have little commonality or when the basis for a new agreement could destroy the common ground. These mechanisms can explain why other, related, policies were negotiated independently of the core EU package.

Once adopted, climate and energy policies must be implemented consistently and develop further over time (Hovi et al., 2009). Theories of issue-linkages have less to say about consequences for domestic implementation and further policy development for dealing with long-term challenges like climate change. Consequences are explored by analysing whether joint gains in deciding on EU-level policies also promote implementation and policy development. At the EU level, interaction between package components can create synergies or conflicts when one instrument affects the performance of another (Oberthür and Gehring 2006). For example, promotion of renewables can lead to conflict by bringing emissions down in cap-and-trade sectors and reducing demand for allowances. This may result in a lower carbon price and fewer incentives for industry to invest in low-carbon solutions for the future. At the national level, whether issue-linkage mechanisms that promote EU-level agreement are reproduced domestically is likely to depend on the degree of alignment between EU and national energy-economic interests, institutions and policies

to utilize new linkage opportunities. Lack of reproduction of joint EU gains may lead to implementation failure and stagnation, or repacking of new policies.

Issue-linkages need to be analysed within a policy context to explain how the package came about and developed. Previous research has shown that EU climate and energy policies cannot be fully understood without reference to the complementary nature of traditional theories of EU policymaking and integration, such as Multi-Level Governance, Liberal Intergovernmentalism and international regimes (see Moravcsik 1998; 1999; Marks et al. 1996; Fairbass and Jordan 2004; Skjærseth and Wettestad 2008; Costa and Jørgensen, 2012). Non-state actors like industry and green groups, member states, EU institutions as actors and arenas (Commission and Parliament) and the international climate regime are the key drivers for understanding how issue-linkages come about and their consequences. These actors and institutions at various levels form the policy context for this analysis of the initiation, decision-making, implementation and development of the EU climate and energy package.

3. Initiating the package

In 1991, the EU unsuccessfully sought to adopt a package of climate and energy policies based on carbon/energy pricing, renewables and energy efficiency (Skjærseth 1994). From then on, EU climate and energy policies developed separately, based on different interests, organization, timing, policy instruments and objectives. Both policy strands gained momentum after the 1997 Kyoto Protocol and the 2001 Marrakesh Accords.

DG Energy had responsibility for renewable energy and energy efficiency. In 1997, the EU started work on doubling the RES contribution – a target of 12 per cent share of renewable energy in gross inland consumption by 2010 was adopted. The EU imported almost half its energy needs, a share expected to increase significantly (Commission 2000). In 2001, a directive on promoting electricity from renewable energy sources was adopted (2001/77/EC), followed in 2003 by a directive on substituting biofuel for diesel and petrol in transport (2003/30/EC). These directives aimed primarily at promoting security of energy supply, and secondarily at implementing the EU's 8 per cent reduction commitment under the Kyoto Protocol.

Policies on energy efficiency followed the same priority in objectives. In July 2005, DG Energy issued a Green Paper on energy efficiency concluding that up to 20 per cent of EU energy use could be saved to promote energy security (Commission 2005a). However, developing a common EU policy on renewables and energy efficiency proved difficult. Targets were non-binding; moreover, the considerable potential for stepping up renewables in the heating and cooling sector, accounting for about half of total EU final energy consumption, remained unexploited. Slow policy development at the EU level reflected the common view that member states should have sovereignty in choosing primary energy sources and the energy mix. The UK was the chief bottleneck to a more harmonized EU-level energy policy (Eikeland 2012).

DG Environment had responsibility for climate policy. The 2003 emissions trading (ET) directive (2003/87/EC), establishing the EU Emissions Trading System (ETS), was adopted unanimously by the 15 member states, with only four votes against the directive at the final reading in Parliament (Skjærseth and Wettestad 2008). Trading started in 2005, followed by a price on carbon that could stimulate investments in low-carbon solutions. Emission

allowances were allocated to energy-intensive and electric power installations basically free of charge through a decentralized system based on national allocation plans. In 2004, the EU adopted the associated Linking Directive (2004/101/EC) connecting the EU ETS to the Kyoto Protocol's flexible project mechanisms, mainly the Clean Development Mechanism (CDM). Companies could use credits from investing in more affordable projects abroad to comply with the EU ETS, within certain limits. As the first-ever international cap-and-trade system, the ETS represented an innovative market-based policy instrument that rapidly became the new 'star' in Brussels. The ET directive also helped to build credibility for the EU's diplomatic efforts at saving the Kyoto Protocol after the US withdrawal in 2001 (Skjærseth and Wetttestad 2008:146).

A clash between DG Energy and DG Environment surfaced in the wake of the adoption of the EU ETS and EU ratification of the Kyoto Protocol in 2002. Energy Commissioner de Palacio challenged Environment Commissioner Wallström over the economic costs of her climate leadership-by-example strategy. De Palacio questioned the rationale and costs behind adopting measures to implement the EU's Kyoto commitment if the Protocol failed to enter into force. This concern was shared by the 'competitiveness-first' commissioners responsible for the internal market and industry. Commission President Romano Prodi publicly criticized De Palacio and stressed the importance of keeping the Commission unified in support of the EU's leadership role in international climate policies (Barnes 2011; EurActive 2005).

This incident shows that greenhouse gas (GHG) mitigation had significantly lower priority in DG Energy than in DG Environment. The European Wind Energy Association barely mentioned climate policy arguments when lobbying DG Energy to integrate wind power into European electricity infrastructures (EWEA 2005). Energy ministers were concerned about the EU ETS possible 'market disturbances' in the energy sectors (Council 2005:5). With carbon prices rising towards EUR 30 in April 2006, the ETS had the potential to become the prime policy-driver of energy efficiency and renewable energy in industry. As a market-based instrument, the ETS was also compatible with a competitive internal energy market. Essentially, DG Environment's ETS was poised to govern DG Energy's domain by affecting the costs of fossil fuels, nuclear and renewables differently.

Concerns for climate-policy costs reached the top EU level. In March 2004, the European Council requested the Commission to undertake a cost-benefit analysis and consider new climate targets (European Council 2004:9). In 2005, the Commission responded with the communication *Winning the Battle against Global Climate Change* (Commission 2005b). Internal disagreement prevented the Commission from proposing a new climate target: instead, it launched a second phase of the European Climate Change Programme (ECCP), instigating a review of progress in climate policies and exploring new actions with all major implementing agents and other stakeholders. The Commission also established a High-Level Group, with industry participation, on energy, environment and competitiveness to discuss the relationship between policies in these areas (Commission 2005c). The analysis underlying the 2005 Communication showed that benefits could be increased by fully exploiting *synergies* with energy security and air pollution. Costs could be cut by bringing the major world emitters into a global effort. No specific plans were launched for linking climate and energy policies at EU level. But one hurdle was about to disappear: during its autumn 2005 presidency, the UK shifted from resisting to supporting EU-level energy policies. Agreement emerged among member states on a common response to climate change and energy security challenges (European Council 2005; Commission 2006).

By 2006, oil prices were rising, climate ‘hype’ was sweeping Europe, and public opinion supported EU-level action on energy and climate change challenges (Eurobarometer 2006). Energy security climbed the political agenda also because of the Ukraine–Russia energy dispute that threatened European gas supplies. In March, the Commission issued a Green Paper, prepared by DG Energy, on a European strategy for sustainable, competitive and secure energy (Commission 2006). It painted a dark picture of energy challenges and stressed the need for a new energy policy as an *integrated* part of EU climate policy. While the Green Paper framed climate and energy policies as complementary and synergistic, the specific follow-up actions indicated were still considered largely in isolation, as was evident in the first report from the High-Level Group in June 2006. The report called for a comprehensive approach to energy security, sustainability and competitiveness, but its recommendations were linked to single policy instruments and issue-areas (HLG 2006).

The European Council supported the idea of a new energy policy, while underscoring that member-state sovereignty over the choice of primary energy sources and the energy mix should be respected (European Council 2006). The Parliament and the EU business association UNICE were supportive of stronger co-operation on energy as well, but the Parliament, along with the green groups, criticized the Green Paper for not going far enough on energy efficiency and renewables (ENDS 2006a; 2006b).

By autumn 2006, favourable external and internal conditions for linking climate and energy policies had placed the issue firmly on the Commission’s agenda. Three additional factors were decisive for initiating the package. First, the package initiative came from DG Environment, which needed DG Energy to strengthen the case for more ambitious climate-policy targets and instruments within the Commission. DG Enterprise had traditionally been sceptical to unilateral climate policy, to protect the interests of Europe’s energy-intensive industries. DG Energy needed DG Environment to develop a common EU energy policy. A package of instruments that stimulated the internal energy market, renewables, energy efficiency and a continuing role of fossil fuels by applying CCS could also satisfy various interests within the patchy DG Energy. Second, the new Barroso Commission introduced new commissioners: Stavros Dimas as Commissioner for the Environment and Andris Piebalks as Commissioner for Energy. Piebalks immediately prioritized co-ordination of energy, environmental and research policies (European Parliament, 2004). Finally, various officials within the Commission were also important.⁴ Jos Delbeke, the ‘founding father’ of the EU ETS, requested his staff in DG Environment to develop early sketches of a possible package based on RES, CCS and revision of the ETS. He had for a long time worked closely with Peter Vis, the lead author of the 2000 Green Paper on the ETS. Vis was offered the position as Deputy Head of Cabinet to Andris Piebalks, with responsibility for the relationship between climate and energy policies. Catherine Day, who had served as Director-General for DG Environment, was appointed Secretary-General for Barroso with particular responsibility for co-ordinating policies within the Commission (EurActive 2006a). Day was persuaded by Jos Delbeke, and had the ear of the Commission President, Barroso.

The three biggest member states were on board as well. Germany, with support of France, announced that climate and energy policy would be key priorities during Germany’s Presidency in the first part of 2007 (ENDS 2006c). Germany and France could rely on support from the UK, which had presented an ambitious response to the Commission’s 2006 Green

⁴ This is not an exhaustive list of those involved.

Paper, including plans to strengthen policies on energy efficiency, renewables and the ETS (EurActive 2006b).

With 2007 came a turning point for EU climate and energy policy. In January, the Commission issued two key communications on energy and climate policy strategies for 2020 and beyond (Commission 2007a; 2007b). These communications proposed the 20+20+20 targets: to cut GHG emissions, increase the share of renewables and energy efficiency by 20 per cent by 2020 compared to 1990 levels. The target of reducing GHGs by at least 20 per cent would be stepped up to 30 per cent if an adequate international climate treaty were agreed. The twin targets represented an effort to demonstrate international leadership on a post-2012 climate treaty with the ETS as the pillar of a future global carbon market (Commission 2007a). The long-term goal was to stabilize global warming at an average of 2°C, which would require 60–80 per cent reductions by most developed countries by 2050. The communications underlying these commitments were prepared by DG Energy and DG Environment respectively and published on the same day by the Commission, showing the close collaboration between two Commissioners. *Synergies* between climate and energy were underscored: an ambitious climate policy would contribute to the achievement of energy goals; an ambitious energy policy would contribute to the achievement of climate-policy goals.

Action on climate change was placed at the centre of a new EU energy policy by making use of energy more efficient, lessening the need for imported hydrocarbons and reducing vulnerability to fluctuations in oil and gas prices. Action on energy policy would contribute to climate-change mitigation and more effective application of the ETS, while also creating new green jobs. This would be achieved by strengthening policies on renewables, energy efficiency, liberalization of the European energy market and technological innovation. A European energy technology plan was proposed, to lower the cost of clean energy and put the EU at the forefront of the low-carbon technology sector. Largely swept under the carpet were potential conflicts like downward pressures in carbon prices caused by renewables and energy-efficiency measures in the ETS sectors.

The proposals also rested on the linking of *differently valued issues* between DG Energy and DG Environment and among member states. DG Environment favoured a stringent climate policy; DG Energy was more concerned with energy security. The ten Central and East European countries that joined the EU between 2004 and 2007 were less prosperous and less energy-efficient than the EU-15, increasing interregional EU disparity in carbon intensity and varying in GDP per capita by a factor of 10 (Wheeler 2010). These new CEECs were more concerned about energy security, whereas the EU-15 generally favoured a more stringent climate policy, as expressed by the adoption of the ET directive.

The 2007 communications specifically called on the European Council and Parliament to endorse the ambitious plan before it was officially proposed as new legislation. The Parliament responded swiftly, in February publishing a resolution on climate change that argued for targets even more stringent than those proposed by the Commission (European Parliament 2007). In March 2007, the European Council adopted the key elements of the new integrated climate and energy policy, underscoring the central role of the EU ETS in the EU's long-term strategy for reducing GHG emissions (European Council 2007:12). Poland, Hungary and the Czech Republic voiced concerns on how efforts to reach the climate target would be shared. These coal-dependent states also worried that a binding target on renewables could force them to invest in more costly energy sources (ENDS 2007; EurActive 2007). However, the Commission had received backing from the highest political level before

the package entered the decision-making phase. The Intergovernmental Panel on Climate Change confirmed the need for an ambitious EU climate and energy policy with the release of its first full assessment of climate science since 2001 (IPCC 2007).

Thus, the Commission initiated a package of climate and energy policies based on two issue-linkage mechanisms. First, different values among individual and collective decisionmakers on energy security and climate mitigation were exchanged to benefit most policymakers. The proposals rested on the linking of differently valued issues, particularly between DG Energy and DG Environment and among the member states. Second, complementarities and synergies between climate and energy policies and between these policies and other policies were strongly emphasized. Synergies were to be created by mutually reinforcing climate and energy goals, to reduce air pollution, create green jobs and stimulate technological innovation. Potential trade-offs were largely ignored.

4. Decision-making

In January 2008, the Commission formally proposed the climate and energy package to achieve the 20+20+20 targets by 2020 as a first step towards a low-carbon economy by 2050 (Oberthür and Pallemmaerts 2010). The main structure involved two cross-sector instruments developed by DG Environment. The first was a revised EU ETS aimed at reducing emissions in the ETS sectors by 21 per cent below 2005 emission levels. The proposal included a transition from a decentralized system to an EU-wide cap to be reduced annually by 1.74 per cent. Allocation procedures were altered, from free allowances to a system based on payment by auctioning as the main principle. The second instrument was an effort-sharing decision (ESD) based on different national targets, to yield a 10 per cent reduction for sectors not covered by the ETS. In addition, the core package contained two technology-specific directives: one on the promotion of renewable energy sources (RES) based on different national targets, and a proposal for a legal framework for safe storage and capture of carbon (CCS).

Effort-sharing to promote fairness and solidarity had entered decision-making with full force (Commission 2008a:4). The main criterion for calculating differentiated national targets in ESD and RES was GDP per capita. Overall costs to European economies were estimated at just under 0.5 per cent of GDP by 2020. In principle, no member state was expected to make investments that diverged too sharply from this average.

The EU climate and energy package was based on thorough assessment of how the ETS, ESD, and RES proposals would work together (Commission 2008b). Assessments focused mainly on the impact of climate policies on renewables, not the converse. They also indicated that RES was included in climate policy partly for political reasons, as some member states (with Germany in the lead) favoured this option. From a climate perspective, the ESD and ETS would be sufficient, as these instruments covered all emission sources (Commission, 2007c; Commission, 2008b). The assessments included scenarios based on various parameters, like CDM access to lower ETS compliance costs in Europe. Significant member-state differences in costs by 2020 were levelled out to provide *side-payments* to compensate poorer members in three ways, to make the package politically acceptable:

- by setting different national targets in the non-ETS sectors (ESD) based on GDP/capita;

- by setting different national targets for the share of EU energy consumption to be achieved by renewable energy (RES) based on a combination of GDP and flat-rate increase in the share of renewable energy;
- by using auctioning revenues (ETS) to compensate lower-income member states.

The combination of these three policies covering different issues ensured fairness in effort-sharing. Analyses of energy-intensive industries exposed to significant international competition and at risk of carbon leakage showed that access to CDM credits and free allowances through benchmarking would be effective strategies for limiting potentially negative effects on competitiveness of the revised ETS.

Other policies simultaneously developed by the Commission were de-linked from the impact assessment and the core package because they might increase burdens for certain member states or make negotiations more complex. For instance, a regulation covering new car emissions applied only to member states with car manufacturers, and was not included in the package. Similarly, a directive on fuel quality, including required reduction of the carbon footprint of road fuels from well-to-wheel, applied primarily to oil companies and was not made part of the core package (Christensen and Gulbrandsen 2012). These policies could have been integrated, as they were part of DG Environment's portfolio. Finally, the Commission proposed no new binding measures for achieving the 20 per cent energy-efficiency target. Development of energy-efficiency policies followed a different time-schedule and could have burdened the CEECs, which had the greatest energy-efficiency challenges – or, put differently, the highest energy-efficiency potential. Negotiations would have been even more complex if energy efficiency had been added to the climate and renewable energy targets.

Nothing guarantees that the Commission's legislative proposals will survive negotiations.⁵ Still, the package's main structure remained intact throughout the 2008 negotiations. Member states unanimously adopted the package and the Parliament endorsed it, also the reduction targets for ETS and non-ETS sectors and different national targets in the ESD and RES Directives. The four legislative proposals were complex, and the schedule for their development was tight. The EU needed an ambitious package to show its 'leadership by example' before the international climate negotiations in Copenhagen and the June 2009 Parliament elections could result in a less supportive Parliament. Deliberations commenced with informal negotiations among high-level representatives from the Commission, the Parliament and the Council. The major climate-policy element in the package was the proposal for revising EU ETS. Two main areas of disagreement existed in negotiations on reforming the ETS: the new CEECs, led by Poland, demanded more economic 'solidarity' than originally included in the Commission's proposal; and energy-intensive industries demanded more free allowances, to reduce the risk of their abandoning Europe (Skjærseth and Wettestad, 2010). These demands were voiced with increasing intensity in autumn 2008, fuelled by the unfolding global economic crisis and rising concerns about the costs of the package. Poland threatened to veto the whole package.

France took over the EU Presidency from Slovenia in autumn 2008; French leadership proved extremely important in forging compromise by year's end. One institutional tool the French used was the introduction of a more demanding decision-making procedure, replacing qualified majority voting in the Council of Ministers with unanimity in the European Council. Because the package's elements were mutually reinforcing,

⁵ One example is the failed EU carbon/energy tax.

decisionmakers were pressured to negotiate and adopt all legislative proposals simultaneously: in practice, each member state plus the Parliament would have a veto position. Instead of following the full co-decision procedure, trilogue talks between the Commission, the Parliament and the Council were to sort out disagreements in one single round. The Parliament did not demand any radical changes.

Germany defended energy-intensive industries and demanded more free allowances, but the Parliament opposed this. For accepting more free allowances, the Parliament got 300 million allowances from the ETS new entrants' reserve (NER300) to co-finance up to 12 CCS demonstration projects and other renewable technologies, linking the new CCS legislation to the ETS. The CEECs demanded changes in the baseline and structure of the effort-sharing decision proposal that were incompatible with the overall design of the package. However, these demands eventually led to increased revenues from auctioning to the solidarity fund and greater concessions to the CEECs regarding some free allowances for the power sector, linking the effort-sharing decision proposal to the ETS.

To summarize, issue-linkages through side-payments were introduced as a third mechanism in the decision-making phase to promote effort-sharing among policymakers. This contributed to an integrated package proposal that made negotiations co-operative in nature. The comprehensive package designed by the Commission provided further room for side-payments through issue-linkages during the 2008 negotiations. The result was unanimous adoption of new EU climate and energy policies.

The rapid adoption of the complex package of new policies when the financial crisis unfolded was partly a result of how it was designed by the Commission. In addition to forging synergies and combining values, the Commission shaped a package of instruments that provided side-payments to lower-income member states and energy-intensive industries exposed to significant international competition. Aided by strong French leadership, the negotiations among member states did not affect the main structure of the proposed package, but the Commission's emphasis on effort-sharing clearly reflected the constellation of interests among member states and energy-intensive industries. The international climate regime served as a target, with the upcoming climate negotiations in Copenhagen at the centre. Access to CDM credits under the Kyoto Protocol lowered ETS compliance costs for European industries.

5. Implementation and development towards 2030

The package was formally adopted in 2009 and implemented through further deliberations on remaining issues through comitology procedure and by national transposition of EU legislation and follow-up plans. Issues dealt with include the adoption of national limits for the ESD in the non-ETS sectors, an auctioning regulation and product-based benchmarks for the ETS sectors, and a decision specifying criteria and measures for financing demonstration projects under NER300. These issues were complex, but the real challenge came from a combination of changes in circumstances and the package design itself that caused conflict between various policies. This seriously impeded the balancing of costs and benefits.

The financial crisis brought a drop in emissions from the ETS sectors by about 11 per cent between 2008 and 2011, causing a cumulative surplus of 955 million allowances, expected to increase even further from 2013. This in turn caused a drop in the carbon price from nearly EUR 30 in May 2008 to below EUR 10 in 2012 (Commission 2012b). Access to

external CDM credits, growing shares of renewables and greater energy efficiency in ETS sectors further reduced demands for EU ETS allowances (Commission 2012c). Reduced demand for allowances was reinforced by the adoption of a new Energy Efficiency Directive (EED) in October 2012, which explicitly mentioned the need to strengthen the EU ETS to make it more effective. Funding of CCS and renewable projects through NER300 and national revenues for low-carbon development from auctioning suffer when the allowance price is low.⁶ This would particularly harm the CEECs that were entitled to compensation by a solidarity fund. The Commission had created high expectations by emphasising synergies between climate and energy policies and compensation to poorer member states, while largely ignoring potential trade-offs between the package components.

Member-state experiences with implementation show that the combination of issues and policies that promoted agreement at EU level has not always brought gains at the domestic level particularly not in the CEECs (Commission 2013b; Ibec 2013). In 2013, the Commission issued a Green Paper on a new framework for climate and energy policies towards 2030 (Commission 2013). The Green Paper launched a public consultation on the content of the 2030 framework, including new targets, coherence between policy instruments and contribution to competitiveness. On targets, all member states favoured a GHG reduction target for 2030, except for Poland. On renewables, there was disagreement on setting a new target and what form this should take. On energy efficiency, member states also expressed mixed views on the usefulness of a new target. Member states and non-state actors underlined the importance of strengthening coherence between policy instruments toward 2030. There was general agreement that the EU ETS should remain a central instrument, but views differed on the usefulness of the other package instruments and whether a structural ETS reform was needed for dealing with the allowance surplus.

Poland, as the largest coal producer in the EU, exemplifies the challenges of transforming policies that promote EU level agreement into gains at the national level. During the 2008 negotiations, Commission representatives visited Warsaw to 'sell' the package by underscoring the opportunities that would accrue from ETS revenues, CCS and renewables. In 2011 and 2012, Poland nevertheless blocked adoption of the Commission's energy roadmap and the low-carbon roadmap that proposed strengthening the ETS by a more stringent 2020 climate target as part of a stepwise plan towards a decarbonized Europe by 2050 (Commission, 2011a; 2011b; Council, 2011).

A Polish impact assessment study of the 2020 package and the energy roadmap found few benefits but high potential costs for affected sectors – electricity producers, energy-intensive industry and households; the only case where Polish companies could create large-scale added value would be in biomass technologies (Polish Chamber of Commerce, 2012). This perception is widely shared by the government, the public, political parties and business (Skjærseth, 2014). Poland has cancelled all three CCS projects, mainly for lack of funding. This makes higher carbon prices and decarbonisation threatening, as Poland plans to continue using indigenous coal for electricity production to meet expected increase in demand. Poland is on track to meet the EU's renewable target of 15% by 2020. The subsidy system adopted by Poland is technology-neutral and benefits the most cost-effective technologies. This has resulted in co-firing of biomass and coal as the main option – which does not stimulate renewable energy development. Increase in wind-power is

⁶ Member states determine the use of revenues generated, but with at least 50% to be used for investment in low-carbon solutions.

dominated by foreign companies and depends on technology import.⁷ A proposed new renewable energy law will continue to benefit large energy companies and stimulate co-firing (Skjærseth 2014).

In January 2014, the Commission formally proposed new climate and energy policies for 2030, with a new target of reducing GHGs by 40% below the 1990 level (Commission, 2014). This will be achieved by increasing the annual ETS cap from today's 1.74% to 2.2% after 2020, and by a market stability reserve to address the accumulating surplus of emission allowances. Emissions from sectors outside the ETS would be cut by 30% below 2005 level, through effort-sharing among the member states. Targets and policies on renewables and energy efficiency have been significantly weakened. An EU-wide target of at least 27% renewable energy by 2030 is proposed. This is only slightly above expected developments and will not be translated into new binding national targets. There are no new proposals on energy efficiency, CCS or the transport sector.

This proposal reflects varying member-state experiences with implementing the package for 2020. The CEECs do not want new binding renewable or energy-efficiency targets. It also reflects the economic crisis and slow progress in international climate negotiations. Still, initial responses show that the member states remain deeply divided (Council, 2014). With Poland in the lead, Hungary, the Czech Republic, Slovakia, Romania and Bulgaria have demanded full national control over their energy mix, compensation from the EU and burden-sharing.⁸ Essentially, they hold that ambitious member states like Germany, France and UK should deliver the reductions towards 2030 themselves. Poland also demands that new climate and energy policies should be made conditional on a global climate deal in Paris 2015.

The upshot is first that interaction between the package components has created conflict rather than synergy. This can be explained by the combination of change in circumstances and the package design itself. Second, and related, the linking of climate and energy policies that promoted agreement at EU level has not always brought gains at national level, and the CEECs see few benefits from the package. And so, new policies for 2030 have been re-packed by decoupling issues and policies that may destroy the basis for a new agreement.

6. Concluding remarks

This article has shown that theories of issue-linkages can contribute to explain how the EU climate and energy package came about in the first place. Linking climate with energy policy instruments gave something to most policymakers. Three mechanisms yielded joint gains. First, climate mitigation and energy security were differently valued by policymakers but were combined by the package, ensuring support from key DGs within the Commission, within the European Parliament and among member states. Second, side-payments were crafted by combining policies to compensate poorer member states and industries exposed to international competition. Finally, synergies were created by mutually reinforcing objectives in different issue-areas. Policies that might increase the burdens for certain

⁷ See http://www.paiz.gov.pl/sectors/renewable_energy. Accessed 09.04.14.

⁸ The Visegrad Group Countries, Romania and Bulgaria Joint Paper on the EU climate and energy framework 2020-2030. May 2014, undated. On file with author.

member states or make negotiations too complex were de-linked from the core package and developed independently.

In the policy initiation phase, favourable external and internal circumstances were necessary for aligning the compartmentalized Commission. Once internal agreement was reached within the Commission, the package was 'sold' politically by emphasizing the synergies while downplaying possible negative interactions. In the decision-making phase, the asymmetrical costs of implementation became evident. Policies were accordingly combined in the Commission proposal as side-payments to compensate member states and energy-intensive industry.

The literature on issue-linkages has little to say about the consequences of combining issues and policies for domestic implementation and policy development to deal with long-term challenges. Disruptive interaction between the policy instruments and problems in transforming gains at one decision-making level to another can explain why developing the EU package proved challenging. This challenge may be of general relevance to the integration of climate and energy policies. First, climate- and energy-policy instruments intended to be mutually reinforcing have developed into a relationship characterized by conflict, caused mainly by a combination of the economic crisis and institutional design: the unhappy marriage between the EU ETS and policies to promote renewables, energy efficiency and access to external CDM credits. The resultant low carbon price undermines funding for CCS, renewables and other low-carbon solutions. With the benefit of hindsight, we see that potential conflicts between various components of the package were swept under the carpet by the Commission to enhance political feasibility. Slow progress on a new international climate treaty also spurred opposition. The package and the targets rested on the expectation that other key states would follow the EU.

Second, and related, the linking of climate and energy policies that promoted agreement at EU level has not always translated into gains at national level. The CEECs – Poland in particular – see more costs than benefits from the package. Accordingly, new policies for 2030 have been re-packed by decoupling issues and policies that might undermine the basis for a new agreement, such as new targets and national policies for energy efficiency and renewables. Still, CEEC opposition remains; and a compromise on new policies in the European Council might need new linkages to fresh funding, energy security or alternative energy sources to coal, such as shale gas.

The making of the package cannot be fully understood without considering non-state actors, member states, EU institutions as actors and arenas and the international climate regime. This policy context of actors and institutions at different levels may be further developed to better explain how linkages have been formed by whom and why. Various approaches to EU policy-making and integration can provide valuable insights here.

The EU climate and energy package was assembled in a unique negotiation context of mainly favourable circumstances. As climate change is a long-term issue, the challenge now confronting EU policymakers is how re-pack the climate and energy package to promote a low-carbon economy by 2050 and strengthen credibility for EU international leadership. This is a research challenge as well: we need a better understanding of how issue-linkages and EU policy packages can be re-shaped when circumstances change.

References

- Barnes, P.M. (2011). The role of the Commission of the European Union: Creating external coherence from internal diversity. In R.K.W. Wurzel and J. Connelly (Eds), *The European Union as a leader in international climate change politics* (pp.41–58). London: Routledge
- Christensen, A.R. and Gulbrandsen, L.H. (2012). *EU policies on car emissions and fuel quality: Reducing the climate impact from road transport*, FNI Report 14/2012. Lysaker, Norway: Fridtjof Nansen Institute.
- Commission of the European Communities (2000). Towards a European strategy for the security of energy supply. *COM(2000)769* final, 29 November.
- Commission of the European Communities (2005a). Doing more with less. *COM(2005)* final, 22 June.
- Commission of the European Communities (2005b). Winning the battle against global climate change. *SEC(2005)180*, 9 February.
- Commission of the European Communities (2005c). Commission decision setting up a High Level Group on Competitiveness, Energy and the Environment. *2006/77/EC*, 23 December.
- Commission of the European Communities (2006). Green paper on a European strategy for sustainable, competitive and secure energy. *COM (2006) 105* final, 8 March.
- Commission of the European Communities (2007a). Limiting global climate change to 2 degrees Celsius — the way ahead for 2020 and beyond. *COM(2007) 2* final, 10 January.
- Commission of the European Communities (2007b). An energy policy for Europe. *COM(2007) 1* final, 10 January.
- Commission of the European Communities (2007c). Impact assessment accompanying renewable energy roadmap. *SEC(2006) 1719*, 10 January.
- Commission of the European Communities (2008a). Europe’s climate change opportunity. *COM(2008) 30* final, 23 January.
- Commission of the European Communities (2008b). Impact assessment. Document accompanying the package of implementation measures for the EUs objectives on climate change and renewable energy for 2020. *SEC(2008) 85/3*, 23 January.
- Commission of the European Communities (2011a). A roadmap for moving to a competitive low carbon economy in 2050. *COM(2011) 112* final, 8 March.
- Commission of the European Communities (2011b). Energy roadmap 2050. *COM(2011) 885* final, 15 December.
- Commission of the European Communities (2012a). Renewable energy: action plans and forecasts. Available at <<http://ec.europa.eu/energy/renewables/action_plan_en.htm>>.
- Commission of the European Communities (2012b). The state of the European carbon market in 2012. *COM(2012)652* (undated).
- Commission of the European Communities (2012c). Commission staff working document. Proportionate impact assessment. Brussels, draft, 2012 (undated).
- Commission of the European Communities (2013). Green Paper: A 2030 framework for climate and energy policies. *COM(2013). 169* final. Brussels, 27 March.
- Commission of the European Communities (2013b). Green Paper 2030: Main outcomes of the public consultation. Commission Services Non Paper. Brussels.http://ec.europa.eu/energy/consultations/doc/20130702_green_paper_2030_consultation_results.pdf
- Commission of the European Communities (2014). A policy framework for climate and energy in the period from 2020 to 2030. *COM (2014). 015* final. Brussels, 22 January.
- Costa, O. and Jørgensen, K.E., eds. (2012). *The influence of international institutions on the European Union: When multilateralism hits Brussels*. Basingstoke: Palgrave.
- Council of the European Union (2005). Council conclusions on climate change and energy efficiency. Brussels: 2695th Transport, Telecommunications and Energy Council Meeting, 1 December.

- Council of the European Union (2011). Environment. Luxemburg: 3103rd Council Meeting Environment, press release, 21 June.
- Council of the European Union (2014). Environment. Brussels: 3297th Council Meeting Environment, press release, 03 March.
- Eikeland, P.O. (2012). *EU energy policy integration – stakeholders, institutions and issue-linking*, FNI Report 13/2012. Lysaker, Norway: Fridtjof Nansen Institute.
- ENDS (2006a). EU energy paper draws praise and criticism, 8 March.
- ENDS (2006b). EU Parliament urges energy efficiency revolution, 2 June.
- ENDS (2006c). Franco-German ministers set EU green agenda, 27 September.
- ENDS (2007). States back unilateral EU climate gas curbs, 20 February.
- EurActive (2005). ‘High noon’ for EU’s environment policies, 20 July.
- EurActive (2006a). Interview with European Commission Secretary-General Catherine Day, 26 September.
- EurActive (2006b). UK energy review answers some EU green paper questions, 12 July.
- EurActive (2007). EU makes bold climate and renewables commitment, 9 March.
- Eurobarometer (2006). European citizens in favour of a European energy policy, says Eurobarometer survey, Brussels, press release, IP/06/66, 24 January.
- European Council (2004). Presidency conclusions from European Council 25 and 26 March 2004. Brussels, 19 May.
- European Council (2005). Presidency conclusions from European Council 15 and 16 December 2005. Brussels, 30 January.
- European Council (2006). Presidency conclusions from European Council 23 and 24 March 2006. Brussels, 18 May.
- European Council (2007). Presidency conclusions from European Council 8 and 9 March 2007. Brussels, 2 May.
- European Parliament (2004). Committee on Industry, Research and Energy hearing with Mr Andris Piebalgs. Brussels, ITRE/2004/D/49530, 15 November.
- European Parliament (2007). European Parliament resolution on climate change. Brussels, P6_TA(2007)0038, 14 February.
- European Parliament (2012). Parliament calls for low-carbon economy by 2050. Brussels, PR\40876.
- EWEA (European Wind Energy Association) (2005). *Large scale integration of wind energy in the European power supply: Analysis, issues and recommendations*. Brussels: EWEA.
- Fairbrass, J. and Jordan, A. (2004). Multi-level governance and environmental policy. In I. Bache and M. Flinders (eds), *Multi-level governance* (pp.147–164). Oxford: Oxford University Press.
- HLG (High Level Group on Competitiveness, Energy and the Environment) (2006). *Contributing to an integrated approach on competitiveness, energy and environmental policies*. Brussels: HLG, 2 June.
- Hooghe, L. and Marks, G. (2001). *Multi-level governance and European integration* (Oxford: Rowman & Littlefield).
- Hovi, J. and Skodvin, T. (2008). Which way to U.S. climate cooperation? Issue linkage versus a U.S.-based agreement. *Review of Policy Research*, 25 (2), 129–148.
- Hovi, J., Sprinz, D.F. and Underdal, A. (2009). Implementing long-term climate policy: Time inconsistency, domestic politics, international anarchy. *Global Environmental Politics*, 9 (3), 20–39.
- Ibec, 2013. Summary of member state responses to the 2030 green paper for a climate and energy framework. Dublin, October 2013.
- IPCC (2007). *Summary for policy makers: IPCC Fourth Assessment Report*. Geneva: Intergovernmental Panel on Climate Change.
- Marks, G., Hooghe, L. and Blank, K. (1996). European integration from the 1980s: State-centric vs. multi-level governance. *Journal of Common Market Studies*, 34 (3), 341–378.

- McKibben, H. (2010). Issue characteristics, issue linkage and states' choice of bargaining strategies in the European Union. *Journal of European Public Policy*, 17 (5), 694–707.
- Moravcsik, A. (1998). *The choice for Europe: Social purpose and state power from Messina to Maastricht*. London: Routledge
- Moravcsik, A. (1999). A new statecraft? Supranational entrepreneurs and international cooperation. *International Organization*, 53 (2), 267–396.
- Morgera, E., Kulovesi, K. and Muñoz, M. (2011). Environmental integration and multi-faceted international dimensions of EU law: Unpacking the EU's 2009 climate and energy package. *Common Market Law Review*, 48 (3), 829–891.
- Oberthür, S. and Gehring, T., eds (2006). *Institutional interaction in global environmental governance: Synergy and conflict among international and EU Policies*. Cambridge, MA: MIT Press.
- Oberthür, S. and Pallerwarts, M., eds (2010). *The new climate policies of the European Union*. Brussels: VUB Press.
- Oberthür, S. and Roche Kelly, C. (2008). EU leadership in international climate policy: Achievements and challenges. *International Spectator*, 43 (3), 35–50.
- Polish Chamber of Commerce (2012). *Assessment of the impact of the emission reduction goals set in the EC document 'Roadmap 2050' on the energy system, economic growth, industry and households in Poland*. Warsaw: EnergSys.
- Sebenius, J.K. (1983). Negotiation arithmetic: Adding and subtracting issues and parties. *International Organization*, 37 (2), 281–317.
- Skjærseth, J.B. (1994). The climate policy of the EC – too hot to handle? *Journal of Common Market Studies*, 32 (1), 25–45.
- Skjærseth, J.B. (2014). Implementing EU climate and energy policies in Poland. FNI Report 2014, forthcoming. Lysaker, Norway: The Fridtjof Nansen Institute.
- Skjærseth, J.B. and Wettestad, J. (2008). *EU emissions trading: initiation, decision-making and implementation*. Aldershot: Ashgate.
- Skjærseth, J.B. and Wettestad, J. (2010). Fixing the EU Emissions Trading System? Understanding the post-2012 changes. *Global Environmental Politics*, 10 (4), 101–123.
- Tollison, R.D. and Willett, T.D. (1979). An economic theory of mutually advantageous issue linkages in international negotiations. *International Organization*, 33 (4), 425–449.
- Tsebelis, G. (2002). *Veto players: How political institutions work* (Princeton, NJ: Princeton University Press).
- Van Schaik, L. and Schunz, S. (2012). Explaining EU activism and impact in global climate politics: Is the Union a norm- or interest-driven actor? *Journal of Common Market Studies*, 50 (1), 169–186.
- Weale, A., Pridham, G., Cini, M., Konstadakopulos, D., Porter, M. and Flynn, B. (2000). *Environmental governance in Europe: An ever closer ecological union?* (Oxford: Oxford University Press).
- Wheeler, D. (2010). Confronting the American divide on carbon emissions regulation. Working Paper 232 (Washington, DC: Center for Global Development).